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Higher Education: Handbook of Theory and Research

Volume 35

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Higher Education: Handbook of Theory and Research

Volume 35

Series Editor

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Graduate School of Education
University of Pennsylvania
Philadelphia, PA, USA

Published annually since 1985, the Handbook series provides a compendium of thorough and integrative literature reviews on a diverse array of topics of interest to the higher education scholarly and policy communities. Each chapter provides a comprehensive review of research findings on a selected topic, critiques the research literature in terms of its conceptual and methodological rigor, and sets forth an agenda for future research intended to advance knowledge on the chosen topic. The Handbook focuses on a comprehensive set of central areas of study in higher education that encompasses the salient dimensions of scholarly and policy inquiries undertaken in the international higher education community. Each annual volume contains chapters on such diverse topics as research on college students and faculty, organization and administration, curriculum and instruction, policy, diversity issues, economics and finance, history and philosophy, community colleges, advances in research methodology, and more. The series is fortunate to have attracted annual contributions from distinguished scholars throughout the world.

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Laura W. Perna
Editor

Higher Education: Handbook of Theory and Research

Volume 35

With 36 Figures and 21 Tables

 Springer

Editor

Laura W. Perna
Graduate School of Education
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Preface

Like the preceding volumes in this series, Vol. 35 of *Higher Education: Handbook of Theory and Research* offers a collection of thorough reviews of research on topics that are of critical importance to higher education policy, practice, and research. Following the tradition of past volumes, this volume also includes an autobiographic essay by an eminent scholar, in this case: Laura Rendón, Professor Emeritus of Higher Education in the College of Education and Human Development at The University of Texas at San Antonio. In this essay, Professor Rendón reflects on her journey from first-generation college student from Laredo, Texas, to distinguished higher education scholar. She also offers her perspectives on current opportunities and challenges facing higher education.

Volume 35 builds on a long and strong history of outstanding scholarly contributions. The first volume in this series was published in 1985. John C. Smart served as editor of the series through Vol. 26, when Michael B. Paulsen joined him as coeditor. After coediting Vols. 26 and 27 with John, Mike served as the sole editor through Vol. 33. I am deeply honored that Mike invited me to serve as coeditor with him for Vol. 34, and that I have the privilege of serving as sole editor for Vol. 35.

This annual publication would not be possible without the intellectual leadership of an excellent group of Associate Editors. For Vol. 35, these exceptionally talented scholars and research mentors are: Ann Austin, Nicholas Bowman, Stephen DesJardins, Linda Eisenmann, Pamela Eddy, Adrianna Kezar, Shouping Hu, Anna Neumann, Anne-Marie Nuñez, and Marvin Titus.

Each of the chapters in this volume represents an important contribution to knowledge. Over the course of a year or more, Associate Editors and I work with authors to develop, produce, and refine the included chapters. Our goal is to ensure that, individually and collectively, the chapters in each volume provide in-depth examinations of the state of research on topics related to: college students; faculty; diversity; organization and administration; community colleges; teaching, learning, and curriculum; economics and finance; policy; history and philosophy; and research methodology. Chapter authors are charged with producing a comprehensive review of research findings on a selected topic, critiquing the research literature in terms of its conceptual and methodological rigor, and setting forth an agenda for future research that will further advance knowledge on the chosen topic.

We are grateful for the time, effort, and engagement that each author has invested in producing their important scholarly contributions. We hope that the chapters in this volume, like those that have come before it, provide a useful foundation for the next generation of research on these important issues.

March 2020

Laura W. Perna

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About the Editor



Laura W. Perna is GSE Centennial Presidential Professor of Education and Executive Director of the Alliance for Higher Education and Democracy (AHEAD) at the University of Pennsylvania (Penn). Her research uses various methodological approaches to identify how social structures, educational practices, and public policies promote and limit college access and success, particularly for groups that are underrepresented in higher education. Recent publications include *Improving research-based knowledge of college promise programs* (with Edward Smith, 2019, AERA), *Taking it to the streets: The role of scholarship in advocacy and advocacy in scholarship* (2018, Johns Hopkins University Press), and *The Attainment Agenda: State policy leadership for higher education* (with Joni Finney, 2014, Johns Hopkins University Press). She has served as President of the Association for the Study of Higher Education (ASHE), Vice President of the Postsecondary Division of the American Educational Research Association (AERA), and Chair of Penn's Faculty Senate. She is a member of the Gates Commission on the Value of Postsecondary Education and the Board of Directors for the Postsecondary National Policy Institute (PNPI). Among other honors, she has received the Christian R. and Mary F. Lindback Foundation Award for Distinguished Teaching from the University of Pennsylvania, Early Career Achievement Award from ASHE, the Excellence in Public Policy in Higher Education Award from ASHE's Council on

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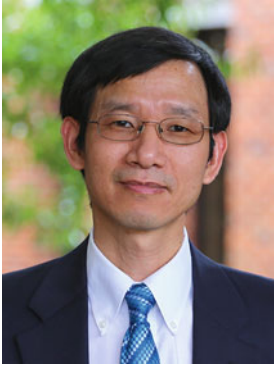
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A First-Generation Scholar's *Camino de Conocimiento*

1

Una Autohistoria

Laura Ignacia Rendón

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Abstract

As a first-generation scholar, Laura I Rendón employs Gloria Anzaldúa's radical genre of autobiographical writing, termed *autohistoria* and *autohistoria-teoría*,

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which disrupts colonial forms of expression and inquiry and which transcends traditional Western autobiographical forms (Keating, A.L.. 2009. Introduction. In A. L. Keating (Ed.), *The Gloria Anzaldúa Reader* (pp. 1–15). Durham: Duke University Press). To expand on her memoir, Rendón also employs Anzaldúa's (2015. In A. L. Keating (Ed.), *Light in the dark/Luz en lo oscuro. Rewriting identity, spirituality, reality*. Durham: Duke University Press) seven stages of *conocimiento* to chart her life story as it progresses from experiencing disruptive life events to undergoing a personal transformation and finding a greater sense of enlightenment. While the first part of the memoir is focused on Rendón's life story, the second part discusses Rendón's views on what the future holds for higher education, including exciting and challenging developments.

Keywords

Autohistoria · *Autohistoria-teoría* · *Conocimiento* · *Camino de conocimiento* · *Mestiza* consciousness · Academic immigrant · Scholarship girl · *Sentipensante* pedagogy · Validation theory · Race · Immigration · Gender identity · Aging population · Sexual orientation · Technology · Post-truth world · Hate crimes

What an honor it is to have been invited to submit this autobiographical essay which blends the personal and professional dimensions of my trajectory in the field of higher education. The first part of this essay illuminates my personal life story, while the second part discusses my views regarding what I believe the future holds for higher education, including exciting and troublesome developments. For me the personal is always intertwined with the professional. Similarly, social, political, and economic trends always impact our nation's educational system.

Nothing in my early life would have predicted that someone like me could have earned the title of renowned higher education scholar which (according to the invitation letter I received) is a necessary requisite to be invited to write a memoir for this publication. I am a first-generation scholar – the first in my family to attend college, earn bachelor's and master's degrees, be awarded a Ph.D., and become a professor and researcher. My journey across intellectual, social, and cultural borderlands has been “*un camino de conocimiento/path of enlightenment*” (Anzaldúa 2015). Anzaldúa notes that the *camino de conocimiento* is a response to a spiritual hunger and the notion that the world is undergoing an extension of consciousness, a sense that not everything that we've been told is correct and that there has to be a better way to live our lives. For example, we have been conditioned to look the other way when vulnerable people are exploited. As a collective, humanity has also become dependent on consumerism, militarization, and greed in the quest for money and power. The path to *conocimiento* requires facing our shadow side, the parts of our being that could lead to fear, shame, and/or embarrassment. A person reaching a higher level of enlightenment is aware of how conventional markers of race, gender, and the divide between mind and body are inaccurate, outworn, and obsolete. Further this form of enlightenment resists binaries (i.e., he/she, colored/white) and recognizes that those in power may seek to hold on to entrenched

practices and belief systems even when they may cause harm and/or no longer useful. *Conocimiento* is a way of knowing that is skeptical of knowledge based solely on reason and rationality. Anzaldúa (2015) elaborates:

Many are witnessing a major cultural shift in their understanding of what knowledge consists of and how we come to know, a shift from the kinds of knowledge valued now to the kinds that will be desired in the twenty-first century, a shift away from knowledge contributing both to military and corporate technologies and the colonization of our lives by TV and the Internet to the inner exploration of the meaning and purpose of life. (p. 119)

Anzaldúa also elevates spirituality as a valued form of knowledge to hold an equal space with science and rationality. She elaborates: “A form of spiritual inquiry, *conocimiento* is reached via creative acts—writing, art-making, dancing, healing, teaching, meditation and spiritual activism—both mental and somatic (the body, too, is a form as well as site of creativity)” (p. 119). Inner work can lead to greater opening of our senses, liberating ourselves from self-limiting beliefs and engaging in political action. My path toward greater wisdom and personal transformation has come not only from academic engagement and knowledge production, but also from experiencing both the joyous and painful parts of my life, focusing on personal, professional, and spiritual growth, engaging in risk-taking, working with diverse ways of knowing, expanding my consciousness, serving as an advocate for low-income, first-generation college students, and working both at the center and at the edge.

Prelude to the Story of a *Fronteriza*/Border Woman

My accomplishments as a scholar of color need to be placed in context as I am an unlikely success story. *Soy una fronteriza*; I am a border woman. I am figuratively and literally a child of the borderlands, specifically Laredo, Texas, and the geographical area known as the Texas–Mexico border where the Rio Grande river both connects and divides Mexico and the United States. As a child I would join my mother and sisters who would cross the Laredo, Texas international bridge quite often, to go as we used to say, “*al otro lado*”/the other side known as Nuevo Laredo, Mexico. In those days, Laredo and Nuevo Laredo existed as if there was no border. The two neighboring cities were known as “*los dos Laredos*.” It was natural “to go across,” attend events sponsored by friends and families, buy artifacts at the *mercado*, dine at nice restaurants, buy groceries, and even take advantage of the festive night life. Laredoans crossed the border just as much as Nuevo Laredoans, who would come to the United States to buy groceries, clothes, and technological products such as televisions, radios, and phones. While we understood the difference between Mexico and Texas, we connected as border crossers, as partners in a geographical context that brought us together as one. As I write this essay, that same border is a site of high tension and controversy. Never in my wildest dreams did I ever believe that Mexican drug cartel activity would become so violent that it would cause Laredoans and tourists to fear going into Mexico. Never did I envision

that anti-immigrant sentiment would result in thousands of immigrants, refugee children, and their families being placed in tents and cages in Nazi-like concentration camps along the Texas border. I could not conceive that a proposed border wall to prevent Mexicans and Central American asylum seekers from entering the United States would become the most contentious political issue for an American President and Congress. The Rio Grande, once a river of hopes and dreams, would now turn into a vast rupture of division and fear resulting in a humanitarian crisis not unlike Syrians fleeing their terrorized homeland.

As a border woman, my whole life has been spent in what Gloria Anzaldúa (2015) calls “*nepantla*,” an Aztec word depicting a liminal space between two worlds where transformations occur. During my life trajectory, I have learned to operate in many borders, to negotiate dislocations and relocations and to work with a pluriversal (Andreotti et al. 2011; Mignolo 2013) framework that rejects binaries and welcomes all viewpoints even when they seem contradictory. As I reflect on my life experience, I am made aware of my “*mestiza consciousness*,” (Anzaldúa 2012), the intersectional consciousness of the borderlands:

The new *mestiza* copes by developing a tolerance for contradictions, a tolerance for ambiguity. She learns to be an Indian in a Mexican culture, to be Mexican from an Anglo point of view. She learns to juggle cultures. She has a plural personality, she operates in a pluralistic mode—nothing is thrust out, the good, the bad and the ugly, nothing rejected, nothing abandoned. Not only does she sustain contradictions, she turns the ambivalence into something else. (Anzaldúa 2012, p. 101)

Perhaps living in the Tex–Mex borderlands, knowing what it means to embrace the cultural aspects of two nations, speaking two languages (Spanish, my first language, and English), and crossing the bridge that took me from one nation to another prepared me to work in liminal spaces and to have a high tolerance for ambiguity. Perhaps becoming comfortable living in a world of contradictions and as a child never knowing what to expect have allowed me to negotiate more than physical borders including those that are social, cultural, and intellectual. Mine has been an intersectional life experience. I have an American, Mexican, and Native American heritage. I have experienced both oppression and privilege. I have been married and divorced, and I know what it is like to have the privileges afforded to heterosexuals and to be a target of discrimination and hate ravaged against LGBTQ+ communities. I know what it is like to be economically poor and to have accumulated middle-class wealth.

Since I was a little girl, my dream was to be a teacher. However, in high school, the sponsor of the Future Teachers of America told me I would never be a teacher because I made an *F* in chemistry. My teacher never asked why I received a failing grade. She didn’t know that I had sprained my knee so badly that I could not walk to school for at least 2 weeks. She didn’t know that we did not have money to see a doctor. That was just the way it was. I have been underestimated, placed in a slow learners class in middle school, and told I should go to vocational school rather than to pursue a bachelor’s degree. As a Chicana and as a member of scholars of color and queer scholarly community, I have always experienced what it means to navigate

multiple contexts and to feel what it means to be racialized, minoritized, and sexualized. My academic work has been both at the center and at the edge – “centered on the edge” I would call it. That same woman who in the past was underrated is today hyperdocumented (Chang 2011) with a Ph.D. from the University of Michigan and with numerous accolades and distinctions that typically go to affluent people from privileged backgrounds.

Part I: *El Camino de Conocimiento: Mi Autohistoria*

In this essay, I follow the literary path of my fellow *tejana* and iconic feminist theorist, Gloria Anzaldúa, whose internationally acclaimed book, *Borderlands/La Frontera: The New Mestiza* (1987), offers an innovative way to write personal history and to capture the panoramic social, political, psychological, cultural, and mythical landscape of what she calls *borderlands*. Anzaldúa coined the terms, *autohistoria* and *autohistoria-teoría*, to present an innovative, transformational method to write a complex autobiography that resists easy classification (Keating 2009).

Autohistorias are autobiographical writings employed by women of color that disrupt colonial forms of expression and inquiry and which transcend traditional Western autobiographical forms (Bhattacharya 2015; Lockhart 2007). Keating (2009) explains: “Autohistoria-teoría includes both life-story and self-reflection on the story. Writers of autohistoria-teoría blend their cultural and personal biographies with memoir, history, storytelling, myth and other forms of theorizing. By so doing, they create interwoven individual and collective identities” (p. 9). Understanding that her borderlands are never in stasis, Anzaldúa’s Latina queer feminist *autohistoria* is a radical genre which employs a mixed media methodology that ultimately disrupts, re-writes, and re-stories traditional Western autobiographical modes of expression. As I write my *autohistoria*, I am fully aware that the path that I have walked seeking to transform higher education, to bring justice and equity to those who are most vulnerable, and to create a vision of education that allows students of color to succeed, is a road that others in underserved communities have walked and are walking alongside me. My struggles have been their struggles. My success has brought collective success. My failures have allowed us to grow. My story is aligned with their story.

I am an American citizen born on July 31, 1948 in Laredo, Texas. At the time of my birth, Laredo was a sleepy border town of roughly 50,000 people. Laredo, which bills itself as the “Gateway to Mexico,” has historically been a site of extreme poverty, and while the economy has seen some improvement, poverty conditions persist and certainly characterize my early upbringing. The schools I attended were quite under-resourced (i.e., poor libraries, labs, and classroom facilities) and our teachers and counselors were not necessarily focused on encouraging most of us to prepare for college. During the spring and summer when Laredo heat often topped over 100 degrees, we attended classrooms with no air conditioning. Life was slow and somewhat depressing. Because Laredo is relatively isolated from large American cities (San Antonio is 150 northeast), we did not understand big city life. I knew of nobody

in my community who had graduated from college. Most everyone seemed to instinctively know that upon high school graduation, we could hope to land a “good job” – secretary, telephone receptionist, accountant, or railroad worker. The military was also a viable choice as was becoming a nun or a priest. If I had chosen not to attend college, it would not have mattered much in a community that did not understand how to access college and what the full benefits of a college education could be.



Picture of Laura as a baby. (Photo from Rendón personal collection)

The stereotypes about individuals like me who grow up in low-income areas are not very kind; in fact, they are often offensive and even racist. There are plenty of Americans who believe that all poor people are lazy, that nothing good exists in our communities, and that all we want is government handouts and entitlements such as food stamps and welfare checks. There are those who believe that we are stupid, that we don't want to learn English, that our families don't care about their children (let alone education), and that children who grow up in these communities will likely be failures in life. The deficit-minded perception is that we are at best a drain on the US society and at worst, dirty, good-for-nothing creatures who don't deserve to even exist. Low-income people grow up with none of the privileges afforded to affluent communities (i.e., well-resourced schools, well-prepared teachers and mentors, well-educated/affluent parents). The world of college is alien to low-income communities. We know it exists, but it is somehow unreachable, unaffordable, not well understood, confusing, and uninviting. College, for many low-income people, is an alien universe accessible only to those with the proper social and academic documentation. Low-income communities are not given much validity. Students from these

communities are like shadows; we are dark, blurred, and even invisible – dispensable casualties of an educational system not created for “the other” (Conchas 2006; Gándara 2010; Rendón et al. 2019b). Given that all of this is true, how does someone like me, who grew up with basically nothing, become a well-recognized scholar/keynote speaker who has published in refereed journals and who has authored or co-authored several books? The truth is that I am not alone in this unlikely journey and that there are many others with similar stories who have found great success.

In preparation for writing this essay, I took a tour of the geographical area along the South Texas–Mexico border area that stretches from Laredo to Brownsville. These borderlands have been historically afflicted by high poverty rates. Yet, truly great minds have evolved from this region, including intellectuals, writers, architects, physicians, philosophers, dentists, lawyers, psychologists, school teachers, college professors, and nonprofit organizational leaders. While a full listing of these great minds is beyond the scope of this essay, I want to highlight a few individuals whose work I am most familiar with and who I personally admire and respect. These individuals have been not only my inspiration, but also close and distant role models, confidantes, friends, and mentors. They include:

1. Gloria Anzaldúa (Hargill, Texas) – Latina feminist theorist
2. Alfredo de los Santos (Laredo, Texas) – Community college leader
3. Héctor Garza (Edinburg, Texas) – Founder of the National Council for Community and Educational Partnerships in Washington, DC
4. Norma Cantú (Laredo, Texas) – Folklorist, postmodernist writer, and university professor
5. Aída Hurtado (Edinburgh, Texas) – Social psychologist and university professor
6. Amaury Nora (Laredo, Texas) – Higher education scholar and university professor
7. Francisco Gonzalez Cigarroa (Laredo, Texas) – transplant surgeon, former Chancellor of the University of Texas System, and first Hispanic to serve as President of the University of Texas Health Science Center in San Antonio, Texas
8. Raúl Garza (Laredo, Texas) – Educator and researcher
9. Juan Ochoa (Laredo, Texas) – Pharmacist
10. Hortencia Guerrero Medina (Laredo, Texas) – Accountant
11. Ileana Rendón Martínez (Laredo, Texas) – Teacher
12. Annie Serna (Laredo, Texas) – Social worker
13. Martha Guadiana Sepeda (Monterey, Mexico & Laredo, Texas) – Attorney
14. Julia Vera (Laredo, Texas) – Actress
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18. Santa Barraza (Kingsville, Texas) – Artist and painter
19. Selena Quintanilla (Corpus Christi, Texas) – Singer of pop and Tejano music
20. Amado Pena (Laredo, Texas) – Visual artist
21. Anna Neumann (Brownsville, Texas) – Higher education scholar and professor
22. José A. Cárdenas (Laredo, Texas) – Founder of Intercultural Development Research Association

23. Jordana Barton (Benavides, Texas) – Community Economic Development Authority
24. Maria “Cuca” Robledo Montecel (Laredo, Texas) – President and CEO of Intercultural Development Research Association
25. Jorge B. Haynes, Jr. (Laredo, TX) – Retired senior director of external relations for Chancellor Charles Reed at the California State University system

I am honored to stand shoulder-to-shoulder with these impactful figures and dedicate this essay to them and to the younger generation of great minds of the South Texas borderlands. I also honor all of the phenomenal students who I have been privileged to work with over the past 30 years. These students have been representative of diverse cultures (i.e., Latinx, African American, American Indian, White, heterosexual, and LGBTQ+). Everything I have done in my career has been to lift the most vulnerable students – those who, like me, grow up with hopes and dreams but are unsure about how to realize them.

So many ask me: “How did you do it?” The question has its own subtexts. Perhaps some wonder how I succeeded when I wasn’t supposed to lead an accomplished life. Others who might want to keep someone like me in her place might be baffled that I found success despite the formidable obstacles placed on my path. And there are others who genuinely care, who also come from low socioeconomic backgrounds (SES), and who would like to model some of the practices I employed to succeed. My story will show that people like me succeed employing formidable strengths that are often unacknowledged and misunderstood by educators who have little knowledge of low-income communities. Our agency comes from our culture, spirituality, values and traditions, resistance, and our sheer determination to survive.

Seven Stages of *Conocimiento*

As I reflect on my life experiences, I am able to recognize how my path to a higher level of consciousness is reflective of Anzaldúa’s (2015) epistemological model she terms seven stages of *conocimiento*. Keating (2015) notes that: “Anzaldúa uses ‘conocimiento’ in two related ways: (1) as individual insights; (2) as an entire theory of embodied knowing” (Keating 2015, p. 234). Anzaldúa (2015) notes: “The body is the ground of thought. The body is a text. Writing is not about being in your head; it’s about being in your body (p. 5).” *Conocimiento* fosters individual perceptual shifts and envisions individuals moving through stages that can cause disruption but that can lead to inner and outer changes in one’s consciousness and personal development. Going through each stage can ultimately lead to a high level of enlightenment and the ability to act in the world with both with knowledge and wisdom. *Conocer*, to know, is connected to activism and includes healing wounds of oppression, fighting against fragmentation, and working on integration. Briefly summarized, the seven stages of *conocimiento* include the following:

- Stage 1. *El arrebatado* – experiencing *susto*/shock and loss of foundation. *El arrebatado*/the struggle represents the multiple challenges individuals face in life. These struggles shake us up and they serve to awaken us from dormant states of

awareness. The *arrebato* speaks to the strength of the human spirit to recognize that from our most difficult times, can come new teachings, tools, gifts, and growth processes that can result in our personal growth, transformation, and empowerment. Anzaldúa (2015) writes: “If you don’t work through your fear, playing it safe could bury you” (p. 122). The *arrebato* leads to the second stage called *nepantla*.

- Stage 2. *Nepantla* – finding oneself in an in-between state, *ni aquí, ni allá*/neither here nor there. This is a transitional state of both disequilibrium and possibility where a high level of learning can occur. Anzaldúa (2015) explains: “*Nepantla* is the site of transformation, the place where different perspectives come into conflict and where you question the basic ideas, tenets, and identities inherited from your family, your education, and your different cultures. *Nepantla* is the zone between changes where you struggle to find equilibrium between the outer expression of change and your inner relationship to it”. (p. 127)
- Stage 3. Despair, Self-Loathing, and Helplessness – finding oneself in chaos caused by inhabiting a liminal space, the third space is one of paralysis and dysfunctionality as one attempts to sort through options, challenges, and opportunities.
- Stage 4. Call to Action – coming out of depression and breaking free from habitual coping strategies; reconnecting with spirit and undergoing a conversion.
- Stage 5. Create a Pattern that speaks to your reality – engaging in scripting a story about one’s new reality. Anzaldúa (2015) explains that this can be done, for example, by scanning:

Your inner landscape, books, movies, philosophies, mythologies, and modern sciences for bits of lore you can patch together to create a new narrative articulating your personal reality. You scrutinize and question dominant and ethnic ideologies and the mind-sets their cultures induce in others. And, putting all the pieces together, you reenvision the map of the known world, creating a new description of reality and scripting a new story. (p. 123)

- Stage 6. Test Your Story in the New World – developing and field-testing new ideas and behaviors knowing that this may result in success or disappointment.
- Stage 7. Transformation – experiencing inner and outer changes to one’s personal development. Anzaldúa (2015) explains:

In the seventh space, the critical turning point of transformation, you shift realities; develop an ethical, compassionate strategy with which to negotiate conflict and difference within self and between others; and find common ground by forming holistic alliances. You include these practices in your daily life, act on your vision—enacting spiritual activism. (p. 123)

Anzaldúa (2015) understood that one can go through stages in a very nonlinear manner. She writes:

The stages of *conocimiento* illustrate the four directions (south, west, north, east), the next, below and above, and the seventh, the center. . . In all seven spaces you struggle with the shadow, the unwanted aspects of the self. Together, the seven stages open the senses and enlarge the breadth and depth of consciousness, causing internal shifts and external changes. All seven are present within each stage, and they occur concurrently, chronologically or not.

Zigzagging from ignorance (*desconocimiento*) to awareness (*conocimiento*), in a day's time you may go through all seven stages though you may dwell in one for months. (pp. 123–4)

My Childhood Years

I am about 4 years old. I am hungry. Displaced and destitute because of parent's separation, my mother, two sisters, and I are now crowded in my grandmother's house where it feels like we are not really wanted. Every afternoon about 3 p.m., my *abuela* has a *merienda*, a mid-afternoon snack. This time she has fresh *pan dulce* (Mexican pastries) spread on a basket. I grab a piece of bread. My *abuela* is upset and tells my mother: "Look what your daughter is doing—taking our bread!" My mother's rage toward her mother lands on me. My mother begins beating me so hard my *abuela* tells her: "Stop, you are going to kill her." "So what! She is my daughter," my mother angrily responds. Years later, my mother tearfully apologizes for this event which had been haunting her for so long, and which, to this day, I do not remember. I forgive her and now understand that my mother's anger was the rage of poverty, frustration, and helplessness.

My mother did her best under very dire circumstances. Her strength and resolve were admirable, and it is her work ethic and ability to survive that served as a model for me to follow. There was the time when as a child I developed some strange blisters all over my body. Nobody could figure out what was causing these painful, bloody sores. We were living in an old, decrepit house, which was all my mother could afford at the time. One night after we went to sleep, my mother turned on the lights only to reveal hundreds of bed bugs on the mattress where I slept. My six-year-old body was covered with them. Hysterical and alarmed, she pulled out the mattress and burned it.

Life brings you many *arrebatos*, but as a child you don't have the skills to understand or to resolve. For many years, I had erased my childhood from my memory. It was too painful. Getting to writing this section, I feel the pain; emotions take over my body. I almost don't want to remember. But I know that my past is part of who I am and that articulating our pain can lead to healing. I begin the story of my early years with the memory of my now deceased parents and how I was given my name. My mother, Clementina Linares, was born in Nuevo Laredo, Mexico. She was the youngest of 12 children. A stunning, beautiful woman who could easily pass for White, my mother had reddish brown hair and green eyes. She was the victim of unwanted sexual advances, and she led a life of multiple struggles and challenges. I am very proud of my mother. With very limited resources, including only a second-grade education, she took on low-level jobs such as cleaning motel rooms, waitressing, and picking crops. At one point, she sold Avon products in a downtown Laredo street corner. She single-handedly raised three girls, Elva (from a prior marriage), Ileana (my younger sister), and me. Despite the fact that we lived in poverty, I also admire my mother's ability to save enough money so that all our bills were paid on time. She considered it shameful for our family if we owed money to anybody, and this example has followed me all of my life. When she fell and slashed her leg, she went to the doctor and gave him her entire paycheck which she had just received that day to cover the medical expenses.

I will forever be thankful to my sister, Elva, who is now in a nursing home, because she sacrificed her own education to take care of me and my little sister, Ileana. Struggling to help the family survive and with no money for daycare, my mother withdrew Elva from middle school so that she could take care of Ileana and me. Elva never finished high school, and her career became that of being a sales woman earning meager wages in a downtown ladies' wear store. Ileana went on to college, earned a BA, and became a high school English teacher in Laredo.

My mother's most prized possession was a family journal. She was intent on capturing her family history as she was never quite sure of the date she was born. Over the years she would add to "*el libro*," as she called it, capturing through photos, documents, and her notes, the lives of her brothers and sisters and the dates of their passing, as well as the names of their children. I recall that when visitors would come to the house, she would say, "*enséñales el libro, hija*." She knew she was the only one in her family to capture the treasured history of her brothers and sisters and was proud to show it to others.



Family picture – Laura, Elvira Elva Montemayor, and Ileana Rendón Martínez. (Photo from Rendón personal collection)

My father, Leopoldo Rendón, was a tractor operator and later a rancher. We affectionately called him "daddy." My dad was born in Laredo and received an elementary school education. My father was a hard-working man's man. He always wore boots and a ranch hat. My dad worked in the sweltering heat clearing roads and fields with his tractor so bridges and lakes could be constructed. Later in life, he saved enough money and bought a 40-acre ranch where he raised and sold cattle. My father believed in the value of experience, as well as education. "*Tendrás mucha educación*," he would tell me, "*pero no tienes experiencia*." Regrettably, my father did not know how to be the best partner, but even though my mother left him, to his credit he never lost touch with us. We always knew he loved us in his own way. After the divorce from my mother, he remarried but had no other children.



Picture of Laura's parents, Leopoldo Rendón and Clementina Linares. (Photo from Rendón personal collection)

I was named after two people: my grandfather, Lauro Rendón, and my uncle who I never met, Ignacio Rendón. My name has an interesting, yet traumatic story, one that my parents and their families were able to only vaguely discuss. The story I heard was that uncle Ignacio was somewhat of a ladies' man who became involved with a woman who claimed that my uncle had fathered her baby, an allegation my uncle denied. It is said that the woman's brothers confronted my uncle as he left a bar. My uncle was brutally murdered; his remains tossed along the train tracks. Seven years later, I was born on the exact month and day (July 31) my uncle Ignacio was born. Even today, I feel uncle Ignacio's spirit is with me.

I barely remember my early years as they were not the happiest times in my life. My parents were not content with each other. There was a lot of fighting and very little happiness. There was the time when, at 3 years old, I was playing with my sister, Elva. Somehow, I fell and hit my head against the pavement. I blacked out with a concussion and crack in my skull. My mother was terrified that my father would yell at her and called a doctor to make a home visit. I vaguely remember waking up, and I was never fully treated for my injury. That may explain how throughout my life, I have had periods of dizziness. Ultimately, my parents were separated and finally divorced. It was a contentious separation with constant fighting, accusations, and tensions that were to leave an indelible mark on me as a woman who later found it difficult to give and receive love.

My mother became a single parent raising three children, but she was also a very strong woman with the qualities of an entrepreneur. With hardly any income and no health insurance for any of us, she endured the hardships of poverty and limited support from her family as she struggled to ensure that we were fed, went to school, and remained in good health. These were the priorities in our life – basic survival. I don't remember having a Christmas tree, enjoying holiday dinners or getting birthday gifts when I was a child. We just didn't have the money. When there was joy, it was listening to music on the radio playing my mother's Mexican favorites such as Pedro Infante, Javier Solís, and Agustín Lara. Joy was going to my grandmother's house where she prepared big *cazuelas* of chicken *mole*, rice, beans, and fresh tortillas. Joy was going to the parade and carnival, which were a part of Laredo's biggest event, the George Washington Birthday Celebration, complete with a colonial pageant, and later a Princess Pocahontas ball featuring debutantes from Laredo's elite families, none of which I have ever attended. This celebration began in 1898 as a show of American patriotism, and the tradition that continues today. The irony is that George Washington never knew about the celebration and that Laredo has always had a predominantly Latinx population which is patriotic but also has deep ties to Mexico.



Laura's sixth birthday picture with her sister Ileana (left) and cousin Elma (right). (Photo from Rendón personal collection)

At one point in my early childhood, my mother started a neighborhood *escuelita*, a sort of daycare prevalent in Laredo at the time, and for 50 cents a week per child, children would receive instruction in basic mathematics and reading. I participated in this *escuelita*, which was taught in Spanish. I began the first grade when I was 6 years old at Bruni Elementary School where I learned my first words of English. In the first grade, I remember that I was one of the best students. I aced reading and writing, something I noticed very few kids were good at throughout my K–12

schooling. As a young girl, I loved to read especially comic books – Superman, the Green Lantern, teen magazines, encyclopedias, and Mexican *novelas*.

I remember that we moved around several times as my mother was always trying to rent a house she could afford and that was close to our school. It seemed like every day was a constant struggle. My mother would come home quite tired from her evening shift as a waitress (10 p.m. to 6 a.m.) where she earned \$15 a week plus tips. She had little quality time to spend with us. Often, she would bring left over restaurant food so we could eat. We also ate cheap canned food such as beef stew and spaghetti. At one point my mother received government assistance and picked up food staples such as cheese and powdered milk for us to consume. In junior high school, my mother would give me a quarter which I used to buy a hamburger, chips, and a Coke. One day, she found herself having a tough conversation with me: “*Tienes que ser fuerte, hija*. You have to be strong.” She did not have the quarter for me to eat lunch.

I relate these stories not because I want to get sympathy, but because there are so many in higher education who simply do not fully understand the plight of poor students. Even today, low-income students experience hardships such as living in their cars, dealing with incarcerated family members, not having health insurance to pay for their illnesses, dealing with food insecurities, taking care of siblings, and having to work multiple jobs to survive.



Laura's eighth grade photo. (Photo from Rendón personal collection)

El Colegio Es Para Los Ricos

I am in my eighth grade English classroom at L.J. Christen Junior High School in Laredo. The school counselor comes in, forms in hand, and informs us that we need to

fill out the paperwork indicating whether we want to be on the vocational or academic track as we would be transitioning to high school soon. I raise my hand and ask the counselor to explain the difference between the two tracks. She says that if we want to get a job straight out of high school that we should check the vocational track. If we want to go to college, then we should select the academic track. The little girl in me who so wants to be a teacher tells me to select the academic track. I feel so proud and excited about my decision. I come home and find my tired mom, but I gather the courage to proudly tell her: “¡Voy a ir al colegio!” My mother does not smile. She looks angry and frustrated. “Who do you think you are?” she says. “*El colegio es para los ricos.*”

At 13 years of age, I made the most important decision of my life. I made that decision without any information, with no encouragement, and with no idea of what the full impact of that decision would be. All I knew was that I wanted to get out of poverty. I wanted to be somebody. I wanted to make sure that if I ever had kids they would not have to go through what I had endured. While I was greatly disappointed in my mother’s reaction, at some level I knew I had to move forward with my academic goals. I now understand how my mother’s total lack of knowledge about higher education coupled with the fact that she expected me to graduate from high school and quickly get a job so she would not have to work as hard anymore created a situation where she could not support my decision. College? How could she support something totally out of her radar screen, something that poor people could not even dream of considering? How do you know what you don’t know?



Laura’s high school graduation picture. (Photo from Rendón personal collection)

My high school years were noneventful. I was not voted Most Likely to Succeed or considered to be a popular, good-looking girl. I was not a cheerleader, I did not play in the band and I was not invited to go to the high school prom. We didn't have the money to dress nicely or to afford expensive hair stylists. However, my sister Ileana and I developed a network of friends who liked music and dancing. Music has always been a part of my life. On weekends, we looked forward to going to dances at the Laredo Civic Center featuring Chicano bands from south Texas such as Sunny and the Sunliners and Little Joe and the Latinaires. We also listened to Motown music and other artists of the time – the Supremes, the Temptations, Martha and the Vandellas, Smokey Robinson and the Miracles, the Beatles, and the Rolling Stones, among many others. We also went to “record hops” held at the Martin High School gym where Laredo's own bands would play – The Rondells and The Royal T's. Some of my favorite songs were “Talk to Me” by Sunny and the Sunliners and “Elusive Butterfly,” sung by Bob Lind and Jimmy Webb's “McArthur Park” performed by Richard Harris and later by Donna Summer. I was also drawn to Simon and Garfunkel's “I am A Rock,” as I sometimes I just felt that I wanted to be left alone and that I did not need anyone to fulfill me. I loved the poetic nature of some of these songs, and the writer and dreamer in me penned a few poems, something I occasionally do today.

While I generally made good grades in high school, now I understand that I underperformed. I really believe that neither my teachers or even my peers expected that I would amount to very much. However, I did have my own aspirations, and one of them was getting a college degree. I joined the Debate Club, Future Teachers of America and worked on the school newspaper. I graduated from Martin High School in 1966 and immediately enrolled in the only higher education institution available in my home town: Laredo Junior College (LJC), now known as Laredo College. The community college became my gateway to higher education. I always worked while I attended college because I knew my mother needed the money. At one point, I joined my mother working on weekends during the night shift as a waitress at a restaurant. My weekend salary was \$5 plus tips. When I ran out of courses I could take at LJC, I transferred to San Antonio College (SAC).

Moving to San Antonio was a big deal for me, as it was a much bigger town than Laredo. I had to take two buses to get to SAC, and with help from my mom and dad, we rented a room in an aunt's home, where I lived on \$10 a week. This was a lonely time for me. Sometimes I went to bed hungry because I had run out of money. Regardless, I persevered and really enjoyed my classes at SAC, especially my philosophy class, which opened up a whole new world of ideas for me – perspectives that were never included in any of my high school classes or in courses I had taken at Laredo Junior College. I was particularly intrigued by existentialism, a philosophical

view that the individual is a free and responsible agent in society. I was fascinated with the ideas of Sartre, Kierkegaard, Kant, Plato, and Nietzsche, among other thought leaders.

I completed my last semester of courses at SAC, qualifying me to earn an Associate of Arts degree in 1968, and in 2011 I was named Outstanding Former Student. I then transferred to the University of Houston (UH) because my dear friend, Raúl Garza, was enrolled there. Raúl, also a low-income student from Laredo, loved to collect college catalogs from universities throughout the nation. He encouraged me to join him in Houston. This was the height of the Vietnam War and protests against the war were raging throughout the country.

In the fall of 1968, my mother took the long Greyhound bus ride with me from Laredo to Houston. This was the first time one of her daughters was leaving home so far away, and she was terrified that something horrible would happen to me. When I stepped on the campus at the University of Houston, I was so elated. I had just seen one of my all-time favorite movies, *The Graduate*, and I took delight in seeing the big trees, large buildings, and squirrels that ran across campus. We had nothing like that back home. The academic nature of the university filled my soul. The movie soundtrack featuring Simon and Garfunkel's song lyrics ("Sounds of Silence," "Scarborough Fair") ran through my mind. At UH, I lived with four White roommates, and we got along very well. This was the first time I had experienced living and closely interacting with White people, and I believe it was my roommates' first time being that close to a Mexican American woman. I majored in English and Journalism, as these were the classes I hoped to later teach. My first semester at UH was stressful as I was getting accustomed to a new academic culture that was foreign to me. I never came across any Latinx professors, and there were not very many Latinx students at UH at the time. When times got tough, I would go to the student union and listen to two albums which calmed my soul: Stan Getz and Astrud Gilberto's Brazilian bossa nova album featuring "The Girl from Ipanema" and famed composer Armando Manzanero's album of romantic Mexican songs, including "Esta Tarde Vi Llover." It was during this time that I began to develop a new sophistication about life – absorbing the world of ideas, developing relationships with people who did not look or think like me, and viewing myself as a real success. I wasn't thinking about it then, but I became the first in my family to attend a community college and a 4-year institution. In 1970, my first big dream was realized. I earned a bachelor's degree, and was ready to be a teacher. I had successfully crossed the academic border which before had seemed so inaccessible. This redefined my family history as my little sister, Ileana, went off to college a couple of years after I did. Ileana's three sons also went to college.



Picture of Laura as eighth grade English and reading teacher, L.J. Christen Junior High School, Laredo, TX. (Photo from Rendón personal collection)

Realizing My Childhood Dream: Becoming a *Maestra*

Upon graduation from college, my parents insisted that I return to Laredo even though that is not what I wanted to do. I wanted to continue living life away from my hometown. I was intrigued with the Peace Corps, teaching in big cities, and exploring new careers. But my mother and father would have none of that. They thought I belonged safely at home. The outside world was too foreign for them, and they were afraid to take the risk that their daughter would be harmed if she steered too away from the family unit. Angry with my parents, very reluctantly I returned to Laredo, and my first professional job in 1970 was to teach at L.J. Christen Junior High School at a salary of \$6500 per academic year. I think this was the most anyone in my family had ever earned. From the ages of 21 to 25, I taught eighth grade English and reading. I also became the sponsor of the school newspaper and yearbook called the *Big C*. I taught low-income *barrio* kids in very hot, overcrowded classrooms without air conditioning. I was a popular, well-liked teacher, and after my first year of teaching I was assigned accelerated English classes where I interacted with some of the smartest students. My teaching style was different from other teachers. I used the Beatles and other music to turn the kids on to poetry. I connected literature to contemporary themes. I had the kids work on their own

plays which they performed in class. Some of my students went on to become lawyers, politicians, poets, and physicians. It was exciting and fun to work with these kids, and I could have easily stayed working with them for the rest of my professional life. But there was something in me that wanted more. My intuition was telling me that my work at this school was done, and that I should prepare for my next stage in life. It was also during this time that I noticed people would look at me as an intelligent leader. My overall appearance was also changing – more attractive, better dressed, and more polished. I was dating and having a good time with my friends, but I never lost sight of my overall objective to be as educated as I could be.

I had now set my sights on becoming a school counselor, and I began to take evening graduate-level courses at what was then known as Texas A&I University–Laredo (a branch of Texas A&I University–Kingsville), which functioned as an upper-level institution for juniors, seniors, and graduate students. This university later changed its name to Laredo State University. Ultimately the institution became a 4-year university when it joined the Texas A&M system and is now known as Texas A&M International University. At the time I was taking graduate-level courses, students could not complete a master's degree in Laredo. Instead, we also had to take courses at Texas A&I University in Kingsville. I was teaching during the day, which meant driving to Kingsville at night once or twice a week, and taking summer courses in residence at the Texas A&I campus.

Nothing comes easy to low-income communities, and it often takes a legal battle to move forward with real change. It is noteworthy to mention here that it took a lawsuit by the Mexican American Legal Defense Education Fund (MALDEF) to improve higher education opportunities along the Texas border, including the areas around Brownsville, Corpus Christi, Laredo, San Antonio, and El Paso. In 1987, MALDEF filed the *LULAC V. Richards* lawsuit challenging decades of discrimination against Mexican Americans in the Texas–Mexican border. In 1990, I was proud to provide legal testimony as to the dire socioeconomic conditions and limited higher education opportunities available to students living along the border. As I took the stand in a Brownsville, Texas courtroom, my mother was recognized. She stood up, beaming with pride, knowing that her daughter was standing up against injustices that for so many years had remained unaddressed.

For so long, there existed a pernicious, misguided belief that the border area was not the right location for the highest levels of education and that the best that could be done was to prepare students to enter the workforce. At the time the entire border region was the largest and most populous area in the United States without a comprehensive university offering doctoral and professional programs in diverse fields of study. Students in the border area averaged about 225 miles of travel to attend a comprehensive public university, while students in the rest of Texas traveled only 45 miles. The situation was so dire that in 1993, all the universities in the border area were in the lowest two of five tiers of higher education. Until the 1970s, San Antonio was the largest city in the United States without a public university. MALDEF won a court order requiring Texas to improve border higher education. The result was greater college access, more doctoral programs, research laboratories, libraries, and improved employment opportunities (Kauffman 2016). Texas A&M International University in Laredo as well as the University of Texas–Rio Grande

Valley, which boasts a medical school, are examples of new higher education opportunities that were created along the Texas–Mexico border.

Beginning a Career in Higher Education

I earned a master's degree in Counseling and Guidance and Psychology in 1975. This opened the door for me to land my first professional job in higher education. I was being considered for a position as a counselor in the Coordinated Bilingual Studies Program at Laredo Junior College (LJC). I had actually gone to the Laredo Independent School District superintendent to see if they had a high school counseling position, but he told me nothing was available. A friend told me about the position at LJC, which was a Title III federally funded program. I applied and immediately got the job as a counselor and psychology instructor in a learning community of 150 low-income, Mexican American students who were just initiating their freshman year in college. This was my first job in higher education. After a year, I was promoted to Director of the program. I supervised two counselors, two English instructors, one reading instructor and two paraprofessionals. I was now in a position with department chair status at the age of 26. I reviewed faculty and counselors for promotion and merit pay, wrote funding proposals, made organizational changes, and collected data to assess the effectiveness of the program. Looking back now, I realize that this was one of the first learning communities and first-year experience programs tailored especially for Mexican American students. We were very proud of our success as we had a high first- and second-year student retention rate. Every year consultants from the faculty in the University of Texas–Austin community college leadership program would come to Laredo to evaluate our program and offer suggestions for improvement. We always received high marks. This is how I learned that there were higher education programs which offered doctoral degrees, and I was excited by the prospect of actually entering such a program.

24 June 1976

Arechiga tells project personnel changes

Administrative personnel for Title III programs in research and planning, curriculum and development, and coordinated bilingual studies have been reassigned at Laredo Junior College.

The changes were announced by Dr. Domingo Arechiga, college president, while advising of receipt of a \$275,000 federal grant for the total program. He said the college drew an additional \$50,000 over last year's funding level.

Dr. Hector Farias Jr. of Laredo will be the overall coordinator for Title III programs effective July. He currently serves as director of research and planning.

Farias will be assisted by three coordinators assigned by Arechiga from present administrative personnel. Jacinto Juarez, now the

director of personnel and computer services, will be the coordinator for research and planning.

Juarez will double as supervisor of the computer center. He previously worked for Laredo Model Cities.

Ray Feiger, the coordinated bilingual studies project coordinator, will become the coordinator for curriculum and development.

Laura Rendón has been promoted to be CBS coordinator. She formerly was a counselor with the same program. A counselor now with the program is being

reassigned to a faculty position.

The CBS program and staff recently came under administrative fire as a result of an incident involving students while on a year-ending trip to New Braunfels. Arechiga, however, gave the program a clean bill of health after an in-house investigation.

"These assignments reflect our policy of increasing productivity with the assistance of federal funds," Arechiga said. "Instead of adding programs and personnel when federal monies are available, we

study methods of reorganization for maximum efficiency and economy."

Appointed to LJC in 1974, Farias holds a doctorate from Northwestern University and master's and bachelor's degrees from Texas A&I University at Kingsville.

Rendón holds a master's degree from Texas A&I University at Kingsville and a bachelor's from the University of Houston. Before joining the CBS program last fall, she taught in Laredo public schools during 1970-75.

Appointed to LJC as director (See ARECHIGA Page 10A)



DR. HECTOR FARIAS
...Title III head



LAURA RENDÓN
...CBS director

Jumping, rocking plus anything

Laura I Rendón hired as administrator at Laredo Junior College. (Photo courtesy of Laredo Morning Times)

I applied to the UT–Austin community college leadership program but was not accepted because I was told my GRE scores were too low. This was disappointing because these faculty members were the same ones that would come to evaluate the program I directed at LJC. Since then I have never believed that test scores are indicative of all that students can do or that they measure a student's full potential. Often used as filters to keep people like me out of college programs, tests can be harmful and exclusionary.

I also applied to the University of Houston's higher education program. A UH faculty member called to tell me they could grant me conditional admission, which could be removed after 1 year if I made good grades. Around the same time, one of my high school classmates had completed a doctorate in the higher education program at the University of Michigan. He spoke to me about the program, and encouraged me to apply. The University of Michigan accepted me without conditions and offered a terrific financial aid package, a significant show of confidence in me and my potential that I will forever appreciate. Going to Michigan opened up opportunities and world views I never knew existed. Looking back, I believe that leaving the familiarity and sameness of my hometown and going to Michigan was a much better choice than staying in Texas. When I opened the acceptance letter, I jumped for joy. I knew my life was about to change.

Around the same time, I was dealing with personal challenges. I had gotten married while working at LJC and things did not work out between me and my then husband. He was someone with much less education than I had, and he seemed to have little ambition in life. I think I married him just because it was expected. I was 28 and thought maybe it was time to get married, but deep inside me I felt I was making a mistake. This proved to be true, and I divorced him after less than 2 years of a chaotic marriage. Another challenge was that my mother did not want me to leave home again. She was very stressed with my decision to leave Laredo. She developed an unusual pain in her chest, lost a significant amount of weight, was depressed, and told me that if I went to Michigan, I might not catch her last breath. Chicana mothers can be like that.

My father was also not supportive of my decision. All of this was stressful for me, but I decided to take the risk and go to Michigan. I told myself that if my mother continued with her physical pain that I would return to Texas and go to Houston where I could both enroll in doctoral study and take her to the best doctors in Texas. In the fall of 1979, I packed a few boxes and took a plane to Detroit where a couple of friends met me and drove me to Ann Arbor. My mother had chest pain one more time and never again after that. Relieved, I continued my doctoral study at UM, and that decision proved to be the best I have ever made in my life.

Living the Life of a Scholarship Girl

Getting to Ann Arbor was fun, exciting, intellectually stimulating, and ultimately life changing. Everything in Ann Arbor was different than Laredo – the climate (cool in the summer and snow in the winter), the people, the intellectual ambiance, the food, and the way people talked and presented themselves. During the fall, the leaves turned beautifully yellow and red, an experience I could not get in Laredo. I was so pleased that two

other people from Laredo were also in Ann Arbor – Sandra Mendiola, who was working on a doctorate, and Armando López, who was entering law school and who had been one of my students when I taught English at L.J. Christen Junior High School. There was also a small group of Latinx undergraduate and graduate students, and we all knew who we were. On weekends we would have parties, and we knew that if we needed anything – a ride, food, support, anything – someone would reach out to help. We also had small group gatherings at local pubs where we shared what we hoped to do with our education, how college had changed us, how our families really did not understand what we were doing, and how our lives, while now close, would soon be broken apart as we went our separate ways. It was at UM that I met graduate students who influenced my life: Héctor Garza, Aída Hurtado, Anna Neumann, Kathleen Smith, Kathy James, and Jaime Flores. The sense of support coming from the Latinx student community at UM was phenomenal. Without that support I would not have had a sense of family, and it would have been much more challenging to complete a doctorate.



Laura I Rendón as doctoral student at University of Michigan. (Photo reprinted with permission from The University of Michigan)

The first semester at UM was a little disconcerting. I entered the higher education program with a strong cohort of mainly White students, some who had attended very prestigious, elite colleges and universities (some of which I had never heard of before), and I was in awe that I was a part of that entering class. I never really felt like an imposter with this cohort. My feelings were more related to the tension of being in a place I had not experienced before and the notion that somehow, I was going to figure out a way to succeed. Here I was, a Chicana from south Texas, who had attended community colleges and regional universities, sitting in class with students who had graduated from places like Kalamazoo College, Princeton, and Yale. But those concerns were quickly dispelled as I participated in classes and was able to hold my own in terms of viewpoint, intellect, and academic ability. The caliber of faculty in the UM higher education program was outstanding. At UM, my goal was to become a community college president. I remember meeting my adviser, Joseph Cosand, who had been Chief Executive Officer at three community colleges in California and President of the Junior College District of St. Louis. Joe was a nationally known, distinguished leader in higher education. He had also served as Deputy Commissioner for Higher Education, member of the Carnegie Commission on Higher Education, Chair of the Board of Trustees of the American Council on Education, and Deputy Commissioner for Higher Education. I loved Joe. I believe Joe saw in me what I could not fully see in myself at the time. In his classes, he would look directly at me with his intense blue eyes and say, "Laura, when you are community college president, what would you do?" This was a tremendous validating action because it affirmed my capacity to be a higher education leader. Here I was being told by one of the nation's foremost higher education leaders that it wasn't a question of if, but when.

Joe retired a year after I arrived at UM, and my new adviser became Richard Alfred, who took over the community college program. Dick, who had held several leadership positions in community colleges, became my dissertation chair. I also met Carlos Arce who directed the Chicano Project at UM's Institute for Social Research (ISR). My days were spent reading and writing, working at the UM Office of Minority Affairs in the School of Education and taking classes. The Latinx community on campus was quite concerned about the lack of Latinx students and faculty, and we formed an organization, Coalition of Hispanics for Higher Education, where I served as President. Our organization lobbied the UM President, Deans, and Director of Affirmative Action to recruit more Latinx students and faculty. These experiences helped to fine-tune my leadership and advocacy skills and to gain stronger sense of agency. Unlike my experience in high school, at UM I was all over campus – popular and considered a leader and strong advocate who was unafraid to speak truth to power.

Regardless, I did experience some microaggressions. A White female graduate student told me: “You know Laura, I think you’re kind of smart. But I have to admit that when I first met you, I thought you were kind of dumb.” When I submitted a research paper to a White professor, he said: “This is very well written. Do you write like this all the time?” There was also some reluctance from a faculty member who asked me if studying Chicano students would constitute a valid research study. And a state policymaker said he knew exactly where I was coming from: “hot off the migrant trail,” as he put it, referring to migrants who came to the Midwest to pick crops during the summer months. I had never been a migrant worker, but I had utmost respect for them and knew that some people stereotyped migrants as inferior human beings. Some of my high school friends had taken that yearly long trip from Laredo to the Midwest to work in the fields and live in deplorable housing conditions. Working in the fields was excruciating, backbreaking work which involved waking up before sunrise, stopping at sunset and sometimes being sprayed by pesticides. This was a way of life for migrant families, including their underage children, who wanted to earn and save enough money that would last them the entire school year.

At UM, Carlos Arce, who headed the Chicano Project at ISR, received a grant designed to provide support (summer housing, statistical analysis, preparing the dissertation for submission to Graduate School, etc.) to previous Ford Foundation Fellows who had not yet completed their doctorates. I had not been a Ford Fellow, but my friend, Aida Hurtado, convinced Carlos that I should participate in the program, which indeed pushed me to the finish line. In the fall of 1982, I defended my dissertation before my committee comprised of Richard Alfred (Chair), Carlos Arce, Gerald Gurin, and Norma Radin (outside member from the School of Social Work). My research study, *Chicano Students In South Texas Community Colleges: A Study of Student and Institution-Related Determinants of Educational Outcomes*, received Dissertation of the Year Award – Higher, Adult, and Continuing Education Department. I was among the first in the entering cohort to complete my doctorate. Michigan was too far for my family to travel to my doctoral graduation, so I did not participate in the hooding ceremony. However, my dear friend Norma Cantú had also received her doctorate at the same time from the University of Nebraska. Together, we hosted a big party, Laredo style, with a band, great food, and family and friends. Norma and I weren’t thinking of it then, but having two Laredo Latinas earning a doctorate at the same time was nothing short of a big deal, and the local paper featured a story about us. Now here I was, a Chicana with a doctorate from the University of Michigan. I was now ready for the big time.



Laura I Rendón and Norma Cantú as new Ph.D. graduates. (Photo courtesy of Laredo Morning Times)

Bright Lights and You, Girl!

In the late 1960s, Tom Jones, a popular pop singer, released a song, *Bright Lights and You, Girl*, and I connected to its lyrics about a woman who achieves stardom and fame. As a young woman, I wanted my life to be exciting, Hollywood style, to have national prominence and to have my work highly regarded. Now I had a doctorate and everything about me, my struggles during my poverty years, my experience as a middle school teacher, my role as a community college administrator, and my graduate experience at UM, had prepared me for center stage. I felt ready for the bright lights.

In 1982, as I was close to completing my doctorate, the President of Laredo Junior College, Domingo Aréchiga, called to offer me a job as Director of the Ford Foundation funded Mathematics Intervention Project with an organization called The Border College Consortium. The grant had been written by Manuel Justiz and Paul Resta at the University of New Mexico. The consortium included six community colleges located along the US–Mexican border – two in Texas, two in Arizona, and two in California. I took the job, which was based in Laredo, and this role put me in an exciting position where I interacted with individuals representing highly regarded organizations that were trying to address the underrepresentation of students of color in STEM fields of study. In my early 30s, I was interacting with important people representing the Ford Foundation, the Carnegie Corporation of New York, the National Academy of Sciences, the American Association for the Advancement of Science, the Educational Testing Service, and the National Institute of Education. Working with Héctor Garza and Antonio Flores, we co-founded the Hispanic Caucus of the American Association of Higher Education (AAHE) where I later served on the Board of Directors. I became Chair of the AAHE Hispanic Caucus, and this put me in touch with higher education leaders from across the nation. The Caucus evolved into the current American Association of Hispanics in Higher Education (AAHHE), where I co-founded the yearly Student Success Institute and a policy brief series featuring an analysis of contemporary Latinx education issues called *Perspectivas*.

When Manuel Justiz was appointed Director of the National Institute of Education (NIE), he recruited me to become a Research Associate and to join Paul Resta and him in Washington, DC. Again, my parents were very reluctant to have me leave Laredo, but I felt this position would be very good for me. In the fall of 1984, Kathy James and Raúl Garza drove with me to DC, and when they left, I felt stressed and overwhelmed. I was fortunate to find an apartment close to the metro, and I purchased a condo the second year I lived in DC.

My first day at NIE, which later became the Office of Education Research and Improvement and now known as Institute of Education Sciences, released the report, *Involvement in Learning* (NIE 1984) as a follow-up to the acclaimed *A Nation At Risk* (National Commission on Excellence in Education 1983), which drove school reform efforts throughout the nation. *Involvement In Learning* helped launch a large-scale higher education first-year experience initiative and an assessment movement. At NIE, I worked on the technical aspects of creating a new higher education research center, which was awarded to the University of Michigan, and I also worked to establish connections between the Institute and community colleges. Here I interacted with federal policy makers, well-known faculty, administrators, and program officers.

Living in DC was truly another culture shock for me. With so many people, there was also so much loneliness. With so many projects, shifting deadlines, and people to meet, there was also a sense of craziness and disequilibrium. I did not like DC living, and when Manuel Justiz left NIE to assume a faculty position at the University of South Carolina, we wrote a grant to study transfer students in the Border College Consortium. The grant was submitted to the Ford Foundation, and I left DC

in 1986 to join Manuel as Director of the research study. I was now located in the deep south – the University of South Carolina where I held the title of Visiting Assistant Professor. Along with working on the research study, I taught community college courses in the higher education program geared to student affairs administrators. This was my first type of faculty experience in a 4-year institution of higher education. The best thing that happened to me in South Carolina was meeting John N Gardner, who had taken charge of the nation's First-Year Experience initiative. John and I developed a long-lasting friendship, and today I proudly serve on the Board of Directors of the John N Gardner Institute for Excellence in Undergraduate Education.

In the late 1980s, I became involved with a major national initiative, the Quality Education for Minorities (QEM) Project, funded by the Carnegie Corporation of New York and headquartered at the Massachusetts Institute of Technology (MIT). I was part of a prominent panel of faculty and administrators that held hearings throughout the nation to learn about the issues afflicting minority communities, what was working and not working in the educational system, and what could be done to foster greater access and success especially for African Americans, Latinxs, and American Indian students. The result was a nationally disseminated report, *Education That Works: An Action Plan for the Education of Minorities* (1990), and the creation of the Quality Education for Minorities Network in Washington, DC. I found myself gaining national visibility and respect for my work. I began to get speaking engagements, and I was presenting my work at national conferences.

Also in the late 1980s, I wrote my first and only two-act play, *C/S Con Safos* (Rendón 1988), a coming-of-age story of Laredo students about to graduate from high school in 1966. The play was inspired by the film, *American Graffiti* and Janis Ian's song, "At Seventeen." The play featured American and Tex-Mex music of the 1960s, and was the first-place winner of the Chicano Drama Contest, Teatro El Sol, Tucson, AZ. My play was staged in Tucson, AZ (1988), San Antonio, TX (1988), Laredo, TX (1999), and Austin, TX (2000). Acquiring the identity of a playwright and seeing my work being performed on stage was nothing short of thrilling.

Becoming *Una Profesora*

As the research project in South Carolina was ending, my UM adviser, Dick Alfred, called to tell me about a faculty opportunity in the community college leadership program at North Carolina State University. In 1988, I applied and was hired as an untenured Associate Professor and Associate Editor of the *Community College Review*. In North Carolina, I met Ed Boone, who was chair of the department. Ed was extremely supportive, and it was clear he believed in my potential to be a leader and scholar in higher education. Ed is one of the reasons I became a faculty member in higher education. At NC-State, I worked with community college administrators, taught adult and community college courses, and directed the summer Community College Leadership Institute. I was coming into my own as a scholar and leader in the higher education community.

In 1991, I received a call from Alfredo de los Santos, then Vice Chancellor of the Maricopa Community College system in Phoenix, indicating that Arizona State University (ASU) was interested in hiring me in their higher education program. Loui Olivas and Robert Fenske were also instrumental in recruiting me to ASU where I became a tenured associate professor. When I arrived in Phoenix, I finally exhaled. It was great to be back in the southwest after spending 7 years in the south. I remember being at Target and hearing people speaking in Spanish. I smiled and thought, "I'm home." I loved my time at ASU, and I thought I would never leave. I became President of the ASU Chicano Faculty and Staff Association where we worked to advocate for Latinx faculty and students. I was meeting with the ASU President and top administrators on campus. During this time I was very driven, working long hours and dealing with an extensive travel schedule. I published my first book while at ASU, *Educating a New Majority* (1996) co-edited with Richard Hope, who I had met through the QEM Project, and who was at the Woodrow Wilson Foundation. I was told I was the first Latina to become full professor through the promotion and tenure process at ASU.

I attended many conferences, but my primary professional network became the Association for the Study of Higher Education (ASHE) which I started attending since the mid-1980s. There were very few scholars of color attending ASHE at the time, and I remember hearing that some senior scholars were calling those of us in our 30s the "Brat Pack" of the organization, a term used to refer to a group of young actors who starred in 1980s coming-of-age films such as *The Breakfast Club* and *St. Elmo's Fire*. We thought being called the Brat Pack was rather cute. Around that time, Millie García, Wynetta Lee, and other scholars of color initiated the ASHE Council on Ethnic Participation to address the limited visibility and participation of underrepresented scholars. Today there is much more diversity in ASHE, and I am proud that we helped to open the doors for so many other scholars of color who now hold leadership roles within the organization. One of my most significant professional honors is being the first Latinx scholar to be elected President of ASHE, first serving as President-Elect with both terms occurring between 1998 and 1999.

During my 8-year tenure at ASU, I always had grants. I was Director of the Ford Foundation's Urban Partnership Program (UPP), which was the precursor to today's federally funded GEAR UP Program. My role was to lead the effort to assess the progress of 16 urban cities throughout the nation which organized city-wide alliances to address the participation, retention, and graduation of underserved students. The partnerships included the K-12 system, 2- and 4-year institutions, community-based organizations, and elected officials. I worked closely with Steven Zwerling, program officer at the Ford Foundation, and a team of assessment consultants to collect and analyze data related to the progress of students as they moved from middle school to high school and ultimately to college. An outgrowth of the UPP was the National Center for Community and Education Partnerships (NCCEP) located in Washington, DC. Héctor Garza (NCCEP President), Peter Dual, Millie García, and I co-founded NCCEP which provided technical assistance to all GEAR UP sites across the nation. I succeeded Peter Dual as Chair of the NCCEP Board of Directors, and the organization is still in existence.

I also served as a Research Associate with National Center for Postsecondary Teaching, Learning and Assessment headquartered at Penn State University and funded by the Office of Education Research and Improvement, U.S. Department of Education. In this Center I worked closely with prominent and up-and-coming scholars such as Patrick Terenzini, Ernest Pascarella, Vincent Tinto, Jim Radcliff, Amaury Nora, William Tierney, Estela Bensimon, and Romero Jalómo, my ASU graduate research assistant. This team worked on research projects related to improving college student outcomes. It was through this research that I developed *validation theory* (Rendón 1994) which later became the framework for student success initiatives such as California's Puente Project and Texas' *Ascender/Catch the Next Program*. The theory has also been employed in research studies and as a framework in dissertations capturing the experiences of underserved students (Rendón-Linares and Muñoz 2011).

From the Barrio to the Academy: Revelations of a Mexican American "Scholarship Girl" (Rendón 1992) became the most popular article I have ever written. While working on my doctorate at UM, I came across an essay written by Richard Rodriguez (1975) where he related his experiences as a "scholarship boy." This essay was a poignant story of the cultural separation Rodriguez found students must endure in order to attain academic success in college. As I read the Rodriguez narrative, I reflected on my own college experience. I believed people like Rodriguez and I needed to act with resistance against total cultural separation (i.e., giving up use of Spanish, having limited power to enact institutional changes, totally assimilating into the institutional culture, etc.). I argued that our family and culture were strong assets, and that while we would surely be changed by higher education, the academy itself could also be changed by us. This now classic piece has been employed in diverse fields – English, ethnic studies, sociology, psychology, etc. Even today I get people telling me they have read my essay, and that they can relate to what I wrote so many years ago.

It was a joy to work with outstanding students and faculty at ASU, too many to specifically mention here, but I trust they know who they are. As I was leaving ASU in 1999, I left some funds to the Chicano/Latino Faculty and Staff Association which employed the money to set up the endowed Laura Rendón Scholarship, still in existence today. I had the honor of attending a couple of ceremonies where scholarships in my name were awarded, a very touching moment for a scholar like me who had spent her professional life advocating for low-income, first-generation students.

Focusing on Spirituality and Overall Well-Being

I am with three young assistant professors at ASU, and we gather together to visit a dear friend and fellow professor who is fighting colon cancer. Our friend is only 44 years of age, but she is now in a hospital and the end of her life journey appears near. Slowly, we each leave her room and huddle outside hugging each other with tears in our eyes. One of the things she told us was that what really mattered in her

life right now was not her academic undertakings, but simply being able to sleep. It was to be the last time we saw her.

As I was working my way up to full professor at ASU, I came to realize that something in my life was missing. Three dear friends had passed away in their 40s and early 50s (heart attack, colon cancer, and AIDS). I was concerned that I was missing out on other important things in life besides work: spending quality time with family, having love in life, having a deep sense of purpose, and attending to health and overall well-being. I knew there were professionals who suffered from ailments such as anxiety disorders, cardiovascular issues, gastrointestinal disorders, and chronic stress. My own issues with debilitating neck and shoulder pain at times kept me from performing at 100%, though I did everything possible to not let the pain get in the way of my work. Yet it appeared that there was little to no space in higher education to entertain issues not related to academic work. I came to realize that there were other prominent scholars, in fact people in every professional field, who were also concerned with larger issues in our lives. I attended meetings focusing on spirituality, authenticity, and wholeness with scholars like Alexander Astin, Helen Astin, Donna Shavlick, and Art Chickering, among others.

In the late 1990s, one of the most exciting things to happen to me was becoming a Fellow of the Fetzer Institute in Kalamazoo, Michigan. When I received the application to be considered as a Fetzer Fellow, I was quite excited. I was even more excited when I actually got the fellowship opportunity which ultimately transformed my life. As a fellow, I spent the next 3 years attending quarterly retreats at the Fetzer Institute where all fellows engaged in inner work and coming to terms with the strengths and shadows of our lives. The retreats were led by Angeles Arrien, author of several books, including *The Four-Fold Way* (Arrien 1993). Each fellow also benefitted from the expertise of well-known advisers which included: (1) Margaret Wheatley, a management consultant with expertise in systems thinking, chaos theory, leadership, and the learning organization; (2) Arthur Zajonc, physicist and author of books related to science, mind and spirit who later became President of the Mind and Life Institute; and (3) Mel King, a Boston political activist, community organizer, and writer who created The New Majority aimed at uniting Boston's communities of color around candidates for elective office.

Each fellow was engaged in an "independent learning quest." Mine was a study of holistic and contemplative teaching and learning practices that allowed students to engage in deep learning through the use of contemplative practices such as meditation, poetry, journaling, music, and arts-based projects, among others. My quest also involved learning more about Latinx spiritualities in Puerto Rico, Mexico and Central America, and this brought me to visit archeological sites and to interact with shamans and spiritual leaders in these countries. Through this extraordinary experience, my consciousness was expanded to be able to see what was beneath unconscious belief systems, apply the wisdom of Indigenous People, view the world as a connected system, and learn the difference between knowledge and wisdom. While the fellowship ended in 2003, I am still in touch with some of the fellows, and we aim to reunite when we can as we value the very special bond that connected us. This fellowship experience enhanced the spiritual dimension of my life, not so much

in a religious sense, but in a way where I began to appreciate the wonder of life, to know how to give and to receive love, remain authentic, practice forgiveness, and remain unattached to outcomes knowing there is a greater plan at work that I may not be able to see at the present moment. Being a Fetzer Fellow also brought new connections with individuals from diverse fields of study and organizations interested in contemplative practices, introspective methods, personal well-being, and the exploration of meaning and purpose in our lives. For example, I served on the Board of the Center for Contemplative Mind in Society, was named a Fellow of the Mind and Life Institute, served as a Trustee at Naropa University, and presented my work at the Garrison Institute. By the early 2000s, I had undergone a full personal and professional transformation as I was now being recognized not only as a leading higher education scholar, but also as a thought leader in the field of contemplative education.

Maturing as a Faculty Leader

I left ASU when I was named Veffie Milstead Jones Endowed Chair at California State University–Long Beach (CSULB) in the fall of 1999. Jean Houck, Olga Rubio, John Attinassi, and Dawn Person were instrumental in recruiting me to CSULB. One of my dreams was to have a home overlooking the ocean. After selling my home in Phoenix, I bought a beautiful condo overlooking the ocean, a peaceful space I shared with Nana Osei-Kofi. Here I could do my academic work and entertain friends and colleagues. I spent 6 years at CSULB where I engaged in a number of projects most notably serving on the President Robert Maxson's Enrollment Management Committee where we designed admissions models to ensure that the entering freshman class was diverse. In the College of Education, I developed monthly *Sentipensante* (Sensing/Thinking) Dialogues designed to help faculty explore their inner lives and to attend to self-care and well-being. I also taught courses in the master's student affairs program. During this time, I was invited to join the Board of Trustees at Naropa University in Boulder, Colorado.

In 2005, I was to undergo another transition. I was asked to apply for the position of Chair of the Department of Educational Leadership and Policy Studies at Iowa State University (ISU). The faculty, staff, and students at ISU were outstanding, and it was a real privilege to work with them. I had the opportunity to work with senior scholars like Larry Ebberts, John Schuh, and Frankie Laanan, and we had also had a dynamic group of tenure-track faculty who went on to be successful scholars in their own right. We also had a highly ranked student affairs and community college program, and we started one of the nation's first social justice concentrations in the higher education program. Serving as Chair at ISU was one of the most rewarding experiences of my professional life. I could have stayed at ISU forever were it not for Iowa's geographical location and frigid winter weather.

While at ISU, I published a book, which was the culmination of my Fetzer Institute fellowship experience. The book, *Sentipensante (Sensing/Thinking) Pedagogy: Educating for Wholeness, Social Justice and Liberation* (Rendón 2009), is

based on interviews I held with 2- and 4-year college and university faculty who were employing contemplative practices in their classrooms to provide learners with deep learning experiences. *Sentipensante* offers a blueprint for the development of a holistic, deep learning experience grounded in wholeness, justice, equity, and social change. The pedagogy blends rigorous academics with contemplative practices that cultivate a capacity for deep concentration, insight and spiritual activism.

By 2010, I decided it was time to step down from my position as Department Chair at ISU. While there are many rewards to holding such a distinguished academic position, there are also some challenges. Being Chair can be a lonely experience as you can't really be close friends with anyone in your department. There are always those who feel you are paying too much attention to one or two faculty or who feel you are not being supportive to their particular program area. Unfortunately, this can happen no matter how hard you try to be fair to everyone. It was difficult to come home to an empty house, especially when I dealt with tough, stressful times at the office. Being Chair can be an almost a 24/7 job, and while the position holds many rewards, it can also take a toll on your overall well-being.

Around the same time, my mother was undergoing the end of her life journey. I took a sabbatical after stepping down as Chair to be with my mother in Laredo. She passed away in her home peacefully about 2 months shy of her 100th birthday. While on sabbatical, the University of Texas–San Antonio (UTSA) made me an outstanding offer to join the Department of Educational Leadership and Policy Studies. I accepted the position which brought me to work with my dear friend Amaury Nora, who had actually attended middle school with me in Laredo. Amaury and I had agreed that someday we would be working at the same campus, and we were both excited when that special time was now before us. Amaury and I co-founded the UTSA Center for Research and Policy in Education. We hired Vijay Kanagala, one of my ISU doctoral students, as a postdoctoral associate. Together we worked on research, policy, and practice projects related to Latinx student success. For example, we worked with Café College and the *Ascender*/ Catch the Next Project modelled after California's Puente Project, as well as the Hispanic Association of Colleges and Universities and TG Philanthropy. Returning to Texas also brought a new network of friends and a partner, Chilean-born visual artist Liliana Wilson. While in Texas I never felt alone. I felt my life was now complete.

In 2016, I decided to retire from UTSA and to pursue a new role as an education consultant. I felt my job at UTSA was done and that it was time for me to pay it forward. I wanted to leave my coveted seat as professor to a scholar from a new generation. I became part of the network of speakers connected to SpeakOut – The Institute for Democratic Education and Culture, a nonprofit organization dedicated to advancing education, racial, and social justice. Today, I am a frequent speaker at conferences and at 2- and 4-year institutions of higher education. My archives can be found at the Nettie Lee Benson Latin American Collection at the University of Texas–Austin, one of the premier libraries in the world focused on Latin America and Latinx Studies, and also known for housing the academic archives of Gloria Anzaldúa.

Allegory of an Academic Immigrant: *Una Transformación*

My journey across intellectual, social, and cultural borderlands depicts the transformational story of a *fronteriza* (border woman), a first-generation, low-income student who finds success in the elite academic world. In these respects, I view myself as an academic immigrant, as a protagonist in my own life who imagined and fashioned a powerful dream to become an academic leader and to confront and overcome multiple *arrebatos*/struggles to achieve what no one in my family had ever even conceived of accomplishing. For me earning a college degree was the coveted ticket to economic and social mobility, as well as the opportunity to give back to my community. As an academic immigrant, I experienced Anzaldúa's seven stages of *conocimiento*/enlightenment (not always in a defined order) which begins with Stage 1, *El Arrebato*. Certainly, I confronted several *arrebatos*/struggles in my life journey, beginning with living my early life in poverty, attending poorly resourced schools, not having mentors and role models, lacking resources to attend college, and dealing with macro- and microaggressions throughout my academic trajectory. Lacking academic and social capital that is typically afforded to affluent students meant that I did not have the full, proper *papeles*/documentation to present at academic border checkpoints. My grades and test scores did not reflect all I was capable of doing, and I could have easily slipped out of the college pathway as so many students who lacked required documentation and privileged social status often did.

Stage 2, *Nepantla*, represents a liminal stage of tension, disequilibrium, and adjustment. I crossed the academic border to gain access to college as a foreigner, as a stranger in a strange land. While the transition from high school to my hometown community college was not so disruptive, once I left Laredo to attend the University of Houston, I found myself with one foot in my home world and the other in college. I was caught in the middle space between the world of the Laredo, Texas *barrio* and the new language, customs, conventions, and traditions of college. Nothing in the university resembled my home environment, including the way people talked and carried themselves. The college curriculum did not reflect my life experiences, and the faculty who were nearly 100% White were not representative of my culture. I also had to dislocate from my home world to relocate in a new academic culture with little to no assistance. In Stage 3, *Despair*, I experienced what Anzaldúa (2012) calls "*un choque*" (p. 100), a culture clash when I interacted with two distinct worlds. In the world of college, I experienced separation anxiety, financial stress, and microaggressions. I sometimes felt guilty that I was not home to help my mother, and I took on work study jobs so I could send money home and to ensure that I could cover my living expenses. While I had financial aid, I never used all of it for myself. I must say that despite facing multiple challenges, never once did I consider dropping out of college. In Stage 4, *Call to Action*, I relied on my Latinx cultural capital (Yosso 2005) to persevere, resist, and overcome challenges that could deter me from earning a college degree. Through my scholarly work focusing on low-income, first-generation students, as well as through my own life experiences, I have learned that underserved students employ unacknowledged, misunderstood

assets to complete their college education. These assets include: aspirational, linguistic, familial, social, resistant, *ganans*/perseverance, navigational, giving back, curiosity, pluriversal (i.e., ability to negotiate contradictions and to hold multiple, competing systems of meaning in tension), and spirituality/faith (Rendón et al. 2014, 2019a; Foxen 2015; Yosso 2005). Leveraging these kinds of assets, I was able to navigate diverse educational and geographical contexts. For instance, I benefitted from my parent's modeling of a strong work ethic and survival skills, as well as from my ability to form social networks and to navigate the world of college. I also benefitted from skills related to resisting poverty and microaggressions and from unrelenting *ganans*/determination to succeed. All of these assets combined to give me formidable resilience to overcome adversities and to thrive even when I wasn't expected to flourish. As I moved forward traversing and navigating academic, social, and cultural borderlands, I grew stronger. I found myself mastering the academy's language, values, and traditions, and I was able to complete both a bachelor's and master's degree.

Ultimately, I was able to undergo a conversion that took me to another academic checkpoint to pursue doctoral study at one of the nation's most elite research universities – The University of Michigan. With extensive education, teaching, and administrative experience, I was a more sophisticated student at Michigan. Here my aim was to get a doctorate because there was so much work to be done to improve educational, social, and economic conditions of my community. Armed with a Ph.D. and with academic and Latinx cultural capital, I found myself in Stage 5, *Creating a New Pattern of Reality*. This new life pattern was in stark contrast to that of my early beginnings. Instead of poverty, I now had middle-class wealth. Instead of powerlessness and marginalization, I found a new sense of agency and social acceptance. Rather than focusing only on intellectual understandings, I now reconnected with my Indigenous spirituality, challenged entrenched structures and practices, and gathered inner strength to take social action. Instead of lack of intellectual documentation to enter elite academic, social, and cultural borderlands, I was now hyperdocumented (Chang 2011) with a Ph.D. and with numerous accolades, recognitions, academic publications, and national visibility that made me an expert, spokesperson, and advocate for underserved students. I was elected or appointed to prestigious boards, became the first Latinx scholar to be elected President of ASHE, interacted with high-level academic leaders and foundation representatives, and was invited to present my scholarly work at conferences, as well as at 2- and 4-year colleges and universities. This hyperdocumentation allowed me to work in Stage 6, *Testing A New Story in the World*. Through my research, I became a scholar and thought leader testing ideas especially about the importance of working with students through an ethic of care that I called validation and with a holistic, integrated teaching and learning approach I termed *sentipensante* (sensing/thinking) pedagogy.

Today, the academic immigrant has been transformed to become a respected senior scholar whose long scholarly journey is drawing to completion. I find myself in Stage 7, *Transformation*, a space of *conocimiento*/enlightenment. I reached a level of *conocimiento* using writing as an intellectual, spiritual, healing, and art form.

As a student advocate and contemplative educator, I called attention to the plight of underserved students. I took risks and challenged entrenched belief systems to shift realities about the nature of knowledge (i.e., decentering Western ways of knowing, educating the whole person, engaging the learner in deep learning experiences through the use of contemplative practices, and liberating students from self-limiting views). I emphasized the harmonic, complementary relationship between the *sentir* of intuition and the inner life and the *pensar* of intellectualism and the pursuit of scholarly endeavors. My spiritual work allowed me to fine-tune inner-life skills (i.e., self-awareness, sense of purpose, the connection between spirituality and social justice, etc.) and to confront and learn from the shadows of my existence.

Conocimiento (with higher levels to come) allows me to draw on my intellectual and spiritual development to walk in the world armed with both knowledge and wisdom. *Conocimiento* allows me to put my knowledge to good use, especially with vulnerable populations. Today, I find it important to pay it forward, to give back to new academic immigrants – the next generation coming behind me. I support scholarships, serve as a student advocate and continue to publish to lift knowledge about how educators can best work with underserved students. Recently, I felt that it was time to give up my academic position and tenure to a new generation of scholars who are destined to change the academy, even as the academy changes them. This new cadre of scholars will inherit the lessons learned from my generation, and they represent the hope that higher education can serve not just the elite few, but also the broader group of students who in the past had been left behind. Democracy, justice, and equity suffer when we leave large numbers of students behind, when they are not given the opportunity to blossom and when they become dispensable casualties of the nation's academic system. In the end, I remain hopeful that the older and newer generation's collective impact will be significant and enduring.

Part II: The Future Is Touching Us Now

You must give birth to your images. They are the future to be born. Fear not the strangeness you feel. The future must enter you long before it happens. Just wait for the birth, for the hour of new clarity. (Rilke 1987)

In 2016, I made a presentation for the AERA Division J Committee on Inclusion. I spoke about the need for creating a new scholarly imaginary. I argued that scholars needed to take risks as they worked against entrenched belief systems and structures that privileged some and marginalized others. I also noted that our work must take us not simply into the realms with which we are most familiar, but also guide us into the growing edges that allow for new insights and expanded viewpoints. Working at the edge is often uncharted territory. It takes courage because often we may be trolled and attacked when we engage in offering radical ideas to shatter belief systems and practices from which others have benefitted and that the system rewards to maintain complacency and a privileged academic order. I believe that the future of higher

education lies working especially at the edge, where strangeness, uneasiness and discomfort can be felt.

In this section, I highlight some of higher education's opportunities and challenges. There are, of course, the obvious challenges which have been the focus of my research – college access, affordability, and completion. These topics have been extensively addressed and will continue to dominate the discourse about student success in the higher education research literature. However, I want to focus on what I consider to be newly emerging areas that are bound to re-shape how higher education functions and addresses its student body.

America's Four Transformational Demographic Firsts

The future is touching us now as the nation is presently beginning to experience demographic and cultural changes. US demographic forecasts indicate our nation is headed toward four demographic "firsts." These population shifts are expected to transform the nature of American society and the nation's educational system.

1. *No Clear US Majority Race*. Within the next two decades, no ethnic/racial group will comprise over 50% of the population. The United States will become increasingly less white (self-definition), leading to questions as to what counts as "Whiteness," and who is "minority" or "majority." According to the National Action Council for Minorities in Engineering (NACME 2013) by around 2050, no one race/ethnic category will be a majority. Moreover, while the white population will decrease from 63% in 2012 to 48.2% in 2050, the Latinx population will increase from 17% to 26.8% and the Asian American/Native Hawaiian/Pacific Islander cohort will increase its population from 5.1% to 7.3%. The African American population will remain rather static, growing slightly from 12.3% to 12.8%. It is going to be interesting to watch the growth of the two or more races category that will double from 1.9% to 4.2% (NACME 2013).
2. *Migration Increases*. In a report documenting population projections, Vespa et al. (2018) note that beginning in 2030:

Because of population aging, immigration is projected to overtake natural increase (the excess of births over deaths) as the primary driver of population growth for the country. As the population ages, the number of deaths is projected to rise substantially, which will slow the country's natural growth. As a result, net international migration is projected to overtake natural increase, even as levels of migration are projected to remain relatively flat. (p. 1)

There are now over 44 million immigrants living in the United States. About three million were refugees who entered the country after the Refugee Act of 1980 (Migration Policy Institute 2018). Consequently, it will become important for higher education to address the education of refugees and immigrants. Another important issue relates to the immigration policy known as DACA, or Deferred Action for Childhood Arrivals, a policy established by President Barack Obama in 2012. DACA is intended to protect eligible immigrant youth who came to the

United States as children, allowing them to benefit from temporary protection against deportation and to qualify for work authorization. The future of the policy is unclear, but DACA college students are faced with continued stress regarding their citizenship, as well as their ability to complete their education and to work in this country (Gonzalez 2015; Muñoz 2015).

3. *Single-Race Identity Becoming Obsolete*. The Two or More Races population is projected to be the fastest growing over the next several decades, followed by single-race Asians and Hispanics of any race. The cause of growth for Hispanics and biracial and multiracial people is due to high rates of natural increase as these groups are relatively young. The growth of the Asian population is due to high net international migration (U.S. Census 2018).
4. *Aging Population*. By 2030 all Baby Boomers will surpass age 65 with one of every five residents becoming of retirement age. Within 15 to 20 years, older people are projected to outnumber children for the first time in US history (U.S. Census 2018).

These demographic and cultural shifts will have a significant impact, particularly with the student body. Student identities are becoming more complex and there will be radical changes in the way we have conceptualized race, gender, and sexual orientation.

The Changing Nature of Higher Education's Student Body

What we call identity is becoming more complex as the nature of college students becomes more multiracial and more willing to embrace multiple aspects of their identity related to, for example, politics, migration status, religion, history, language, geography, sexuality, gender, and world view.

Reconceptualizing the Concept of Race. A more spacious intersectional consciousness is emerging with a new, multidimensional student culture that is not trapped in binaries and that embraces not one or two, but multiple aspects of their identity. Identity combinations are seemingly endless and not easily categorized. Take, for example, a student whose father is Peruvian and Chinese and whose mother is Irish, German, French, and Cherokee. Another student might identify as Muslim, American, and Bengali. Still another might reject being forced to choose between her Chinese and American heritage and decides to make sense of her identity by embracing both aspects of her ancestry. The five major classifications of race (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White) based on skin color and genes are becoming obsolete, and the future student body of the United States is multiracial and multidimensional (VOA News 2011). Moreover, students have ways of referring to their identity that transcend race/ethnicity, gender, and sexuality. Identity may also include, for instance, whether a student is undocumented, "hyperdocumented" (Chang 2011), first generation, and/or disabled.

Filatino, Chicanese, Korgentinian, Blaxican – these are some of the mixed-race terms students are using to describe their race identification. The era of employing racial binaries to categorize people as Black or White, colored, and not colored is basically over especially with the youth population. As the United States moves to a context where all races fall below 50% of the population and with the biracial and multiracial population growing at a faster pace than those in the single-race category, very interesting dynamics will occur as Americans will begin to reconceptualize the meaning of race. It is important to note that racial classifications are not free of social consequences especially for vulnerable groups which have a long history of being the targets of racial attacks. As Onwuachi-Willing (2016) has noted: multiracial adults who are viewed as Blacks “experience prejudice and interactions in ways that are much more closely aligned with members of the black community” (p. 1).

For colleges and universities, working with the complex characteristics of its newly emerging demographic profile can be both exciting and challenging. Clearly, there will be a need for investing in the nation’s diverse youth as their population continues to grow. This is important given that educational preparation can produce a working population that can contribute to the economy and to Medicare and Social Security, programs on which the White senior population will depend on for their well-being. Moreover, new issues are bound to arise with no easy solutions. For example, Yi and Kiyama (2018) note that educating refugees and migrants will require addressing barriers to access and success (i.e., cultural differences, discrimination and racism, language issues, financial hardships, and documentation needed to access college). Also, as more students identify as multiracial, what does this mean for institutional designations such as Hispanic-Serving Institutions and Predominantly White Institutions? What other terminology will be needed?

Reconceptualizing the Concept of Gender Identity. Gender identity is evolving to no longer being a binary representation (i.e., feminine or masculine; he or she). The term genderqueer, also known as nonbinary, falls outside what is known as cisgender, where an individual’s gender identity matches the sex they were assigned when born. Genderqueer captures gender identities that are not exclusively male or female and gender expressions that combine masculinity and femininity. Moreover, new terminology is evolving with gender categories such as bigender, transgender, trigender, nongender, pangender, genderless, other-gendered, and genderfluid. Some students will avoid commonly used pronouns such as he and she because they do not feel like or identify as a “male” or “female.” New gender-neutral pronouns are emerging and are now in use, for example, ze/hir/hirs. The title of Mx. is sometimes used instead of Mr. or Miss. Terms and definitions will continue to change, and educators will be tasked with keeping up with evolving language (Hines and Sanger 2010; Nicolazzo 2017; Trans Student Educational Resources n.d.).

Reconceptualizing the Concept of Sexual Orientation. A growing number of students are choosing to identify or not to identify with a sexual preference. Consequently, the traditional binary classification of sexual orientation as gay or straight is no longer proving to be useful. Like those who identify as cisgender, genderqueer people can have varied sexual or romantic orientations, and several terms exist to define one’s sexual orientation. For example, terms such as asexual

(little or no sexual attraction or desire for others) and pansexual (potential for emotional, romantic, or sexual attraction to people of any gender) are finding their way into the lexicon describing sexual orientation that transcends more commonly employed terms such as heterosexual, homosexual, and bisexual (Human Rights Campaign *n.d.*).

As race, gender, sexuality, and identity become radicalized, what does this mean in terms of the kind of curricular programming, institutional accommodations, and student support services that higher education needs to deliver to students that are not easily categorized? A case in point is the so-called “bathroom bill” in North Carolina and Texas which proposed that transgender people use restrooms in public buildings that corresponded to their sex at birth. A legal battle ensued with the LGBTQ+ community citing discrimination against transgender individuals who argued that they had experienced verbal, physical, and sexual harassment in public facilities. Many institutions of higher education have taken steps to protect the transgender community with gender-neutral toilet facilities and unisex toilets.

There is also a need to consider institutional policies, entrenched behaviors, power structures, and contextual conditions that favor some students over others to determine how they impact individuals to create vulnerability, stigmatization, and discrimination in the form of exclusion, racism, sexism, and homophobia, among others (Crenshaw 1991). At one university, an African American woman had placed her feet on the desk, and the instructor called the campus police to escort the student out of class. How many times have White students placed their feet on the desk without consequence? Would the professor have called the police if the student was a White male dressed in a suit? In this example, the Black woman found herself powerless and at a disadvantage due to the interlocking nature of her race and gender. Another example is that of Chang (2011) who describes her hyperdocumented status as an effort to accrue awards, accolades and even a Ph.D. to compensate for her once undocumented status. Chang understands that regardless of possessing multiple forms of academic documentation, individuals with interlocking, marginalized identities related to, for example: race/ethnicity, gender, citizenship, sexuality, physical ability, and religion can face oppressive, discriminatory situations and even have their status and legitimacy challenged.

A Technological Revolution

Unquestionably, I believe technology will continue to have a significant impact on education and on our society. We are already being touched by the future of technology as there are numerous examples of artificial intelligence (AI) in use today. Examples include: Siri, Alexa, self-driving automobiles, Tesla cars, Amazon, Netflix, and Pandora, among others (Adams 2017). The advent of 3D printing will allow for building homes and produce toys, food, and even body parts. The rules of cyber ethics have emerged to promote responsible behavior when using the Internet and technological devices (Center for Internet Security *n.d.*).

Within the past 5 to 10 years, our society has embraced technology to the point that a large segment of the population now has a cell phone, laptop, and/or tablet and is using this technology in numerous ways. Consider that within a very short period of time we have moved from:

- Talking on the phone to texting on our cell phones
- Using landlines to relying on cell phones
- Using telephone conference calls to using Skype or Zoom
- Relying on face-to-face teaching and learning to using online or blended formats
- Making formal, face-to-face presentations to presenting on webinars
- Buying records and CDs to streaming videos and songs
- Going to the movies to downloading films from Netflix, Hulu, or Amazon Prime
- Playing with toys to interacting with video games

These are just some examples of how our society and the youth culture, in particular, have embraced technology. The Henry J Kaiser Family Foundation (2010) reported that daily media use among children and teens, especially minority youth, has dramatically increased. Specifically, adolescents aged 8–18 spent more than 7.5 h a day consuming media, including using more than one medium at a time. Interestingly, black and Hispanic children were found to spend more time with media than white kids. Our digital addictions have managed to, in some ways, define our lives: In 2015, the Pew Research Center (Lenhart 2015) indicated that aided by constant access to mobile devices, especially smart phones, some 92% of teens were online daily and 24% of them are almost constantly online. Among teens, Facebook was the most popular and frequently used social media platform with half using Instagram and nearly as many turning to Snapchat. Adults aren't any better: Most adults spend 11 hours a day or more consuming electronic media, including watching TV, using apps on their smartphones, and other media (Rodriguez 2018).

While technology has certainly made our lives easier in many respects, there are certainly some challenges. In a society that prizes relationships and community, to what extent is technology, especially among younger groups who are addicted to high-tech devices and to the use of social media, diminishing the capacity for attention and presence? With attention spans getting shorter, what will that mean to building a solid relationship with another human being? What is the role of technology in high-touch learning environments? There is also the consideration that students can be exposed to harmful content and that technology can have an adverse effect on young children and even adults. Moreover, there is still a digital divide with low-income students and those living in rural communities facing inequitable access to broadband services and to innovative technology (Barton 2016). There is also the notion that technology, when misused and abused (i.e., deepfake, doctored videos), can have a harmful effect especially in a post-truth era. What is truth and what is “fake news?” How is technology being employed to create disinformation campaigns? To what extent can the public truly believe what they see in a growing number of websites that purport to offer their version of truth? To what

extent have we allowed technology to colonize our lives to the extent it shifts attention to our outer realities as opposed to our inner lives?

Defining Truth in a Post-Truth World

Education researchers are concerned with uncovering truth. We are a part of the intelligence world, and we align ourselves with evidence, facts, and notions of reason, validity, and reliability to present our findings which can be employed to make changes in educational policy and practice. With post-truth politics, debates are disconnected from proven facts and politicians appeal primarily to emotions such as hate and fear and employ so-called alternative facts. In the 2016 presidential campaign, social media like Facebook and Twitter, among others, were used to disseminate false reports about candidates. Some people believed these reports which created chaos and confusion. While respected news outlets such as CNN and the *New York Times* had previously been commended for presenting real facts, now some politicians were arguing that these same outlets should be condemned for presenting “fake news” to the American public. Similarly, scientific evidence supporting the overwhelming consensus that the earth’s climate was warming was touted as a myth by some politicians and news outlets.

As researchers we should be very concerned with attacks on evidence-based information. We should be a part of a larger dialogue that concerns itself with matters such as: What constitutes truth? How do we arrive at truth? Is truth really disappearing even when we have a large segment of a public that recognizes lies and that wishes to hold politicians accountable for their attempts to suppress truth? What can we do to preserve our democracy and to affirm the primacy of reality based on proven facts?

Rise of Racially Charged Incidents on College Campuses

At the beginning of this essay, I noted the intertwined nature of what happens in society and what is experienced in our educational systems. One of the most troubling societal issues relates to long-standing hate crimes against vulnerable populations such as people of color, Jews, Muslims, immigrants, and the LGBTQ + community. Indeed campus hate crimes appear to be rising (Bauman 2018). The most recent glaring example was that of August 11, 2017 when hundreds of torch-bearing protesters marched through the University of Virginia campus. The protesters were representative of White supremacist groups who chanted slogans such as “Blood and Soil” and “Jews Will Not Replace Us.” Extremely troubling incidents transcend vandalism and destruction of property to include incidents where a door is defaced with homophobic and transphobic slurs or a swastika is drawn on the student’s door (Bauman 2018).

Aligned with these very troubling developments are campus responses to controversial speakers and protests as institutions of higher education become entangled

with political activism, some of which can generate significant campus disruption. The implications of hate crimes on campus are serious. How should universities respond when controversial figures who spout fear and hate wish to speak on campus? Are university leaders doing enough to protect free speech on campus?

An Unfolding New Reality and the New American Scholar

We can observe and feel a part of the future as we are in the middle of an evolutionary sociocultural context imbued with complexities and where possibilities are seemingly endless. This calls to question: What kind of a higher education scholar is needed in an increasingly complex world where solutions defy a choice between one or two options? How do we work in contexts of uncertainty and even chaos? I agree with Anzaldúa (2012) who states that the future belongs to the person who is able to operate within paradox and contradictions and who embodies both mastery of knowledge and wisdom. A higher calling is upon us as a new, hybrid consciousness emerges.

In her classic text *Borderlands/La Frontera: The New Mestiza*, Anzaldúa (2012) presents a vision of hybridity termed *mestiza* consciousness to identify a growing population that is not trapped in binaries, is able to straddle multiple cultures, and navigate race/ethnicity, gender, and sexuality identity borders. *Mestiza* consciousness is a feminine way of knowing *una conciencia de la mujer*. This philosophical perspective is pluriversal in nature, meaning the ability to negotiate contradictions, move beyond either/or thinking, operate in a both/and mode, and recognize that analyzing opposite perspectives can lead us to more in-depth understandings (Mignolo 2013; Andreotti et al. 2011). With this pluriversal consciousness, rigidity gives way to flexibility; certainty gives way to openness to learning; narrowness gives way to spaciousness. Operating with a *mestiza* consciousness can be rather difficult as it defies traditional practices and belief systems. It means dealing with complexities, tensions, and uncertainties and requiring a high level of tolerance for ambiguities and contradictions.

The future Anzaldúa envisions is touching us now. We are in the mist of “*un desdoblamiento*,” the unfolding of a new reality where all things are possible, where old belief systems can be transformed, and where we can indeed create a new vision of what it means to operate with wholeness, integration and spaciousness. But as scholars we cannot work in a space of *desdoblamiento* employing tactics that keep us sidelined, unable, and perhaps even afraid to speak out against injustice and oppression in all forms. In accepting the Best Director Academy Award for the haunting film, *Roma*, Alfonso Cuarón said: “As artists our job is to look where others don’t. This responsibility becomes much more important in times when we are encouraged to look away” (Da Silva 2019). I agree with this sense of responsibility, and I believe that higher education scholars should not look the other way.

To work in this unfolding new reality calls for a redefinition of a scholar that transcends the traditional view centered around being an expert in a particular branch of study and an intellectual who is engaged in rigorous research. Certainly, this definition will continue to constitute how a scholar can be defined. However, there are new, expanded roles that I believe scholars can and should play in the quest to investigate where we might be encouraged not to probe. Moreover, I believe scholars should actually take risks and entertain new ideas that might be considered audacious, courageous, and bold.

- *The scholar as a social activist and change agent.* I am heartened to see, particularly in the new generation of higher education scholars, a real focus on addressing social issues and taking the lead in advocacy and involvement in our nation's political and social change processes (i.e., women's rights, the MeToo movement, Black Lives Matter, climate change, etc.). Higher education research should address some of the most pressing social issues of our time, for example: immigration, undocumented students, racism, systemic violence against people of color, women, and the LGBTQ+ community, guns on campus, religious intolerance, hate crimes, and the rights of differently abled people. In 2018, the conference theme of Association for the Study of Higher Education (ASHE) was Envisioning the Woke Academy, and engaged critical scholars in shedding light on what it meant to work with woke research that could keep us keenly aware of what was happening in our communities and the world. For me, staying woke means not looking the other way, speaking truth to power and staying present with the realities of vulnerable communities.
- *The scholar as a public intellectual.* As scholars uncover new knowledge, this information should get maximum exposure. Scholars can and should offer their perspectives as experts in their fields with cable news networks, podcasts, social media outlets, blogs, opinion pieces, and television shows. Our influence should spread beyond the academy, and we should seek to influence social movements and shape public debates on the important issues facing our nation and the world.
- *The scholar as an innovator.* As scholars we have opportunities to work both at the traditional center and at the creative edge. Working at the edge means taking risks, creatively introducing and testing new ideas, and being fiercely unafraid of failure.
- *The scholar as a healer.* I believe scholars can and should be caring humanitarians as knowledge ultimately exists to help people reach their full potential. The work of fairness, justice, and democracy is not only about calling out injustice, it is also about healing the wounds that divide us. Moreover, much of higher education research is employed by student affairs practitioners who work with so many students afflicted by, to cite a few examples, stress, isolation, racism, homophobia, mental health issues, and lack of a sense of purpose. The true value of our work can be seen in the extent it improves the condition of education and well-being for all students, especially those who are most vulnerable.

Mi Autohistoria: Final Thoughts

Today I live an intersectional life with multiple, co-existing identities, all of which make me whole; some which expose me to harm in certain contexts. I have come to understand that there has been a grand design in the tapestry of my life – to do the work of light, to be the voice for the most vulnerable among us, to shatter harmful beliefs and practices, and to work with others to create a newly-fashioned imaginary of higher education that is just and liberatory in nature. The humanitarian in me is gratified that my work has been useful in the educational arena and that my students have moved on to be the next generation of scholars and student affairs practitioners.

Mi camino de conocimiento has been quite extraordinary – from growing up in poverty to having the transformative experience of an academic immigrant who crossed multiple intellectual, social, and cultural borders to find privileged presence in the elite network of scholars who study higher education. My message to a new generation of scholars is to remain authentic, be who you are, engage in being co-creators of change and possibility, and work through and learn from your own *camino de conocimiento*, which deepens understandings and wisdom and that helps you to stand in your own power and authority.

There is a Spanish word called *despierta*, to awaken. As purposeful *caminantes*/journeyers, we are being called to wake up and to leverage the full power of our intellectual, social, cultural, and spiritual strengths. We can, individually and collectively, play a part in creating a new consciousness that recasts entrenched, flawed belief systems and that reshapes old policies, practices, and structures that do not support our personal and professional growth. Our greatest tools on the path to *conocimiento* are to remain open, leverage our formidable strengths, connect with our sense of purpose, embody love, focus on healing and bridge building, and stay present. Many before us have cleared a path so that we might engage in creative imagination and implementation of new ideas, solutions, and approaches. We must do the same and carry this tradition forward. I end with a message of hope for all *caminantes* that I expressed many years ago on my path to *conocimiento*: “Many more like me will come to partake of the academy, classic scholarship men and women who leave home to find success in an alien land. We will change the academy, even as the academy changes us. And more and more of us will experience academic success with few, if any, regrets (Rendón 1994, p. 63).”

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The History of Religion in American Higher Education

2

Andrea L. Turpin

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Abstract

This chapter surveys existing literature on the history of religion in American higher education with an eye both to piecing together the story and to pointing out gaps that remain. It likewise reflects on how this history can inform contemporary conversations about the purposes, moral and otherwise, of American higher education. The chapter begins with the original synthetic narrative of how religion has woven through American higher education – and the separate synthetic narratives of women’s and African American higher education. It then turns to how historians have revised aspects of this narrative for three broad time periods: the

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colonial and antebellum period, the Civil War through World War II, and the postwar period to the present. The chapter next considers more specialized scholarship on various aspects of the intersection between religion and American higher education: non-Protestant faiths, the field of religious studies, extracurricular student religious life, and Protestant faith-based institutions of higher education (theological seminaries, denominational colleges, and non-denominational evangelical and fundamentalist institutions). The chapter concludes with an evaluation of how religion has been treated in the recent wave of synthetic histories of American higher education that have incorporated more updated scholarship.

Keywords

Religion · History · Christianity · Protestantism · Catholicism · Evangelicalism · Fundamentalism · Judaism · Muslim · Modernism · Women · Gender · African American · Morality · Ethics · Denominational · Research · Student life · Curriculum · Extracurriculum

The timely completion of this chapter would not have been possible without the intelligent research assistance of my graduate assistant and fellow historian of American higher education Benjamin P. Leavitt. Portions of this chapter are adapted from the following book reviews by the author: “*For the Common Good: A New History of Higher Education in America*, by Charles Dorn,” *New England Quarterly* 92, no. 2 (June 2019): 333–336; “*The Oxford Handbook of Religion and American Education*, by Michael D. Waggoner and Nathan C. Walker, eds.,” *Reading Religion* (February 22, 2019); “*Fundamentalist U: Keeping the Faith in American Higher Education*, by Adam Laats,” *History of Education Quarterly* 58, no. 4 (October 2018): 611–614; “The Many Purposes of American Higher Education,” *Reviews in American History* 44, no. 1 (March 2016): 77–84; “*White Elephants on Campus: The Decline of the University Chapel in America, 1920–1960*, by Margaret M. Grubiak,” *Church History* 84, no. 3 (September 2015): 688–690; “*Science, Democracy and the American University: From the Civil War to the Cold War*, by Andrew Jewett,” *The Hedgehog Review* 16, no. 3 (Fall 2014): 137–140.

Introduction

When considering the relationship between religion and American higher education, it can be helpful to step back and gain some historical perspective. Most scholars of American higher education realize that during the colonial and antebellum periods, the majority of higher educational institutions had some sort of formal religious affiliation. What they may not realize is that as late as the mid-1960s, approximately one-third of American colleges and universities were private and more than half of these private institutions were affiliated with a religious group (Sloan 1994, pp. 203–204). And the presence of religion in American higher education was not

purely nominal: as late as the 1950s, college-educated Americans were more, not less, likely than other Americans to be active in a religious group of some kind (Marsden and Longfield 1992, p. 4).

The picture is even more complex than these numbers would suggest. On the one hand, religion maintained a presence even in institutions that dropped or never possessed any formal religious affiliation. This presence could take multiple forms – required or optional chapel services; required or optional courses on religion, whether from a faith-based or empirical stance; campus chaplaincies and voluntary campus ministry groups. On the other hand, formal religious affiliation did not always produce an institution that looked substantially different from a formally secular one. Some secular colleges and universities teemed with religious life; some religious colleges and universities defined their religious identity so vaguely as to make almost no functional difference in campus curriculum, activities, or climate. And while much of the religious life on American campuses has historically been Protestant, other faiths have established their own institutions of higher education – most prominently Catholicism, but also Mormonism, Judaism, Buddhism, and Islam – and voluntary student religious life at many different types of institutions has reflected the nation’s pluralism.

This chapter surveys the existing literature on the history of religion in American higher education with an eye both to piecing together the story and to pointing out the gaps that remain. It mostly confines itself to monographs other than institutional histories, but occasionally fills out the narrative with some of these as well as various articles. The chapter begins with the original synthetic narrative of how religion has woven through American higher education – and the separate synthetic narratives of women’s and African American higher education. It then turns to how historians have revised aspects of this narrative for three broad time periods: the colonial and antebellum period, the Civil War through World War II – where most of the scholarship has concentrated – and the postwar period to the present. The chapter next zooms in to consider more specialized scholarship on various aspects of the intersection between religion and American higher education: non-Protestant faiths, the field of religious studies, extracurricular student religious life, and Protestant faith-based institutions of higher education (theological seminaries, denominational colleges, and non-denominational evangelical and fundamentalist institutions). The chapter concludes with an evaluation of how religion has been treated in the recent wave of synthetic histories of American higher education that have incorporated more updated scholarship, and also reflects on how this history can inform the contemporary academy.

The Original Synthetic Narrative

The baseline for modern historians’ synthetic understanding of the narrative of American higher education – and how religion fit into it – was Frederick Rudolph’s 1962 sweeping history *The American College and University: A History*. Indeed, Rudolph’s text remained the go-to for classroom assignment until John Thelin’s

A History of American Higher Education (2004, revised 2011, 2019). Rudolph's grand narrative highlighted the unique religious conditions of the American context as crucial for explaining the specific shape that American higher education took after its basic forms were transferred from Europe in the colonial period. Rudolph asserted that the earliest colonial colleges – Harvard (1636) and William and Mary (1693) – intended to sustain English society in America through training ministers, government leaders, and educated gentlemen after the European pattern. Soon, however, an American distinctiveness crept in: denominationalism. Without a single established church for all the colonies, colleges such as Yale (1701) and Princeton (1746) catered to particular religious subgroups (originally, evangelical Congregationalists and evangelical Presbyterians, respectively).

Rudolph credited curriculum changes after the Revolution – mostly an increasing emphasis on science and practical studies – more to influences from Europe than from home, but argued that religious changes in America shaped the antebellum collegiate environment in other ways. On the one hand, religious toleration and indifference rose as the nation grew increasingly pluralistic and as religious disestablishment occurred not only nationally but gradually at the state level as well. On the other hand, the resulting competitive religious market contributed to the establishment of multiple smaller denominational colleges in the antebellum period, especially in the wake of the religious revivals known as the Second Great Awakening. Rudolph argued, though, that state and local rivalries also contributed to this dispersion of resources, which he viewed as a negative development.

In what would become a consistent through line of the history of religion in American higher education, Rudolph highlighted the question of the moral component to undergraduate education: from what did it derive and toward what did it drive? He argued that the American college was originally conceived of as a social investment that trained leaders for the good of the whole society, but that democratic pressure during the antebellum period shifted collegiate education to a means of individual advancement. At the same time, the religious identity of so many colleges gave them strength and purpose, particularly in the context of a growing revival atmosphere and concern for foreign missions, but also gave each one a sort of petty narrowness associated with its specific denominational identity. For Rudolph, in other words, college religion during this time contributed both toward a concern for the greater good and toward more introspective navel gazing.

The location of religion in the college experience contributed to its effect. The antebellum period carried over the basic patterns of the colonial era. Religious requirements included daily chapel and also often Sunday attendance at a church of students' choice, a course in "Christian evidences" that gave a reasoned defense of the Christian faith, and a senior capstone moral philosophy course that brought together students' various areas of studies under the umbrella of a Christian moral outlook. This capstone was taught by the college president, almost always a minister. Rudolph argued that by the individualistic antebellum period, required religious activities often backfired. What worked instead were new voluntary student religious organizations, the annual season of prayer for colleges, and particularly religious revivals; in fact, college leaders hoped and prayed for a revival to sweep through at

least once every 4 years so as to affect every student. The last year in which a revival spread through multiple colleges was 1858, the tail end of the Second Great Awakening. Rudolph proffered a Whiggish explanation for this fact: he claimed that revivalism was bound to peter out in a nation so focused on the possibility of progress in this life.

Seeing history through this lens, Rudolph went on to describe alterations in the standard college experience toward the end of the antebellum era as a student-led shift, dare we say progress, from strict behavior requirements, often deriving from a religious outlook, to greater freedom and confidence in students' own abilities to make and find meaning. Thus, the religious outlook of professors and administrators charged with student discipline shifted from one that assumed innate human depravity, as revivalism did, to one that placed more faith in students. Students, meanwhile, shifted their energies from revivals to literary societies, Greek life, and athletics, all of which sought to build the character and skills needed for this-worldly professional and social advancement, rather than the piety needed for life in the next. Simultaneously, the rise of distinct academic disciplines led many professors to reject their former role as moral authorities and disciplinarians in favor of a model of vocation and professional advancement tied to their field rather than their college.

Though heavy-handed in his assessment of antebellum student religious life, Rudolph astutely analyzed the interplay between religion and money in American higher education. On one side, denominational multiplicity led to lower state support for higher education. On the other, many professors saw their vocation as a religious calling and hence were willing to accept less remuneration than their work warranted. Their willingness to receive a relatively small paycheck kept institutions afloat – and enticed benefactors who might more readily give to name a building rather than to support the general fund.

Rudolph also made one of the foundational interventions into what would become a long-running historiographical debate on exactly how science and religion interacted to produce the major changes in American higher education in the decades around 1900. He argued that a scientific course of study was originally introduced into the antebellum undergraduate curriculum in part because, pre-Darwin, science was regularly believed to bolster religious faith inasmuch as it increased appreciation for God's creation. Rudolph went on to argue that, ironically, it was science that would play the main role in altering the religious nature of American universities – from institutions primarily dedicated to instilling in students inherited truth and character to institutions primarily dedicated to discovering new truth.

That said, Rudolph emphasized that in the late 1800s, even state universities retained some form of active religious life on campus in order to fend off accusations from denominational colleges that they were cesspools of godlessness – all while making that religious life vague enough or broad enough to fend off parallel accusations that they were friendly to a particular denomination. Turning his attention to denominational institutions themselves, Rudolph noted that these were slowest on the whole to adopt the system of undergraduate electives that became popular in the decades around 1900, at least in part out of a theological investment in traditional ways of training. Zooming out, Rudolph noted that at almost all

institutions, academic leaders actually sought to reconcile science and religion; very few saw the former as a replacement of the latter. However, intellectual development functionally became more important than religious or moral development, especially in the new universities. One marker of this shift was that class rank was now solely determined by academic performance and not also by behavior.

According to Rudolph, what ended up replacing the gap left by the marginalization of religion was the Progressive Era service ideal. In other words, universities would contribute to the nation's moral progress by turning out experts to serve the state in developing wholesome policies and would also serve democracy by offering extension courses for the "common man." The marginalization of formal religion within the university was hastened by the commitment of the new philanthropic foundations to funding nonsectarian institutions. Most notably, when the Carnegie Foundation for the Advancement of Teaching established funds for faculty pensions, it not only required institutions to hire only PhDs as faculty but also to be non-denominational. As a result, several institutions with only tenuous ties to a founding religious denomination chose to cut those ties. In the 1920s, universities adopted a new, more pluralistic method of filling the moral and pastoral gap: hiring multiple denominational chaplains. Writing in the early 1960s, Rudolph wrapped up his narrative shortly after World War II, when the increased complications of a growing student body meant that a wider range of Americans attending college, often for economic and social mobility, created a crisis of moral purpose among institutions of American higher education.

Rudolph concluded with a bibliographic essay laying out the historiography of American higher education to that point. His focus was the growing percentage of these histories done in recent decades by historians housed in history departments (as distinct from educators housed in education departments or studies commissioned by the government or philanthropic foundations). This shift necessarily introduced new questions.

Before this "historian's turn," if you will, the chief work Rudolph named was Donald G. Tewksbury's *The Founding of American Colleges and Universities Before the Civil War: With Particular Reference to the Religious Influences Bearing Upon the College Movement* (1932). Rudolph called this "the most useful historical study to come out of the nearly one thousand titles in the *Teachers College, Columbia University, Contributions to Education* (1905–60), 3 vols." (p. 500). (Rudolph tended to take umbrage at what he called "the prescriptive and inspirational" elements present in many of the Columbia works (p. 500).) Tewksbury's book carefully catalogued (in 25 pages!) all the permanent colleges and universities founded before the Civil War. It then analyzed the role of religious denominations in their founding, including struggles between denominations and state governments for control of higher education in the years leading to the widespread establishment of state universities. Tewksbury did not, Rudolph noted, recover information on the hundreds of short-lived colleges that did not survive that era.

Other books Rudolph highlighted in this series included *The Church, the State, and Education in Virginia* (Bell 1930) and *Church-State Relationships in Education in*

North Carolina Since 1776 (Gobbel 1938). Though Rudolph attempted to answer some of this question in his own book, he noted, “While some of the studies previously listed move into the area of church and state relations, there is still a need for a history that will clarify this relationship and the process by which church and state became separated, with emphasis on the meaning for higher education” (p. 501).

Rudolph credited what he called “the return of the historians” (p. 504) to the history of American higher education to publication of Samuel Eliot Morison’s multivolume project on the history of Harvard: Morison, ed., *The Development of Harvard University Since the Inauguration of President Eliot 1869–1929* (1930); Morison, *The Founding of Harvard College* (1935); Morison, *Harvard College in the Seventeenth Century*, 2 vols. (1936a); and Morison, *Three Centuries of Harvard 1636–1936* (1936b). Published to celebrate Harvard’s 300th anniversary in 1936, these volumes also demonstrated that college and university history “could make significant contributions to an understanding of American social and intellectual development” (p. 504). Rudolph postulated that college and university history would have soon reentered the mainstream of American history writing anyway because other institutions were also approaching big anniversaries and now employed guild-trained historians capable of doing their histories justice. Regardless, other strong works soon followed.

Rudolph particularly noted one that centered on the role of religion: Albea Godbold’s *The Church College of the Old South* (1944), which analyzed various denominations’ motivations for founding colleges in that region. These chiefly involved educating ministers, but also included lowering the cost of education, rendering service to the community, promoting denominational loyalty, extending denominational influence, evangelizing, fostering sectional interests, and providing an alternative to state universities, which they perceived as godless and aristocratic. Rudolph called for further works that would expand treatment of this topic beyond that region and time period because “. . . in the absence of sound study, a great deal of nonsense is purveyed on the general subject” (p. 505).

Turning to a different subset of works on religious history, Rudolph, in a double condemnation, declared the existing literature on Catholic higher education “small but disappointing” (p. 514). He included under this rubric: *A History of Catholic Colleges for Women in the United States of America* (Bowler 1933); *Catholic College Foundations and Development in the United States (1677–1850)* (Cassidy 1924); *Catholic Higher Education for Men in the United States 1850–1866* (Erbacher 1931); and *A History of Catholic Higher Education in the United States* (Power 1958). What Rudolph believed to be missing in this body of work was a clear sense of how Catholic institutions were like or unlike other colleges and universities. He also called for analysis of the late nineteenth-century debate within the Catholic Church over Catholics attending non-Catholic colleges and universities.

Perhaps the highest recognition of the significance of an individual work of history is to reissue it with a retrospective introductory essay, and the highest recognition of the significance of its attendant bibliographic essay is to update it. In 1990, John Thelin and the University of Georgia Press did both for Rudolph’s

original 1962 book and bibliography. Thus, Thelin's two essays add onto Rudolph's synthetic history a helpful window into the developing treatment of the history of American higher education in the intervening 30 years. But they are startlingly silent on the question of religion. The closest Thelin came was his treatment of the 1970s revision to the portrayal by scholars such as Rudolph and by Hofstadter and Metzger (1955) of the average antebellum college as a backward institution "controlled by a religious denomination, hamstrung by a moribund 'classical' curriculum, staffed by transient beleaguered instructors, and bound to a declining constituency of reluctant, ill-prepared adolescents" (p. xiv). Thelin asserted that historians such as David Potts (1971), Hugh Hawkins (1971), James Axtell (1971), Colin Burke (1982), and David Allmendinger (1971, 1975) had demonstrated that such institutions were actually not under the thumb of a single denomination but rather resulted from a partnership between local and denominational funding and hence served a broader constituency. Likewise, these colleges were places of far more dynamic experimentation than earlier caricatures would have led us to believe.

In his supplemental bibliography Thelin asserted, "Rudolph believed that social history and intellectual history would be the umbrella under which histories of higher education might flourish. The latter variant – intellectual history – has been markedly underdeveloped. Certainly it is social history's connection of the campus to trends in demography, regional history, and urban history and to questions of class, race, and gender that has been the source of scholarly energy" (pp. 520–521). Perhaps this judgment accounts for a striking aspect of Thelin's supplemental bibliography: unlike the original, it did not mention any scholarship on the history of the religious aspects of American higher education. More precisely, it did not highlight when works it did mention might bear on the subject.

For example, Thelin called attention to a series of books in the 1970s that addressed the question of access to collegiate education: *The American College and American Culture: Socialization as a Function of Higher Education* (Handlin and Handlin 1970), *The Half-Opened Door: Discrimination and Admissions at Harvard, Yale, and Princeton, 1900–1970* (Synnott 1979), and *The Qualified Student: A History of Selective College Admissions in America* (Wechsler 1977). All of these wrestled with the marginalization of Jewish and Catholic students and could have been seen through that lens as advancing our understanding of the nature of religion in colleges and universities.

If all we had to go on were Thelin's 1990 historiographical essays, we might assume that interest in the role of religion in higher education had died off after Rudolph. In other words, perhaps Rudolph caricatured the influence of religious denominations in colleges as often meddling and narrowing, but at least he cared. However, D. G. Hart's bibliographic essay in the 1992 edited volume *Secularization of the Academy* (Marsden and Longfield, eds.) revealed a wealth of scholarship published in the intervening years. It thereby also revealed a disconnect between this scholarship and mainstream historians of education who shaped the overall perception of the field. As will be discussed below, the authors of *Secularization of the Academy* set out to repair that breach.

Religion in Synthetic Histories of Women's Higher Education

Literature focused on the changing role of religion in American higher education has for the most part told the story, at least implicitly, only of white male Protestant students, faculty, and administrators. In part this result grows from the fact that this literature has concentrated on what I call the “usual suspects” – the nationally prominent, trend-setting universities where the rise of the research ideal marginalized religion. As described below, historiographical debates on the topic have centered on exactly how and why this marginalization occurred. Yet these concerns, driven by intellectual history, did not interact with the growing literature on the experiences of women and African Americans in American higher education, driven by social history. In fairness, neither did this latter literature interact at great length with scholarship focused on the secularization of the academy. As a result, there exists a separate narrative of the role of religion in the history of American women's higher education, and until recently that narrative did not influence more “mainstream” accounts.

That narrative was also not extensive. Linda Eisenmann noted in a 2001 essay that religion often provided the motivation for the women (and men) who worked to expand American women's higher education. As such, she proposed religion as one of four possible organizing schemes to bring coherence to that history, along with institution-building, networks, and money. Eisenmann also noted that as of that time few authors had actually used this organization scheme, because “in a society like the modern USA, where the concern for separating church and state is paramount, especially in educational matters, an avoidance of religious themes obscures the potency of that impulse for understanding much of the history of women's educational activity” (pp. 468–469). Eisenmann's assessment was also prophetic, as few authors in the history of American higher education after 2001 would take up that particular framework. Nevertheless, the changing role of religion did weave through histories of American women's higher education as a subtheme.

Mabel Newcomer published the first synthetic treatment, *A Century of Higher Education for American Women* (1959), in anticipation of the forthcoming centennial of her employer, Vassar College. Drawing heavily on the archives of Vassar specifically, Newcomer nevertheless sought to tell a coherent story of the development of American women's higher education in general, but noted that she did not pretend to comprehensiveness. Religion did not appear frequently in her work, but the ways in which it did pointed to themes that would be developed in more detail by later historians. First, Newcomer argued that religion was the primary reason American higher education had been limited to men in the first place – not because Puritan and Anglican settlers held religious convictions about women's mental inferiority, but rather because they believed that the role of minister was limited to men, and training ministers was the primary reason for the founding of the earliest American colleges. The other professions entered by early college graduates – law, medicine, statesmanship, and even teaching – were at the time reserved for men as well. Newcomer subsequently noted that when teaching became a profession

suitable for either sex and women's higher education expanded in the mid-nineteenth century, religious coursework and extracurricular activities permeated women's and coeducational colleges as they had earlier men's colleges, though she did not analyze these activities or their rationales in depth.

The next synthetic work published on women constitutes the urtext of contemporary histories of American women's higher education: Barbara Solomon's *In The Company of Educated Women: A History of Women and Higher Education in America* (1985). Solomon's sweeping master narrative organized the experience of American women in higher education around four themes: women's struggles for access to institutions, the nature of women's college experiences, the effects of higher education on women's subsequent life choices and opportunities, and the uneasy connection between women's educational advancement and feminism. Religion was not a major factor in her narrative, but it did appear within all four frameworks. First, religion was one of the explanations Solomon supplied for the expansion of women's educational opportunities in the American republic. Alongside the ideal of republican motherhood – that mothers needed education to train citizen sons – and the need for the occupational opportunity of teaching, Solomon credited the revivalism of the Second Great Awakening with encouraging education that would enable women to spread the Christian message to children and students in a new nation with no established religion, and as missionary teachers in the American West and abroad. The desire to pursue a sense of Christian vocation likewise made Solomon's list of frequent motivations for women to pursue higher education, together with the desire for professional training, the pursuit of social status, and a simple love of learning. Similarly, Solomon noted that Christian missions served as a common career path for educated American women, along with teaching, writing, reforming, and selected professional opportunities such as medicine.

Religion briefly jumped to the fore of Solomon's narrative when she noted that the first four of the elite private Seven Sisters women's colleges were founded from religious motives: Vassar (1865), Wellesley (1875), Smith (1875), and Bryn Mawr (1884). She did not, however, provide a nuanced reading of those motivations, claiming simply (and inaccurately) that all four originally primarily sought to make Christian women better at domestic duties, and only if need be, also at teaching. Finally, Solomon noted briefly the ways that college women had similar religious experiences to college men: both participated in collegiate religious revivals before they fizzled out in the late nineteenth century, and both sometimes underwent crises of faith when they encountered Darwinism, or turned to a new liberal Christianity focused more on social questions. Later authors would take up these themes in more detail.

Subsequent scholarship on American women's higher education tended to delve more deeply into portions of the large story Solomon told. Margaret Nash focused her lens in *Women's Education in the United States, 1790–1840* (2005) on the expansion of seminary and academy education for early American women, a form of higher education that bridged secondary and collegiate education, and was the highest level available to women at that time. Nash argued that antebellum women's and men's education were far more similar than different – academies offered similar

education to both sexes, and very few men, if no women, went on to college. Nash, too, did not organize her narrative around the motivation of religion, but, like Solomon, noted its prevalence within the larger story.

Specifically, Nash included religion in her list of the motivations that led middle-class American women to seek higher education. Indeed, she routinely listed it first among the others: the conviction that education nurtured faith and morality and prepared women to share in spreading evangelical Christianity, preparation for employment in an uncertain economy, the opening of more jobs for teachers in response to expanded common schooling, the pursuit of pure intellectual joy, and a desire for class status. Nash also listed religious motivations among the reasons educated women subsequently chose the profession of teaching: increasing demand for teachers, decreasing supply of men as more lucrative opportunities arose, the opportunity to evangelize students (which also motivated women to accept comparatively small pay), teaching's compatibility with gender ideals of women's fitness to nurture children, and a surplus of young, single women.

Meanwhile, Mary Kelley's *Learning to Stand and Speak: Women, Education, and Public Life in America's Republic* (2006) said oddly little of religion, despite covering roughly the same topic during the same time period. As her title implies, Kelley focused on how women's education paved the way for the acceptance of women's public speech and hence their public influence. Specifically, she argued that the claim that women's education was directed toward social improvement rather than self-actualization legitimated their place in making public opinion. This argument could have led Kelley to tease out how religion underlay (at least some) educators' rationales, but she did not pursue this to the extent of scholars such as Nash.

Helen Horowitz, on the other hand, gave significant attention to the role of religion in the rise of the first women's colleges in *Alma Mater: Design and Experience in the Women's Colleges from Their Nineteenth-Century Beginnings to the 1930s* (1984). *Alma Mater* was an exploration of the material and conceptual design of the Seven Sisters colleges founded after the Civil War. Horowitz sought to explain both the animating visions and the contingencies that made these institutions what they were. As such, she made religious motivation a major plotline, although not the dominant one. Claiming that all these colleges were founded with a strong vision, not merely pragmatically and piecemeal, Horowitz demonstrated that this vision was often religious. While The Harvard Annex (1879, later Radcliffe) and Barnard (1889) simply intended to make available to women a Harvard and a Columbia degree course through coordinate education (where men's college professors retaught their classes to women separately), the other five Eastern women's colleges founded in the nineteenth century were animated by a religious impulse.

Horowitz noted that Mount Holyoke, founded in 1837 as a seminary and later developing into a college, intended to train women to serve as evangelical Protestant teachers and missionaries. Vassar (1865), Wellesley (1875), and Smith (1875) then all copied its design and intention to a greater or lesser extent, and Bryn Mawr (1884) later copied Smith's design in service of a Quaker-specific variant. Horowitz's focus on buildings, campus design, and attendant student routines also gave her an eye for

the differences in their visions, differences that she attributed to the particular life histories and philosophies of the founders of each college. Some of these related to variations in religious conviction but others connected to personal histories – including social class, relatives helped by the institutional style of an asylum, or varying levels of commitment to aesthetics or traditional domesticity.

Lynn Gordon expanded Horowitz's focus on the Seven Sisters to include coeducational and Southern institutions in her *Gender and Higher Education in the Progressive Era* (1990). Gordon drew her conclusions from in-depth study of a variety of representative institutions that admitted women during the years between the Civil War and World War I: the University of California, the University of Chicago, Vassar College, Sophie Newcomb College, and Agnes Scott College. Gordon argued that at both single-sex and coeducational institutions during this era, women students developed an independent campus culture from men. This culture maintained its own values and represented an alternative to the "culture of professionalism, with its defining characteristics of individual success, financial gain, and reliance on technology and science" that she argued dominated male college spaces and would come to dominate higher education as a whole (p. 4). Gordon described female collegiate culture as consisting of an embrace of what women considered to be the distinctly female traits of emotion, community, and cross-generational ties, as well as an orientation toward using education to serve and reform the larger community beyond the college gates. Gordon did not delve deeply into the role of religion within this women's culture, and did not engage in any comparative analysis of the role of religion within men's college culture. She did, however, note that a social gospel Christianity pervaded college women's experience, often through the popular campus Young Women's Christian Association (YWCA), and contributed to its shape. Gordon also noted the social marginalization of the comparatively small number of Catholic and Jewish women students who attended college during this time.

Linda Eisenmann picked up the story of women's higher education after World War II in *Higher Education for Women in Postwar America, 1945–1965* (2006). As is true of general histories of higher education after the Progressive Era, religion plays only a muted role in this narrative. Eisenmann argued that what had been viewed as a doldrums in activism by and for college women actually nurtured a different sort of activism: instead of seeking the large-scale social change of the earlier Progressive Era and later 1960s and 1970s, women in postwar higher education pursued research and counseled individual choices designed to maximize their flourishing within the social norms of the period. As narrated by Eisenmann, neither the social norms nor the proposed individual solutions were often conceptualized in religious terms per se. Eisenmann did note that a few prominent religious organizations – notably the YWCA and the American Friends [Quaker] Service Committee – continued to organize college women for religiously motivated volunteer service to their communities. The biracial YWCA also took a lead in fighting for greater acceptance for African American women in American higher education. Eisenmann also noted that the 1963 President's Commission on the Status of Women sought to end college admission quotas for both African American and Jewish students.

Finally, Nancy Weiss Malkiel narrated the path to coeducation at many of the nation's elite colleges in the 1960s and 1970s in her *"Keep the Damned Women Out": The Struggle for Coeducation* (2016). This masterful work briefly noted how continuing prejudices against Jews and Catholics intersected with these debates, but otherwise did not interrogate the role of campus religion in the process.

Religion in Synthetic Histories of African American Higher Education

The earliest historical scholarship on African American higher education assumed the centrality of religion to its narrative. *The Education of the Negro Prior to 1861: A History of the Education of the Colored People of the United States from the Beginning of Slavery to the Civil War* (Woodson 1915) arguably made religion its organizing theme. The first substantive chapter, "Religion with Letters," argued that the first people to educate African Americans did so in hope that they would become faithful Christians through the reading of Scripture. A later chapter, "Religion without Letters," detailed how slaveholders (and northerners) who wanted to live as good Christians and spread the faith subsequently pulled back from black education because they feared the social consequences of teaching blacks how to read and write. The brief chapter on higher education addressed connections between Christian individuals and organizations and the educational institutions they founded for African Americans.

Religion in Higher Education Among Negroes (McKinney 1945) argued that as much as religion was an important strand in the history of American higher education generally, it assumed even more importance in the history of the higher education of African Americans specifically. Most of the book dealt with issues contemporary to the time of its writing, but the historical chapter argued that because of denominations and philanthropies, religion had been a driving force behind the creation of colleges for African Americans, by both religious groups friendly and unfriendly to African American advancement. One of McKinney's primary forward-looking concerns, however, was that the increasing presence of tax-based support for African American higher education would foreclose previously tenable linkages to religion. In short, he was concerned about secularization.

The most capacious synthetic narrative, *America's Historically Black Colleges & Universities: A Narrative History from the Nineteenth Century into the Twenty-First Century* (Lovett 2011), also made religion a major theme. Lovett traced the essential roles of multiple Christian denominations (many of them black denominations) and the undenominational American Missionary Association in sparking and then sustaining higher education for African Americans. The book is more a compilation of small organizational histories than an argument-driven analysis, so he did not so much note the difference these religious connections made, as rather simply that they existed.

Most of the scholarship that has zeroed in with more analytical depth on a particular aspect of African American higher education has not treated religion very deeply, but several works have made helpful contributions. *Ebony & Ivy:*

Race, Slavery, and the Troubled History of America's Universities (Wilder 2013) explored the intertwining of slavery with the earliest establishment of American institutions of higher education. Most early colleges were founded by a religious body or for substantially religious ends, so the implication of slavery in their success likewise reflected back on religious denominations. For example, Wilder noted the usefulness of slavery in helping white denominations expand their schools westward.

On the other end of the spectrum, *Black Women in the Ivory Tower, 1850–1954* (Evans 2007) saw religion as one of several major themes in African American women's higher education, and consequently wove it throughout the book. Evans noted that "African American women advocated Christian education. They argued that moral, spiritual, ethical, and other metaphysical or religious concepts are essential to formal teaching and learning" (p. 196). Because of the role of the black church in binding together the African American community, churches were involved in the education of African American women, and African American women were involved in churches. Similarly, although religion was not a large theme in the book, *Envisioning Black Colleges: A History of the United Negro College Fund* (Gasman 2007) demonstrated how both white and black missionaries contributed to the establishment of private black colleges and how black churches subsequently supported those institutions.

A few works have particularly examined the role of religious philanthropy in African American higher education. *Dangerous Donations: Northern Philanthropy and Southern Black Education, 1902–1930* (Anderson and Moss 1999) nuanced the traditional narrative of philanthropy's impact on southern black education by demonstrating how southern whites responded to and shaped the output of northern philanthropic bodies, producing a more mixed result. Two full chapters explored the Episcopal-run philanthropy American Church Institute for Negroes (ACIN). *Reparation and Reconciliation: The Rise and Fall of Integrated Higher Education* (Smith 2016) focused on the role of the American Missionary Association (AMA) in establishing a network of colleges intended to integrate whites and blacks, men and women, in order to produce a new leadership class for a racially integrated democracy. Here, Smith detailed how various political and economic forces, sometimes within charities and foundations, subsequently separated out African Americans, Appalachian whites, and white women from these institutions. The earlier *His Truth Is Marching On: African Americans Who Taught the Freedmen for the American Missionary Association, 1861–1877* (DeBoer 1995) highlighted the specific role of African Americans in AMA institutions.

Works on twentieth-century black student activism have not considered religion in as much detail but have highlighted some ways in which it intersected their topic. *The Black Revolution on Campus* (Biondi 2012) noted that black collegians of the 1960s were noticeably less religious than their parents: 85% "grew up in religious families," but 65% of that number "were not personally followers of a religion" (p. 29). Some activists, however, did go on to become pastors. Black activists also had some positive and some negative interactions with the religious black pride organization the Nation of Islam; the negative ones were often related to the

organization's strict patriarchal gender norms. *The Black Campus Movement: Black Students and the Racial Reconstitution of Higher Education, 1965–1972* (Rogers 2012) highlighted religious groups and leaders that operated alongside African American student activist groups, noting also Nation of Islam and Malcolm X, and adding liberal seminaries like Union and the Black Theology Movement. *Upending the Ivory Tower: Civil Rights, Black Power, and the Ivy League* (Bradley 2018) did not make religion a major theme, but highlighted the social role of black ministers in mediating between black and white communities and the significance of local black churches in supporting activist movements.

Religion in Colonial and Antebellum Colleges

Since religion played a generally recognized role in colonial and antebellum American higher education, much of the revisionist scholarship – some already noted above in Thelin's bibliographical essay – has dealt with nailing down the nature of that role. Roger L. Geiger's edited volume *The American College in the Nineteenth Century* (2000) offered a new interpretation that combined aspects of the original master narrative with elements of the revisionists. In his Preface and Introduction, Geiger noted that the 1970s revisionists of Rudolph's master narrative never collected their findings to create a new narrative and, in his opinion, also overcorrected by denying elements of Rudolph's story that had merit. The volume's essays collectively asserted four themes for better organizing our understanding of colleges during this time period, all of which had implications for the relationship between religion and the college experience: (1) the transformation of student life over the 1800s from top-down regimentation to almost total student control of the extra-curriculum; (2) significant regional differences between the Northeast, South, and Midwest; (3) the period 1850–1875 as a transitional time with its own character and institutions that did not survive in those forms (multipurpose colleges, early women's colleges, scientific schools) but influenced forms to come; and (4) the influence of American colleges on the ultimate structure of American universities.

Geiger et al. sided with the revisionists on many issues related to collegiate religion. Against the earlier contention that antebellum colleges served a narrow elite, they noted that proliferating evangelical colleges brought higher education to a wider swath of the middle class. Against the contention by historians such as Tewksbury (1932) and Hofstadter and Metzger (1955) that colleges frequently failed because they were primarily weapons in denominational battles, Geiger noted that the radical 81% mortality rate claimed for American colleges by 1920 included chartered institutions that never even began; the right figure is a mere 17%. Furthermore, extant colleges did not experience Hofstadter's claimed "Great Retrogression" as the Enlightenment gave way to the Second Great Awakening (Hofstadter and Metzger 1955). Rather, after 1800, students, faculty, and curriculum expanded at both liberal and conservative colleges. An earlier centralizing bias had viewed proliferating colleges as religious excess, but their actual effect was to meet the needs of a decentralized society for access to higher education. Denominational

institutions rarely engaged in “sheep-stealing” from the institutions of other denominations, and also often downplayed denominational distinctiveness in order to partner with local interests vested in accessible higher education for other reasons. Furthermore, broadly evangelical colleges with various denominational affiliations often cooperated together, such as in the American Education Society of the 1820s–1840s.

The volume highlighted how religion’s relationship with the college varied by region. In the Northeast, the presence of academies enabled a higher level of general education and a higher level of specialization and professional schools. Hence more independent or semi-independent theological seminaries arose there. In the South, often stereotyped as a heavily religious region, state-supported colleges were actually quite secular, catered to the social and political elite, and contained few professional schools. Meanwhile, denominational colleges proved popular for middle-class evangelicals, and the two types of institutions often came into conflict. In the Midwest, denominational colleges were often founded first to train ministers for that region and then expanded to serving laity. More hierarchical denominations that could rely on centralized funding from another region imitated the organizational style of Eastern colleges, but less hierarchical denominations had to cooperate across religious lines and with local secular interests in shaping the form of the college. A centralizing tendency after the Civil War then led both types of colleges to have closer relations to their founding denomination for a time.

“Secularization” in the Era of the Research University, 1865–1945

Much of the literature on the role of religion in the American academy has focused on the period between the Civil War and World War I. This era constituted a sea change in American higher education and its place in American life. Professors now not only passed down previously accumulated knowledge but also engaged in original research. A theological shift paralleled this academic one: conversion-oriented evangelical Protestantism was “disestablished” within most institutions of higher learning. Many American intellectuals instead embraced a more liberal “modernist” Protestant theology, which prioritized ethics, and thus altered how they sought to communicate religious values on campus. Together, these trends led colleges and universities to reevaluate how they pursued their traditional twin obligations to foster both students’ intellectual and moral development. Debates about the purposes of higher education and how to achieve them subsequently churned from the 1870s through the 1910s (Turpin 2016). The dynamism of this period, especially as it relates to religion and morality – and the scholarly consensus that it served to solidify the basic structures of the modern American college and university – accounts for the disproportionate amount of scholarly attention that has concentrated here.

A disproportionate amount of that scholarly attention, in turn, came during a single decade. From about 1992 through 2003, a flurry of interest in understanding the changing role of religion in American higher education produced a wealth of

histories. Several of these sprang from a Pew Charitable Trusts grant. This grant-funded research resulted in three works: *The Secularization of the Academy* (Marsden and Longfield 1992), *The Soul of the American University: From Protestant Establishment to Established Nonbelief* (Marsden 1994), and *The University Gets Religion: Religious Studies in American Higher Education* (Hart 1999).

The first to be published, the edited volume *Secularization of the Academy*, laid out the agenda for the subsequent scholarship. In his introduction to the volume, George Marsden set up the historical question the essays sought to answer: how did American higher education become so secular that many of its participants would be surprised by how religious it was in the recent past, a situation reflected in the relative elision of the role of religion in historical works about the history of American higher education? In his words, “Our subject is the transformation from an era when organized Christianity and explicitly Christian ideals had a major role in the leading institutions of higher education to an era when they have almost none” (p. 5). Marsden carefully disclaimed that the volume was a jeremiad. He elaborated, “Particularly if an author is at all critical of some of the results of secularization, readers are likely to jump to the conclusion that all secularization is being represented as a decline. Such a conclusion, if applied to the present volume, would be highly misleading. Rather the authors recognize (if I may presume to speak for all of them) that in some respects the secularization of the academy has been a gain. . . . None of us is for the re-establishment of religion in the public sector of the academy” (p. 5).

Marsden added, however, “that most of us see the change in the role of religion in modern higher education as *in some ways* a loss” (p. 5). The loss he highlighted was that no consensus had emerged as to what would replace the ousted broad Protestantism as a moral underpinning for higher education. The result, he argued, “. . . left a moral vacuum that can be filled only by rhetoric and politics. So the modern university, which liberated itself from religious dogmas in order to become a haven for free inquiry, is in danger of becoming largely an arena for political debate based on appeals to dogmatic authority. At the same time, no authority is widely recognized” (p. 6). Noting that their research “describes processes that seem to have taken place without much plan or reflection,” he hoped the volume would promote conscious reflection on the gains and the losses in the secularization of the academy and hence spur more thoughtful planning for the future (pp. 5–6).

At the end of this volume, D. G. Hart helpfully included “Christianity and the University in America: A Bibliographical Essay” (Marsden and Longfield 1992, pp. 303–309). In this essay, Hart surveyed the scholarship on the intersection between American higher education and specifically Christian faith published prior to the 1990s. Hart opened with praise: “Since the founding of the History of Education Society and its journal, the *History of Education Quarterly*, in 1960, the history of American higher education has grown in scope and sophistication” (p. 303). He went on to lament, however, the relative underdevelopment of its intersection with the history of Christianity in America 30 years later: “Yet for all this intricacy, the study of religion and higher education remains remarkably simple. It is still bound to a perception that traces the weakening if not the actual subversion of Protestant

churches' cultural authority to the rise of universities and the specialized scientific research they fostered" (p. 303). Following James Axtell, Hart labeled this view the "Whig historiography" of reading the development of American higher education as progressing "from sectarian and pious colleges to enlightened and secular universities" (Axtell 1971; Hart 1992, p. 303).

Hart relatively generously blamed this oversimplification on "bad timing" (p. 304). Specifically, he noted that the foundational works of the 1950s and 1960s sought to place the history of American higher education more robustly within American intellectual history. He noted particularly *The Development of Academic Freedom in the United States* (Hofstadter and Metzger 1955); *The American College and University* (Rudolph 1962); *The Emergence of the American University* (Veysey 1965); and *Higher Education in Transition* (Brubacher and Rudy 1976). Hart praised the effort overall, but noted that, particularly in the hands of Hofstadter and Metzger, the emphasis on the intellectual shift from a more religious to a more scientific outlook took on a simplistic "warfare-between-religion-and-science imagery" (p. 304). Hart argued that Metzger and Hofstadter's interpretation was not surprising inasmuch as their book – and a wave of institutional histories published in the 1960s that followed their schema – predated a wave of scholarship revisiting the relationship between Darwinism and American Protestantism. Later works such as *The Post-Darwinian Controversies* (Moore 1979) and *Darwinism and the Divine in America* (Roberts 1988) demonstrated how many American Protestants merged their faith with the scientific theory of evolution without a lot of angst. Before these, however, historians writing in the relatively recent wake of the pitched battles between fundamentalists and modernists in the 1920s and 1930s could reasonably have concluded that the rise of science led to a loss of traditional faith. The field's turn to social history then meant that this intellectual framework would not be revisited for many years.

Hart rightly excepted historians' developing treatment of the antebellum college. As previously noted, starting in the 1970s, a group of revisionists sought to challenge Hofstadter's interpretation of this era as "the great retrogression" wherein renewed denominational control of colleges resulted in aborting the intellectual development of American higher education. Most notably, Hart pointed out, *Paupers and Scholars* (Allmendinger 1975) and *American Collegiate Populations* (Burke 1982) demonstrated that antebellum denominational colleges were neither as overly elite nor as overly weak as recent historiography had suggested. Meanwhile, *Science and the Ante-Bellum College* (Guralnick 1975), *Curriculum: A History of the American Undergraduate Course of Study Since 1636* (Rudolph 1977), and *Scholarly Means to Evangelical Ends* (Stevenson 1986) demonstrated how the traditional classical curriculum at denominational colleges was far less oppressive and far more flexible for students' needs than had been recently portrayed.

Yet Hart noted that revisions to our understanding of the antebellum period had not yet altered our understanding of the age of the university. Revisionists more sought to see the seeds of the university in the antebellum college than the continuation of some of the priorities of the antebellum college into the university. For the case of religion, this phenomenon meant that revisionists were more likely to

downplay the real role of religion in antebellum colleges than to play up the continued, albeit different, role religion played in the new universities. Despite subsequent scholarship troubling the relationship between Darwinism and Protestantism, scholars continued to narrate a tale where religion exited American colleges and universities when pursued by the bears of Darwinism and an emphasis on science in general. Therefore, few scholars bothered to interrogate the role of religion in American higher education after the Civil War.

An exception that Hart highlights was an emerging scholarship about the rise of academic disciplines, especially in the social sciences. Works such as *Advocacy and Objectivity* (Furner 1975), *The Emergence of Professional Social Science* (Haskell 1977), *American Sociology* (Vidich and Lyman 1985), and *The Origins of American Social Science* (Ross 1991) explored not the warfare between religion and social science but rather the religious impulses that contributed to the formation of these disciplines. Similarly nuanced treatments of other disciplines included *Rise of American Philosophy* (Kuklick 1977); *Science, Community, and the Transformation of American Philosophy, 1860–1930* (Wilson 1990); *American Literature and the Academy* (Vanderbilt 1986); and *That Noble Dream* (Novick 1988), the latter on the field of history. Likewise, a few key works explored the interplay between the impulse to professionalization among academic disciplines and the changing nature of undergraduate education and its traditional religious and moral components: *The Culture of Professionalism* (Bledstein 1978), *The Organization of Knowledge in Modern America* (Oleson and Voss 1979), and *The Authority of Experts* (Haskell 1984).

A related area Hart highlighted was the earlier changing location of the leading edge of American thought from the church to the academy. Works that explored this shift were published in the decade leading up to the renaissance of interest in the secularization of American higher education; they included *Churchmen and Philosophers* (Kuklick 1985), *New York Intellect* (Bender 1987), and *Intellectual Life in America* (Perry 1984). What Hart labeled “the most fruitful and least studied topic that illuminates the interplay between the Christian and the university” was the formal study of religion as a discipline (Marsden and Longfield 1992, p. 309). Not so coincidentally, this topic would be the theme of Hart’s subsequent *The University Gets Religion: Religious Studies in American Higher Education* (1999), discussed below.

A final related topic that had received substantial scholarly consideration before the 1990s was the interplay between Christianity and academic freedom. Here the baseline narrative of antagonism between the two was set by Hofstadter and Metzger’s *The Development of Academic Freedom in the United States* (1955). Hart noted, however, that Hofstadter and Metzger’s own research, and subsequent research as well, revealed that most instances of curtailed academic freedom involved not religious ideas, but rather political and economic ones. Hart cited particularly *Mars and Minerva* (Gruber 1975) and *No Ivory Tower* (Schrecker 1986). For scholarship explicitly dedicated to the interplay between Christian thought and academic freedom, Hart noted only the edited volume *Academic Freedom and the Catholic University* (Manier and Houck 1967).

Here it will be helpful to briefly jump ahead to Timothy Reese Cain's 2016 historiographical overview of academic freedom. As Cain noted, some of the narrative of the warfare between religion and the academy comes from the fact that the very first instance of academic freedom violation Hofstadter noted was the forced resignation of Henry Dunster from the presidency of Harvard College in 1653 for converting from Congregationalist to Baptist beliefs (Cain 2016). Subsequent similar cases occurred as well: Although Thomas Jefferson desired to make the University of Virginia a truly non-sectarian institution, its first faculty hire, Thomas Cooper, was likewise forced to resign on account of unpopular religious views. Cain noted that Jefferson remained consistent in his commitment to freedom of conscience for faculty on religious matters – but that he did not extend these convictions to politics, wishing to keep out Federalist ideas. In essence, Jefferson replaced the religious orthodoxy of denominational colleges with a political orthodoxy. Even as denominational colleges dominated the antebellum landscape, politics remained a chief area of repression of academic freedom, particularly as it touched competing views on slavery.

Cain observed that subsequent to the publication of Darwin's *On The Origin of Species* (1859) and *The Descent of Man* (1871), cases of professors dismissed for religious reasons rose. Namely, accepting all or a portion of Darwin's theory in a way deemed by religious authorities to be contrary to Christian Scriptures became grounds for dismissal. However, since other institutions tended to snap up such faculty, the abridgment of academic freedom on this issue was localized and sporadic.

Cain elaborated that scholarship on religion and academic freedom in the age of the university has been shaped by Cornell President Andrew Dickson White's 1896 two-volume *A History of the Warfare of Science with Theology in Christendom*, which postulated – truth in advertising – that science and theology had always been at war. Subsequent historians alternately supported or refuted White's thesis. Cain noted that the strongest response came when Metzger (Hofstadter and Metzger 1955) argued that the problem that led to academic freedom cases was that the relationship between religion and science during that period was uncertain, rather than inherently antagonistic. Hence it was actually the moderates – those who tried to combine the two – who ended up on trial. Cain argued, though, that Metzger failed to grapple with the fact that more extreme voices were not taken to trial – probably because they perceived limits to their speech and chose to keep silent.

Cain also suggested that Metzger's foundational argument was flawed by a common problem among historians: an excessive focus on the research university. Metzger's "Whiggish" worldview held that research universities represented the apotheosis of American higher education where "science [was] helping universities escape from the doctrinaire beliefs of the past" (p. 167). For Metzger, what was wrong with White's thesis was therefore not the belief that science was a superior mode of academic knowledge than religion, but rather the belief that the two remained locked in a struggle. Metzger saw the struggle over Darwinism as largely resolved by the 1880s in favor of science – with even religious professors and administrators concurring that religious beliefs should not have standing in the

academy. Yet, Metzger could only make that claim because he wrote denominational colleges out of the story. To his credit, by minimizing one aspect of higher education, Metzger was able to highlight another: the growing importance in debates over academic freedom of conflicts over economics rather than religion.

As Cain narrated, Hofstadter and Smith (1961) and Laurence Veysey (1965) essentially followed Metzger's narrative, thereby cementing it. The former argued that "faculty members removed in controversies over religion and evolution often fared better than the colleges that dismissed them" (Cain, p. 167), and the latter argued that academic freedom cases involving religion were rare and tended to occur outside what Veysey considered mainstream higher education, which is to say at smaller denominational colleges. Robert L. Adams (1970) pushed back by focusing on another type of institution arguably understudied by historians: theological seminaries, both freestanding ones and those associated with a university. Though his claim can be contested, Adams argued that seminaries of either type actually offered the maximum amount of academic freedom.

Returning to the academic conversation of the 1990s, several of the authors in *Secularization of the Academy* went on to publish book-length treatments related to their essays: George Marsden expanded his chapter "The Soul of the American University: An Historical Overview" into his 1994 book, *The Soul of the American University*; Philip Gleason's chapter "American Catholic Higher Education, 1940–1990" fed into his subsequent *Contending with Modernity: Catholic Higher Education in the Twentieth Century* (1995), discussed below in the section on Catholic higher education; as aforementioned, Hart published *The University Gets Religion: Religious Studies in American Higher Education* (1999), discussed below in the section on religious studies; and James Turner's chapter "Secularization and Sacralization: Speculations on Some Religious Origins of the Secular Humanities Curriculum, 1850–1900" fed into Jon H. Roberts and James Turner, *The Sacred and the Secular University* (2000). These works were joined by several other significant books published during that decade: *Faith and Knowledge: Mainline Protestantism and American Higher Education* (Sloan 1994), discussed in the section on the postwar era; *The Making of the Modern University: Intellectual Transformation and the Marginalization of Morality* (Reuben 1996); *Dying of the Light: The Disengagement of Colleges and Universities from Their Christian Churches* (Burtchaell 1998); and *The Secular Revolution: Power, Interests, and Conflict in the Secularization of American Public Life* (Smith 2003).

Of all the works growing out of the Pew grant, *The Soul of the American University* made the biggest splash at the time and has had one of the largest ripple effects as well. This work constituted a sweeping interpretation of the changing role of religion in American higher education. It articulated a historical explanation for the "secularization" of the academy – and in a postscript, a controversial program for creating a more robustly pluralistic modern academy in which religious viewpoints would have a seat at the table, but not control of the discussion.

In brief, *The Soul of the American University* proposed an explanation for how American higher education went from the colonial and antebellum periods when most colleges had robust religious affiliations to a time by the late twentieth century

when the mainstream academy marginalized thought explicitly grounded in religious convictions. Specifically, Marsden focused on the effects of the tension between the religious origins of most American colleges and the common understanding that colleges should serve the entire public – that is, students from a variety of faiths, if not always races, sexes, and class backgrounds. Navigating these realities led higher educational leaders to insist that their theological position, and hence their educational institution, was what truly constituted being “nonsectarian.” In the mid-nineteenth century, broad-minded evangelical college leaders made this argument against smaller denominational schools. Then, at the turn of the century, modernist Christian scholars used it to take power from the evangelicals. Later in the twentieth century, secular scholars in turn used it against liberal Christians. Following the lines of this argument, Marsden divided the book into three sections: pre-1865, 1865–1920, and post-1920. Unsurprisingly, the middle section – “Defining the American University in a Scientific Age” – was the largest and most substantive.

A strength of Marsden’s work was its extensive chronological scope. Yet, this approach also introduced weakness. To tell a coherent story over a large span of time, Marsden stuck to the “usual suspects” in the history of American higher education. As he elaborated in the preface, in order to tell the story of the institutions that set the national parameters for what constituted prestige, he excluded Catholic colleges and universities, women’s colleges, HBCUs, most southern colleges and universities, and conservative Protestant colleges of the twentieth century. Likewise, Marsden gave pride of place to the religious convictions of leaders – rather than to, say, changing ideals of science, curriculum, or student life.

Marsden was hardly alone in slighting the experience of women or people of color in his history: almost no other synthetic treatment of the changing role of religion in American higher education written in that decade incorporated them either. As Thelin (1990) had observed, intellectual and social history remained separate. Where these other works differed was in their answer to the question of why the role of religion changed. One set of authors (Marsden 1994; Burtchaell 1998; Smith 2003) focused on conscious changes by administrators and faculty concerned with building a position of authority for themselves and their institutions. A second set (Reuben 1996; Roberts and Turner 2000) focused more on the ironies of history, that is, the accidental consequences for religion of changes made to higher education for other reasons.

In a complementary analysis to Marsden’s, James Burtchaell’s *Dying of the Light: The Disengagement of Colleges and Universities from Their Christian Churches* (1998) focused not on prominent research universities, but rather on colleges and universities that maintained an explicit connection with a Christian denomination for some time – Congregationalist, Presbyterian, Methodist, Baptist, Lutheran, Catholic, Reformed – and then later severed that connection. Like Marsden, he placed the balance of the explanation on conscious individual choice, particularly that of the faculty, who grew to favor loyalty to their professional guild over loyalty to a church, and of the college presidents, who altered the nature of their institutions to bring in more students, more money, and more prestige. Burtchaell also grounded this shift in the intellectual and cultural changes of the Gilded Age and Progressive Era, but at

the denominational institutions he studied, the definitive break occurred later in the twentieth century. Along the same vein, sociologist Christian Smith's essays in *The Secular Revolution: Power, Interests and Conflicts in the Secularization of American Public Life* (2003) highlighted the efforts in the Gilded Age and Progressive Era by secularists, and not just liberal Christians, to gain control of the knowledge-making power of the universities by actively working to marginalize the role of religion. He teased this out particularly for the history of his own discipline, sociology.

On the other side of the argument, Julie Reuben (1996) maintained that university leaders did not purposely uproot moral and religious concerns from the undergraduate experience, and neither, she argued, did these concerns wither from neglect. Rather, the growing prestige of science eventually choked them out. University leaders actively tried to graft virtue and science, but, in the long run, transmitting religious and moral certainties proved unpredictably incompatible with an empirical scientific method that supposedly precluded suppositions of any sort. Science therefore pushed ethical questions beyond the formal curriculum into the extracurriculum. Knowledge separated from morality.

Reuben argued that this process advanced in three phases. The first "religious stage," lasted roughly 1880–1910. During this phase – concurrent with the construction of the American research university – university leaders prized the scientific approach because they saw it as objective, and hence a sure path toward progress. Academic leaders therefore sought to apply this approach to the study of religion in order to maintain a religious component within the curriculum. As Frank (1993) had argued a few years earlier for college rather than university leaders, many college presidents of this era retained central nineteenth-century beliefs – the orderliness of the laws of nature, the universality of moral principles, and the supremacy of Christianity – even as they rethought the nature of collegiate education during the rise of the university. However, practitioners of this approach ultimately put themselves out of business: they concluded that religious "truth" was emotional and moral, while scientific "truth" was intellectual. Religion's role in the curriculum therefore became problematic, especially because it also turned out that students had little interest in this approach.

Reuben's second phase, the "scientific stage," overlapped the first: it lasted roughly 1900–1920. Here "scientific" referred not to applying the approach of science to religion, but rather to deriving the perceived benefits of religion from science. In other words, faculty and administrators who took this approach argued that careful scientific study fostered in students the same character traits that liberal Protestantism sought to inculcate: self-discipline, fair-mindedness, cooperation, and the like. Additionally, scientific study of social problems would fuel social progress. Because liberal Protestantism focused more on instilling character traits, and sometimes social change, than on transmitting cognitive content as specific as conservative Protestantism, science could thus serve the ends of religion – without the need to include any of the now-problematic formal study of religion in the curriculum. Scientists themselves ultimately killed this approach. For reasons of professional advancement, they did not want their practice tied to moral values that could be seen as nonobjective.

Universities then moved into the final phases of attempting to retain in the curriculum a role for the moral values traditionally fostered by religion: Reuben's "humanistic and extracurricular phase," which ran roughly 1915–1930. Since scientists rejected the role, administrators turned to the humanities. Seeking a *raison d'être* during an era that demanded useful knowledge, the humanities argued that they provided students moral guidance through studying the best of human culture. By the 1930s, the humanities, not the sciences, supplied the quintessential freshman introductory course.

In other words, the previous phase tied the good to the true, but this phase tied the good to the beautiful. Just as liberal Protestantism and the scientific study of religion both loosened the link between religion and "cognitive" truth, so did shifting student moral formation onto the humanities disassociate morality from "factual" knowledge and associate it instead with aesthetic knowledge. Simultaneously, administrators de-emphasized the role of the curriculum altogether in fostering student moral development. The rise in the early twentieth century of the modern apparatus of student life – freshman orientation, student advising, student life administrators, dormitory living – took much of this role instead. By moving moral formation primarily outside the curriculum, administrators completed the process of decoupling morality and knowledge.

Reuben concluded that as the university embraced the scientific approach as the essence of its new role in knowledge production, it therefore struggled to find a meaningful way to continue its historic role in transmitting moral values to students. Educators ultimately released responsibility for this role because they had come to believe consensus via empirical testing was the standard for truth. Yet, they could not reach moral consensus this way, so, ironically, they removed morality from among the university's roles in order to preserve the ideal that free inquiry would lead to truth.

Jon Roberts and James Turner advanced a complementary analysis in *The Sacred and the Secular University* (2000). They explored how in the early twentieth century the positive impulse of disciplinary specialization – rather than any overt antagonism toward religion – cordoned off religion from its previous position as unifier of all knowledge. Previously, science was conducted in a package approach that linked natural science, natural theology, Scottish common sense philosophy, and Christian ethics. Likewise, the social sciences and the humanities now sought to produce their own kinds of knowledge unlinked from a wider vision. Thus, as each discipline professionalized and used methodological naturalism for its own ends, religion became increasingly irrelevant to the university project, albeit unintentionally. As Roberts and Turner explained, "the very nature of disciplinary research undermined the kind of unitary view of knowledge implied in the Judeo-Christian worldview" (p. 70). It was therefore not the rise of the research ideal per se which altered the role of religion in American higher education, but rather the commitment to research conducted within narrower disciplinary bounds.

Even as Roberts and Turner delved more deeply than Reuben into the role the humanities played in collegiate secularization, they too noted the signal importance of the sciences. For them, this lay in the fact that the sciences succeeded in making

the argument that truth was best obtained through “scientific knowledge and ongoing rational inquiry” rather than by theological presuppositions (p. 41). In this way, advocates for the natural sciences pushed out alternative epistemologies for truth claims including tradition, divine inspiration, and subjective religious experience. So much so, in fact, that the social sciences and humanities adopted variations on the scientific approach. Roberts and Turner argued that then “the ongoing acquisition and transmission of facts and principles involving sensible, characteristically verifiable phenomena inevitably affected the status of religion in general and Christianity in particular” within the university (p. 69). Higher education did not become hostile to religion per se, but rather became less concerned with theology as its mission reoriented in a different direction.

A variety of debates can be discerned among these authors. Reuben argued not only against some of the other scholars in that decade but also against the grandfather of historiography on the American research university, Laurence Veysey. Contra Veysey (1965), she asserted that educational reformers in the decades around 1900 did not fall into competing camps that pursued utility (good), culture (beauty), and research (truth), but rather saw them as linked. Indeed, reformers did not even repudiate the previous model (discipline and piety) per se. They just wanted to use new, less authoritarian methods to achieve the same result. The reason we look back and see fractured goals is that reformers did not succeed in holding these goals together meaningfully within the university.

Meanwhile, Marsden argued that methodological secularization could in theory have been compatible with continued religious vitality, but in practice marginalized religion and thus paved the way for the later ideological secularization of the university, with liberal Protestantism easing the transition. Reuben countered that, no, attempts to make religion compatible with science failed, so the rise of science was the primary cause of the secularization of American higher education.

Roberts and Turner, in contrast, argued that it was the intellectual failings of liberal Protestantism rather than the success of science that caused secularization. Religion, in their view, could have been compatible with science, but liberal Protestantism could not provide the intellectual framework to make it so. Reuben countered that the reason liberal Protestantism could not effectively incorporate science had as much to do with changes in the conception of science as with shortcomings in liberal Christian thought. Finally, contra Smith, Reuben argued that the social sciences did not ultimately remove moral concerns because of an internal argument between advocacy and objectivity camps during this era, but rather later: science did not come to be seen as value neutral until the 1910s. Instead, the culprit was competing visions of the relationship between science and morality and its implications for social improvement.

Despite their differences, these authors also shared important similarities. Reuben, Roberts, and Turner all diagnosed the major loss from the rise of the research university as the fracturing of the good (now limited to service learning and character formation), the true (now associated only with research and empirically verifiable knowledge), and the beautiful (now covered exclusively in courses on culture and the arts). And, strikingly, Reuben ultimately proposed a similar solution as Marsden

to the loss of meaningful moral authority by American universities: Universities should stop modeling agreement as the ultimate standard for identifying truth. Rather, they should recognize that important aspects of human life lie outside spheres in which agreement is feasible. Universities should therefore tolerate more conflict and thereby allow for the reintegration of fact and value – now by competing voices – because they can never actually be totally separated, and admitting this fact brings us one step closer to truth.

Judging by Thelin's *A History of American Higher Education* (2004), the authors from this important historiographical decade succeeded in their task of better integrating religion into the master narrative, at least in part. As the first book to incorporate a wide array of post-Rudolph research into a single narrative, Thelin's extremely readable volume has since become the standard text for its comprehensive coverage of different types of institutions and students, as well as its attention to the funding and cost of higher education. Thelin incorporated religion thoughtfully throughout the narrative up to the 1920s, but then it largely dropped out – an outcome likely tied both to less available scholarship analyzing religion's place after that time and to accepting the narrative of early twentieth-century secularization.

In brief, Thelin argued that religious denominations played the major role in establishing colonial colleges, and that to their credit, instilling learning and piety were equally important goals. Learning and piety were seen as desirable both for the students who would be future ministers and for the rest who would be future leaders in the professions and government. Thelin noted too that religious liberty was often limited at early colleges, as many colonies had an established religious denomination. The extent to which a colonial college would allow denominational diversity among faculty or students varied over time and place.

Moving into the antebellum period, Thelin, like Geiger (2000), combined Rudolph's pessimism with the optimism of the 1970s revisionists. He asserted that denominational fractiousness continued into the early Republic, with new colleges founded because of religious debates within a denomination or an existing college faculty. At the same time, Thelin noted that denominations footed an essential part of the bill for antebellum higher education without which it could not have reached as many people – and that partnerships with local boosters often made these colleges available to a wider variety of students than just denominational adherents.

Thelin made some arguments about the role of religion in the Gilded Age and Progressive Era that cut against the grain of the predominant narrative; many sprang from his focus on funding. Specifically, he pushed back on the narrative that the high value placed on science during the rise of the research university pushed out religion. Thelin claimed that "science" referred at the time more to systematic organization than, say, to the content of discoveries in biology, and that American religious traditions were generally not opposed to such systematic organization of institutions and knowledge. Occasionally, professors came under investigation for atheistic beliefs, but generally their political beliefs were more suspect. Besides, even many state universities continued to provide daily chapel. Instead, Thelin emphasized that religion played an overlooked role in creating the American university: religious arguments underlay a good portion of the increase in philanthropic donations during

that era. It was thus a general secularization and materialism of wider American culture in the early twentieth century that altered the religious environment on campuses more than the values or structure of the research university.

In sum, this standard text that would serve as the dominant replacement for Rudolph until as recently as the last 5 years grappled seriously with the interplay of religion and American higher education for its first half, but largely omitted consideration of religion in both student voluntary life and the bulk of the twentieth century. (The updated editions in 2011 and 2019 added additional chapters bringing the narrative up to the present, but retained the original conceptual framework and hence did not incorporate further discussion of religion past 1920.) Thus, the flurry of scholarship on religion in the academy in the 1990s seems to have successfully reignited more widespread interest in the topic, at least as midwifed by Thelin, but also left much to be done.

This scholarship had a secondary effect on Thelin as well: producing some concern about how incorporating this 1990s conversation would affect the role of religion in the current academy. Thelin noted that “A number of prominent historians, including George M. Marsden, have argued that the colleges and universities of today have unwisely ignored the importance of religious belief or abolished its place in the core of higher education. . . [and] it would be good to restore the religious spirit and emphasis of the original colleges” (p. 28, citing only *The Soul of the American University* in the footnote). But he argued that the restorative impulse was deeply flawed both because no uniform original impulse existed, at least by the Revolutionary Era, and because denominational colleges left “a legacy of conflict and fragmentation” (p. 29). Thelin would be relieved to know that while most of these scholars of secularization agreed that American higher education lost something by failing to include religious voices in the scholarly mix, they did not wish to return to a time when those voices dominated, but rather to make the academy more genuinely pluralistic.

Twenty years after the initial flurry of interest in the changing role of religion and morality during the rise of the research university, two monographs have recently revisited the question: Andrew Jewett’s *Science, Democracy, and the American University: From the Civil War to the Cold War* (2012) and Andrea L. Turpin’s *A New Moral Vision: Gender, Religion, and the Changing Purposes of American Higher Education, 1837–1917* (2016). Notably, Jewett worked with Reuben, and Turpin studied with Turner and Marsden.

Jewett picked up the emphasis Reuben had laid on the particular significance of science to the changes in American higher education around 1900. He revisited the changing definition of science, the timeline of those changes, and the divisions among scientists themselves. He concluded with a more optimistic outlook than Reuben that the past contains resources for a form of higher education – education in the principles and attitudes of scientific practice – that could help build moral consensus among Americans today. Specifically, he argued that the scientific approach could be used to adjudicate policy debates.

Jewett pointed out that the word *science* has not always referred primarily to the natural or physical sciences. In the late nineteenth and early twentieth centuries,

science referred more to an approach to consensus building. Its practitioners systematically collected evidence regarding our world, both physical and social. Then they engaged in democratic conversation with others – including the general public – as to the best interpretation of that evidence and, ultimately, as to how society ought to proceed in light of it. Jewett called the champions of that forgotten understanding “scientific democrats” (p. 9). They first articulated their ideas in the late nineteenth century out of distress at the apparent impotence of culturally dominant Protestant Christianity to prevent growing divisions in American politics – most violently in the Civil War, then in the nation’s widening class fissure.

Starting in the early twentieth century, physical scientists largely bowed out of the discussion by applying their research to American industry. Meanwhile, those whom Jewett called “human scientists” – psychologists, sociologists, anthropologists, linguists, philosophers, historians, and some biologists – split into two camps. The “value-neutral” camp believed average citizens would not act with consistently disinterested motives, so these scholars encouraged deference to scientific “experts” when investigating social phenomena with policy implications. The “consequentialist” camp – and most famously John Dewey – believed that average people could reasonably learn to inform themselves of basic social scientific findings and then consider others’ good alongside their own.

Going against received wisdom, Jewett asserted that advocates of value neutrality did not win a clear victory in the 1920s. Rather, they and the consequentialists coexisted until the seemingly unending political emergencies that consumed the nation from the 1930s through the 1950s shifted the balance by making political priorities seem clear without the need for public debate. At a far later date than argued by Reuben, Roberts, or Turner, human scientists then largely ceded the task of facilitating democracy to humanists, who used the canon of Western art and literature to foster general commitment to the values of individual freedom and democracy. The former remade themselves as “behavioral scientists” whose findings would indicate the best means for the government to reach predetermined ends. Radicals of the 1960s would dismiss such scientists as lackeys of a state that autocratically directed the lives of a passive citizenry.

Jewett, like many earlier scholars in the 1990s, wrote in part because of his hopes and fears for the future. But Jewett’s proposed solution to consensus building in an “Age of Fracture” (Rodgers 2011) differed from Marsden’s and Reuben’s. Jewett feared that the Left’s post-1960s habit of writing off science “leaves progressive scholars and activists interpretively impoverished amid a massive resurgence of theistic modes of conservatism” (p. 367). Modern conservatives formulated policy in areas such as medical ethics and the environment with explicit reference to science (opposing some forms and embracing others). Therefore, when progressives rejected science as a form of political discourse, they failed to effectively engage their opponents. Jewett favored the Deweyan approach and hoped that all Americans could advance wise political decision making by pooling their theories and experiences.

The first, and so far only, book to use both social and intellectual history to analyze the changing role of religion in American higher education – which is to say

to weave race, class, or gender as a significant variable throughout its narrative – was Andrea L. Turpin’s *A New Moral Vision: Gender, Religion, and the Changing Purposes of American Higher Education, 1837–1917* (2016). Turpin intervened in the scholarly conversation in two main ways.

First, she argued that the nature of collegiate religious changes was more effectively discussed by reframing the shift from conservative to liberal Protestant beliefs among leading educators in the decades around 1900. Most scholars had written in terms of how a move from conservative “evangelicalism” to liberal “modernism” resulted in a shift in emphasis from beliefs to actions, from conversion to morality. Turpin noted that this framework improved on a simplistic reading of collegiate secularization as the complete removal of religion. Yet, both evangelical and modernist Protestantism had distinct theological content and prescribed certain behaviors. Turpin therefore argued instead for a shift from (1) a “vertical” spirituality that thought getting right with God by responding to the gospel message in faith would lead to a changed heart that loved people better toward (2) a “horizontal” spirituality that thought focusing first on treating people more morally would make someone right with God. She noted that these two mindsets affected how college students understood their gender identity as women or men, and thus influenced the ways they saw their education connecting with their future vocations. Gender identity mattered less in a spirituality that was oriented first toward relating to God and mattered more in one oriented first toward relating to the human community – at least in the gendered culture around 1900.

Second, and related, Turpin claimed that historians have missed an important consideration by ignoring that the changing role and nature of religion took place concurrently with the entrance of women into higher education on a large scale between the 1870s and the 1910s. She argued that before the Civil War, evangelical Protestantism provided the main impetus for opening the highest levels of education to women. An attitude she called “evangelical pragmatism” – a willingness to disregard certain gender norms in order to educate as many people as possible, as cheaply as possible, in order to spread the Christian message as well as possible – led to the establishment in 1837 of both the first permanent single-sex higher education for American women (Mount Holyoke Female Seminary, later College) and the first coeducational B.A. program (at Oberlin Collegiate Institute, later College). Then, as previous historians have noted, between the Civil War and World War I shifting theological beliefs, a growing cultural pluralism, and a new emphasis on university research led educators to reevaluate the centrality of evangelicalism within higher education and in turn reconsider how colleges should inculcate morality in students.

In this environment, with a new population of female collegians that surged after the Civil War, educational leaders articulated a new moral vision for their institutions by positioning them within the new landscape of competing men’s, women’s, and coeducational institutions. Colleges and universities sought to enhance their national reputation by downplaying their denominational, or even broadly evangelical identity, and playing up how they contributed to the national good by educating men, women, or both for unique social contributions. In a reverse of present-day ideological alignments, the religiously liberal educators of the Progressive Era fostered in

students a more gendered ideal of character and service than earlier evangelical educators who fostered conversion and left the direction of graduates' future lives to God. Men's new moral formation constituted preparation in the character traits and affinities needed for elite roles in government, business, or education. Meanwhile, women's moral formation fostered a parallel but distinct orientation toward mercy professions, such as settlement work, social work, or nursing – in addition to the ubiquitous vocation of teaching children. Because of this religious reorientation, the widespread entrance of women into higher education did not shift the social order in as egalitarian a direction as we might expect. Instead, college graduates – who formed a disproportionate number of the leaders and reformers of the Progressive Era – contributed to the creation of separate male and female cultures in public life.

In terms of the conversation about how understanding the historic role of religion might inform the present, Turpin argued that all past approaches had both strengths and weaknesses. Because no one type of institution could serve every type of student well, we in the present ought to preserve a robust institutional pluralism. She noted that “no college environment is morally neutral, including those that focus on preparing students for jobs and decline to cast a grander vision. Rather, all...communicate some moral message to students, even if that message is that education does not bestow on students any particular civic responsibility” (p. 271). Contemporary institutions should therefore devote concerted thought to the tradeoffs and unintended consequences inherent in centering different possible moral visions of the purposes of American higher education.

The Fracturing of Religion in Contemporary American Higher Education, 1945–Present

Scholarship on religion in the contemporary era of American higher education is not as extensive as for previous eras. Perhaps this fact is driven by the assumption that, by the postwar period, the mainstream of higher education had already secularized. Perhaps, as Linda Eisenmann (2001) has suggested, it springs from the hesitancy in today's academy to engage with religion in an increasingly pluralistic culture. But the books on the subject that do exist point to a continued significant, if altered, presence of religion in the American academy. Many of these works constitute hybrid histories and contemporary analyses.

The one that most clearly set up the narrative for the latter half of the century was actually an outlier in the 1990s historiographical moment: *Faith and Knowledge: Mainline Protestantism and American Higher Education* (Sloan 1994). It concentrated the bulk of its analysis on mid-twentieth-century attempts to reconcile faith and reason in the academy rather than on the origins of their tension between the Civil War and World War I. Sloan's was an intellectual history, and its heart was an analysis of the Protestant neo-orthodox theologians who tried to join back together the religious and disciplinary knowledge that the wider American academy had put asunder. *Faith and Knowledge* considered three approaches to integrating faith concerns into higher education: pastoral care of students outside the classroom,

carving a space for the study of religion within the curriculum, and investing in a distinct approach to higher education at church-related liberal arts colleges. All three ultimately failed, Sloan argued, because churches failed to do the necessary philosophical groundwork to integrate modern academic and religious ways of knowing.

Like Marsden's *The Soul of the American University*, published the same year, Sloan concluded with a final chapter of philosophical reflections. Sloan did not wrestle with how to build a genuinely pluralistic academy in the public square. Rather, he mused on how contemporary theologians might learn from past successes and failures to create an educational approach that neither cordoned faith and knowledge into two separate spheres nor reduced one to the other. Specifically, he called for deeper reflection on the way that empirical and intuitive/imaginative modes of understanding our world are more intertwined than contemporary academic disciplines (excepting philosophers of science) tend to acknowledge.

A more recent pair of books by Douglas and Rhonda Jacobson have laid out the landscape from the mid-twentieth century to the present. The co-authors have directed the "Religion in the Academy" project while serving as professors of church history and theology (Douglas) and psychology (Rhonda) at Messiah College. Their 2008 edited volume *The American University in a Postsecular Age* took up the question of how best to incorporate the study of religion into the contemporary college curriculum. One-third of the book covered the history of past approaches, focusing on Christianity and Judaism. Subsequently, their *No Longer Invisible: Religion in University Education* (2012) detailed six different ways religion intersects contemporary collegiate education: (1) religious literacy, (2) interfaith etiquette (knowledge of historic religion), (3) framing knowledge, (4) civic engagement (public religion), (5) conviction, and (6) character/vocation (personal religion).

The most comprehensive examination of current developments is itself one of the most recent: *The Resilience of Religion in American Higher Education* (Schmalzbauer and Mahoney 2018). The result of a collaboration between a sociologist in a religious studies department and a historian with a PhD from an education department, this book traced religion's place in higher education since the 1970s. It argued that the contemporary academy is not properly termed "secular" but rather "post-secular," which is to say that since the 1970s, it has grown into a more genuinely pluralistic space where secular and sacred components co-habitate. The authors analyzed this resurgence of religion in three areas: (1) academic disciplines, many of which now have affinity groups for scholars studying religion; (2) church-related institutions, many of which have devoted significant time to refining a unique mission; and (3) student religious life, which has recently witnessed an explosion of options, from longer-established ministries like InterVarsity, Cru, and Newman and Hillel Centers to more recent associations for Muslim, Hindu, neo-pagan, and atheist students.

As part of a 2005 retrospective on Laurence Veysey in the *History of Education Quarterly*, Mark Schwehn looked back at *The Emergence of the American University* (1965) for insight on the state of religion in twenty-first-century American higher education. Like many of his contemporaries in church-related institutions, Schwehn was concerned with thinking carefully about the appropriate space for religion in the modern academy. He credited Veysey with the insight that, while the marginalization

of religion has contributed to the “marginalization of morality,” to borrow Julie Reuben’s phrase, so have other factors, especially outside economic and political pressures not intrinsic to developing the life of the mind. He therefore urged educators of faith and their secular peers to partner in reestablishing a quest for the disinterested pursuit of truth. Schwehn argued that this partnership could be achieved by combining the insights of George Marsden (1994) and David Hollinger (1996) on the loss of Protestant dominance in the academy. Marsden had most clearly articulated the loss of a moral center to higher education that followed the disestablishment of Protestantism – though he did not advocate returning to Protestant dominance. Hollinger, meanwhile, had most clearly explained how this loss had led to the better inclusion of people of other faiths – particularly Judaism – and no faith. Schwehn argued for cooperation across boundaries of religious conviction to help rearticulate a moral center for higher education.

Another hybrid work laid out what religious pluralism in the modern academy has looked like on the ground: former dean of the chapel at Princeton University Frederick Borsch’s *Keeping Faith at Princeton: A Brief History of Religious Pluralism at Princeton and Other Universities* (2012). The heart of this book was Borsch’s reflections on leading Princeton’s religious life during the 1980s and the concurrent growth of religious pluralism there. He also shared anecdotes from Columbia, University of Pennsylvania, Harvard, Yale, Chicago, Stanford, and University of Southern California, but, as such, he merely sketched the outlines of a significant topic.

One of the most recent works to combine historical analysis with policy suggestions was *The Oxford Handbook on Religion and Education in America* (Waggoner and Walker 2018). As an edited volume, it took a wide approach: It examined the legal issues and best practices for teaching about and creating space for religious practice in public education; raised philosophical debates over how to educate a religiously diverse population for citizenship in a religiously diverse world; explored the nature of private religious instruction; provided the context of how American history has created the current landscape; and explored what that history might have to teach us. The volume covered these topics from kindergarten through graduate school.

Of particular interest are the *Handbook’s* Part I, on different philosophical frameworks for analyzing the intersection of religion and education – the private/public divide, secularism, pluralism, religious literacy, religious liberty, and democracy – and Part V, on religion in American higher education specifically. Chapter authors hail from a variety of backgrounds, religious to secular, and from a variety of disciplines, thus modeling the engaged pluralism that is the closest the *Handbook* comes to a unified thesis. The consensus that emerged from the book was that Americans are best served when teachers do not avoid the topic of religion and instead include instruction about a variety of religions in a way that simultaneously respects students’ individual perspectives. Similarly, they agreed that the best education enables students to integrate questions about the ultimate meaning and purpose of their lives with the information they are learning – but in such a way that teachers in a public-school setting do not impose their personal frameworks. Recognizing the difficulty in achieving this balance, the authors debated a range of pitfalls and best practices.

Topics in the History of Religion in American Higher Education

Non-Protestant Faiths

Much of the literature on the relationship between religion and American higher education has focused on Protestantism. This fact is related to the originally privileged place Protestantism enjoyed within the vast majority of American collegiate institutions. A natural storyline for understanding the changing role of religion in colleges and universities was therefore the disestablishment of Protestantism. This story is accurate, but incomplete. Students and faculty of other faiths have been a part of the story from the beginning, and some historical scholarship has highlighted those roles. Such scholarship tends to address three broad themes: colleges and universities founded by non-Protestant religious bodies, discrimination against non-Protestant students and faculty at other institutions, and voluntary religious life among non-Protestant students.

Catholicism

Catholicism has by far the largest share of the first type of scholarship because Catholic colleges and universities represent by far the largest group of non-Protestant religious institutions. The roughly contemporary equivalent synthesis to Rudolph (1962) for American Catholic higher education was Power's *A History of Catholic Higher Education in the United States* (1958). Power's book was synthetic, unbiased, and generally well-researched, but not strongly interpretation-driven. It also treated Catholic men's colleges in much more depth than women's because of the comparatively small number of secondary sources available on the latter at the time.

American Catholics did not limit themselves to establishing liberal arts colleges parallel to Protestant denominational colleges. They also participated in the era of university building, first by establishing Catholic University of America in 1889. The seed of the idea was planted by John Henry Newman's 1852 *Idea of a University*, watered by post-Civil War expansions of Protestant graduate education in the United States, and sprouted after a significant council of bishops held in 1884. As detailed in *The Formative Years of the Catholic University of America* (Ellis 1946), that university rose amidst debates between more liberal and Americanized Catholic university builders and more conservative and Europeanist Catholic liberal arts college supporters. This work constituted a fair-minded assessment of the founders' strengths and weaknesses, but limited itself to the years leading up to 1889.

Tensions between different wings of Catholicism continued to manifest in the twentieth century. A 1917 Code of Canon Law constrained Catholic universities by placing them under ecclesiastical authority, but later, in the 1960s, Vatican II opened the door to American reinterpretations of canon law which placed Catholic universities under civil rather than ecclesiastical jurisdiction. American activism then worked to produce a 1983 Code which preserved that independence. Perceived tensions between Catholic theology and American academic ideals meant that Catholic universities in the United States have constantly needed to clarify the nature of their religious identity (Conn 1991).

This question has proved particularly acute at Jesuit institutions. These universities sought to establish themselves against the Catholic University of America as genuinely Catholic options while balancing cultural anti-Catholicism on the one hand and the challenge of working-class and ethnically divided constituents on the other. Most notably, in 1893 Harvard President Charles W. Eliot decided that Harvard Law School would not admit students who had undergraduate degrees from Jesuit institutions – like Georgetown and Boston College – because the curriculum of such institutions still followed the Ratio Studiorum, a traditional curriculum pretty much the polar opposite of Harvard’s elective system. Kathleen Mahoney (2003) casts this move as a rejection not only of the Jesuit colleges but also of the older (and similar-looking) Protestant-denominational-college ideal. At any rate, middle-class Catholics hemorrhaged into non-Catholic universities such as Harvard.

Mahoney (2003) argued that internal conflicts among Jesuits about how to respond propelled Catholics to establish universities that retained a robust faith identity when Protestant denominations did not. However, in the interwar years, Jesuit colleges and universities took the approach of gradually embracing broader American academic norms, including professionalization, coeducation, and laicization, and have subsequently found it challenging to merge their religious and American academic identities (Kelley 1966; FitzGerald 1984; Leahy 1991). Eric Platt explored the particular challenges faced by Jesuits seeking to establish institutions of higher education in the South, but did not interrogate the role of race and desegregation in their histories (Platt 2014).

The synthetic treatment of this tension felt by Catholic institutions came in 1995 with Philip Gleason’s *Contending with Modernity: Catholic Higher Education in the Twentieth Century*. Part of the 1990s moment grappling with the nature of secularization, Gleason wrote what is effectively the Catholic companion to Marsden’s *The Soul of the American University*, and it told a distinct, but similarly nuanced tale. The book traced the story of American Catholic higher education from Pope Leo XIII’s 1899 condemnation of “Americanism” through the first two-thirds of the twentieth century. The embrace of Neoscholasticism constituted a major American response to this challenge; it affirmed the spiritual significance of the corporeal world and thus allowed for bringing practical subjects into the work of still very Catholic colleges, which in turn helped to produce an educated Catholic middle class. As the American intellectual milieu changed, however, Neoscholasticism proved no longer viable and gradually gave way to secularization, particularly after World War II. Gradually Catholic colleges became more generically American in terms of curriculum, student life, and coeducation. Like Marsden with respect to the secularization of mainstream American higher education, Gleason saw both strengths and weaknesses in the new normal.

Alice Gallin, former executive director of the Association of Catholic Colleges and Universities, picked up the story where Gleason left off (Gallin 2000). Since the 1960s, Catholic colleges and universities in the United States have negotiated relations with a diverse constituency, including American higher education as a whole, federal and state government, campus communities, and the church

hierarchy. For the most part, these schools have gradually continued to shift from a subtle opposition to American academic norms to an open acceptance of them, all the while trying to keep these diverse constituencies happy. Gallin concurred that Catholic colleges have experienced a partial loss of identity as a result, but also asserted that their independence from the Catholic hierarchy was appropriate to their educational mission. Indeed, the story of modern Catholic higher education has not been entirely of loss; as Peter Collins (2010) has argued, the comparatively larger prominence of the discipline of philosophy, and particularly metaphysics and ethics, within Catholic colleges and universities allows them to contribute unique value to the academy at large.

In contrast, Burtchaell (1998), who was also Catholic, viewed this loss of a more distinctive identity as a capitulation that constituted a failure of nerve. Catholic colleges were up against a lot in the mid-twentieth century: religious orders could no longer maintain support of their schools, the schools themselves were short of cash, and Catholic colleges looked increasingly unappealing in the bigger picture of American higher education. As a result, many produced less-Catholic faculties, decreased emphasis on philosophy and theology, and separated Catholic identity from academics. In Burtchaell's view, such an institution was no longer Catholic in any meaningful way.

Sustained treatment of Catholic women's higher education would await the early 2000s. Schier and Russett's 2002 interdisciplinary edited collection *Catholic Women's Colleges in America* emerged from a November 1994 gathering sponsored by the Lilly Endowment. Participating scholars met to discuss the absence of Catholic women's colleges from the then-developing conversation on religious higher education. The resulting book, published nearly a decade later, was an "exploratory" interdisciplinary edited collection aimed at mapping the extent, nature, and contribution of these schools founded and run by women religious (nuns) (p. 9). Topics included administration, student life, and intellectual and social forces at work in these institutions. Together, the authors suggested that Catholic women's colleges were uniquely female-led institutions with a distinct theological basis for women's higher education. These schools also spent much of the twentieth century educating just as many women as Protestant and independent women's colleges and therefore deserved a bigger place within the broader narrative. Other works have zeroed in on particular aspects of Catholic women's higher education, such as institutions founded by the order of the Sisters of Mercy of the Americas (Daigler 2001) or Catholic academy education for women in the first half of the nineteenth century (Mattingly 2016). Specifically, Mattingly argued that Protestant academies for women were modeled after their Catholic counterparts – convent schools – often in reaction to the fear that otherwise the nation's future "Republican mothers" who sought higher education would convert to Rome and bring their children and students with them. Mattingly also noted with precision that, just as Protestant female educators carried prejudices against Catholics, so too did convents carry class and race prejudices – and Southern ones owned slaves.

Catholic higher education was not limited to Catholic institutions: the Newman Movement – an effort "by Catholic students, campus officials, and clergymen to

supply pastoral care and religious education in non-Catholic colleges and universities” (Evans 1980, p. xiv) began in 1883. This local movement often existed in opposition to rather than in cooperation with the Catholic hierarchy, in part because it favored the liberal side of the controversy over how much the church should contextualize itself within the American setting and in part, paradoxically, over the hierarchy’s fears of its success. If Catholic students’ spiritual needs could be met well at non-Catholic colleges, students might accelerate their ongoing move from Catholic to secular colleges, and then the whole Catholic educational network – parochial schools included – might collapse. Despite ongoing opposition, the Newman movement went national in 1908, until it once again decentralized after Vatican II. Evans (1980) did not include sustained attention to students’ experiences in the Newman movement, leaving an important research topic for future historians.

Judaism

The next largest body of scholarship addresses the experience of Jews in American higher education. Jews, too, have established specifically Jewish institutions of higher learning in the United States. Noteworthy is the institutional history, *The Story of Yeshiva University: The First Jewish University in America* (Klapperman 1969). Klapperman traced Yeshiva’s roots back to the foundings of two institutions which bred it: Yeshivat Etz Chaim (1886) and Rabbi Isaac Elchanan Theological Seminary (RIETS) (1897), through the merger of those two schools in 1915, to the 1928 formation of a collegiate department called “Yeshiva College,” and forward to his own post-war era. He described Yeshiva’s promulgation of Orthodox Jewish learning in the United States as an example of “Jewish resiliency and adaptability,” particularly as demonstrated by early Jewish immigrants from eastern Europe (p. 1).

Two seminal works published in the 1970s grounded the study of the history of discrimination in college admissions: Harold S. Wechsler’s *The Qualified Student: A History of Selective College Admission in America* (1977, revised 2014) and Marcia Graham Synnott’s *The Half-Opened Door: Discrimination and Admissions at Harvard, Yale, and Princeton, 1900–1970* (1979, new preface 2010). Both works explored discriminated groups in college admissions, which historically included not only Jews but also Catholics, African Americans, women, and foreigners. Wechsler’s wider lens focused not on discrimination per se, but rather on the evolving criteria for college admissions, sometimes intended to expand representation within the student population and sometimes intended to restrict it. Synnott narrowed in on policies intended to keep out groups of students for reasons other than intellectual qualification. For example, she detailed Harvard’s systematic restriction of Jewish enrollments in the early twentieth century under A. Lawrence Lowell and Princeton’s similar efforts under Woodrow Wilson and John Grier Hibben. In both cases, quotas for Jewish enrollments aimed at maintaining the desired sort of elite institutional culture and the proper “character” of students rather than at admitting the most qualified applicants. Synnott documented how these sorts of discrimination persisted as late as the 1950s.

Dan A. Oren’s *Joining the Club: A History of Jews and Yale* (2001) narrowed consideration to one group at one institution, but thereby expanded the exploration

of religious and ethnic discrimination to include not only student admissions but also hiring discrimination and social ostracism of both students and faculty. Oren's deeply researched book weaves a tale of irony into its narrative about student life, faculty society, and administrative decision-making: Yale remained socially backward in its treatment of Jews into the 1960s and 1970s, even while pursuing liberalization in other spheres.

Paul Ritterband and Harold S. Wechsler, in *Jewish Learning in American Universities: The First Century* (1994), took a different approach to the study of Jewish higher education in America: tracing the growth of Jewish studies in the curriculum, with particular attention to Harvard and Columbia. The century referred to in their title is 1875–1975 because the authors began with the early Semitic-studies departments of the late nineteenth century. These departments faced marginalization in the interwar years – much as Jewish students and academics were marginalized in the nation's leading universities – but, as was the case for institutional culture, Jewish studies recovered in the post-World War II period due to a creative recasting of Jewish identity by academic experts.

David A. Hollinger's compilation of previously written conference papers and lectures, *Science, Jews, and Secular Culture: Studies in Mid-Twentieth-Century American Intellectual History* (1996), brought together academic conversations on the secularization of the academy with those on the significance of non-Protestants within American higher education. The essays did not focus on the experience of Jews but rather on the effect of the presence of Jewish academics on the academy. Collectively, the essays described how Jews (including refugees) partnered with liberal Protestants to create a liberal, cosmopolitan, and broadly secular culture of scientific study in mid-century American academia between the 1930s and the 1960s. Hollinger argued that the increasing acceptance of Jews was midwived by the Cold War “idea that ideology, rather than race or class, was what divided the great, historic blocs in the world from one another” (p. 10).

Marianne R. Sanua's *Going Greek: Jewish College Fraternities in the United States, 1895–1945* (2003) looked at the opposite end of the spectrum: the experiences of Jewish undergraduates. Building on a wide array of manuscript and material culture sources, Sanua's book aimed to show how Jewish college and university students built an alternative system of student life in the midst of the exclusion and discrimination described by authors like Oren. Through the creation and maintenance of their own Greek life system between the final decade of the nineteenth century and 1945, Jewish students found both new ways of understanding Jewishness and new ways of realizing for themselves American middle-class aspirations. Sanua uncovered several tensions inherent in Jewish student Greek life. For one, Jewishness meant different things to different people: different groups were more or less ethnic- or immigrant-based and more or less secular. Also, the separation of Jewish students into their own fraternities and sororities was both caused by discrimination and became a necessary bulwark against it. In all cases, however, Jewish Greek organizations sought to create a more refined Jewish identity for their members.

More recently, Lila Corwin Berman's *Speaking of Jews: Rabbis, Intellectuals, and the Creation of an American Public Identity* (2009) combined Sanua's interest in

educated Jewish identity formation with Hollinger's interest in Jewish contributions to educated discourse. Berman's book examined the way in which Jewish intellectuals – not only rabbis but also academics, especially sociologists – explained their identities to the American people during the middle of the twentieth century, and particularly after World War II. In the post-World War I years, Jewish identity was largely communicated by Reform rabbis who used religious language, but these voices were replaced in the post-World War II years by more secular ones. Sociological theory and their status as academic experts allowed a new generation of Jewish intellectuals to define and justify Jewish difference, and so (paradoxically) create a space for themselves within American society. The end result of their work was a new version of Jewishness as something volitional and chosen.

Mormonism, Buddhism, and Islam

Mormon higher education is associated most prominently in the public mind with Brigham Young University (BYU). Yet many members of the Church of Jesus Christ of Latter-day Saints (Mormons), like Catholics and Jews, have historically sought higher education in institutions not associated with their faith. A recent work, *American Universities and the Birth of Modern Mormonism, 1867–1940* (Simpson 2016), provides a helpful introduction to the intersection of Latter-day Saints with American higher education. This book narrated Mormons' experience both within their flagship university and as they sought to combine their faith with the knowledge and culture gained at outside institutions of higher education. Simpson argued that Mormons' higher educational experiences played a significant role in the modernization and mainstreaming of the LDS church.

Limited scholarship on colleges of faith outside the Judeo-Christian tradition springs in part from their limited numbers. A few recent books have nevertheless cleared a path for deeper exploration of this field. Most of the institutions analyzed have only been founded recently, so authors' methodologies tend toward ethnography and anthropology more than history. Tanya Storch's *Buddhist-Based Universities in the United States: Searching for a New Model in Higher Education* (2015) analyzed the four Buddhist colleges presently operating in the United States: Naropa University (founded 1974 in Colorado), Dharma Realm Buddhist University (founded 1976 in California), Soka University of America (founded 1987 in California), and the University of the West (founded 1990 in California). All offer liberal arts and professional degree courses accompanied by study of the philosophy and practices of Buddhism. Storch wrote from a religious studies rather than a history perspective – most of the book discusses the current culture of the institutions – but she incorporated analysis of their histories as well.

Scott Korb's *Light Without Fire: The Making of America's First Muslim College* (2012) explored the recently founded Zaytuna College (founded 2008 in California), the first accredited Muslim college in the United States. Zaytuna has a Sunni affiliation but its founding was supported by a wide range of Muslim and non-Muslim voices in order to provide at least one Muslim college for the nation. This ethnographic narrative lacked argument, contextualization, footnotes, or index, but is a useful ground-level introduction to the story of the college's founding and

subsequent development. Korb explored the difficult social and political position of American Muslims in the post-9/11 era and the varying ways students have lived out their faith in this environment. For example, Zaytuna is coeducational and most, but not all, of its women wear hijabs. The book's focus was on administration and student life rather than curriculum and leaves much room for further study.

Shabana Mir's *Muslim American Women on Campus: Undergraduate Student Life and Identity* (2014) considered the flip side of the story: Muslim students at non-Muslim institutions. Specifically, she explored the contemporary experiences of Muslim American women college students on two campuses, George Washington University and Georgetown University, both located in Washington, DC. Mir concluded that the women found it difficult to integrate the two parts of themselves – college student and Muslim – because the hedonism inherent in campus culture is diametrically opposed to conservative Muslim values. She thus argued, in an intriguing parallel to the claims of other authors about American collegiate intellectual life, that American college campus culture is marked more by “inflexibility” than by true “pluralism” (p. 179). Mir's academic career points to the potential fruitfulness of further study of the Muslim American college experience: she teaches anthropology at the yet-unaccredited American Islamic College (Chicago, IL), while holding a Ph.D. in education policy studies from Indiana University.

The Field of Religious Studies

In Hart's 1992 bibliographic essay, the only book-length work on the field of religious studies noted was Robert Michaelsen's *The Study of Religion in American Universities* (1965), but a few other relevant texts bear mentioning. Bruce Kuklick (1985) traced the location of religious philosophy and theology within the academy from its eighteenth-century locus among clerical educators (who might also be philosophers) to its nineteenth-century heyday in divinity schools (which he considered the site of the most sustained intellectual discourse of any sort in the United States until after the Civil War) to the taking up of the mantle of intellectual leadership by academic philosophers in the late nineteenth century. Louise Stevenson (1986) elaborated on this intellectual dynamism by zeroing in on one such group of academy intellectuals in the mid-nineteenth century: the New Haven scholars at Yale. She argued that these scholars engaged modern intellectual trends from a distinct religious perspective and produced a vital philosophical school that blended evangelicalism, romanticism, and Whig moral and political ideology – a combination of commitment to tradition and reform.

In a work published nearly concurrently with Hart's essay, Robert Shepard analyzed the development of the discipline of the history of religions (or comparative religion) during the years 1870–1920 in *God's People in the Ivory Tower: Religion in the Early American University* (1991). Examining programs at Boston University, Cornell University, New York University, the University of Pennsylvania, the University of Chicago, and Harvard Divinity School, he argued that after Americans adopted “Religionswissenschaft,” or the scientific study of religion, from Europe, it

did not mature as a field until the 1950s; this was because its early years remained enmeshed in a missionary attitude toward non-Christian religions and closely associated with divinity schools.

In his own book-length treatment, *The University Gets Religion* (1999), D.G. Hart traced the rise of the field of religious studies through three main phases. In so doing, he sought to bring historical perspective to what he perceived as a contemporary crisis of identity within the field. Essentially, Hart contended that the study of religion was an awkward fit for the nature of the modern research university and that the history of the field's development constituted an extended attempt to squish it in. Hart flagged how much of the contemporary debate centered on the identity crisis of what the field was even about: it was oriented around a topic, like women's studies or education, rather than a methodological approach – or at least a cluster of methodologies – like history, sociology, or biology.

Hart additionally argued that the three phases were all driven by mainline Protestants, and, as a result, the contemporary field was handicapped by orienting itself in relationship to this specific religious tradition: either by attempting to continue the mainline Protestant project under other guises or by attempting to differentiate itself from that project as clearly as possible. In the first phase (1870–1925), mainline Protestants embraced the form of the new research university, believed many of their ethical goals could be met through it and its elevation of science, and relegated specifically religious activities and studies largely to the extracurriculum. In the next phase, 1925–1965, mainline clergy and academics – fresh off the victory in the fundamentalist-modernist controversy that ensured their (momentary) continued cultural dominance – sought to promote the study of their own understanding of religion within the university. Universities adopted the formal study of religion during this time as part of the defense of “western civilization” in the wake of multiple world wars and economic crises. This period also saw both the rise of the phrase “Judeo-Christian” heritage to describe the United States and the popularity of neo-orthodox theologian Reinhold Niebuhr's chastened view of human nature. Then, in the wake of 1960s pluralism, “once the close fit between Protestantism and liberal democracy became debatable, religious studies had to find another rationale, one more academic and less dependent on the mainline Protestant churches or the political and economic order that they supported” (p. 244). This shift can be marked by the founding of the field's umbrella organization, the American Academy of Religion in 1964. (Compare the relatively late date, for example, with the American Historical Association, founded exactly 80 years earlier in 1884.) Equally of note is that the previous umbrella organization for professors of religion had been the National Association of Biblical Instructors (founded 1909), a teaching rather than a scholarship society, even though the Society of Biblical Literature (founded 1880 as Society of Biblical Literature and Exegesis), existed as a research-oriented counterpart; nonetheless, both had centered on the foundational text of Christianity. The new field of religious studies was then left with an identity crisis – why should religion be studied in a separate department, rather than as a subfield of, say, history, sociology, or classics? The newly reconstituted field thus struggled with similar issues as did new departments like women's or Native American studies.

By coming at the history of religious studies from a different angle, and focusing on a different time period, James Turner reached a rosier conclusion in *Religion Enters the Academy: The Origins of the Scholarly Study of Religion in America* (2011). This brief book grew out of his 2010 George H. Shriver Lectures in Religion in American History at Stetson University. Turner traced the intellectual rather than the organizational genealogy of religious studies, and he started the tale in the eighteenth century and ended it in the early twentieth. In Turner's telling, the discipline of religious studies only coalesced in the 1870s after it had in fact developed a distinctive methodology, one captured in the field's early names: comparative religion, history of religions, or the science of religion. It was the habit of mind that put multiple world religions on a par and sought to understand the reasons for their similarities and differences that constituted the breakthrough that created a new field. Turner acknowledged that many of the field's earliest practitioners had religious motivations for their approach: they either wanted to find one true world religion that would supersede Christianity or they wanted to use the insights of other world religions to create a more perfect version of Christianity. Turner argued that although the field of comparative religion did not see strong growth until after World War II, it was already congealing into a recognized discipline in the decades around 1900.

Yet Turner ended his book with an account that highlighted the continuing methodological challenges of religious studies: he examined William James' motivations for publishing *The Varieties of Religious Experience* in 1901. Turner argued that James wrote from a concern that the leading methodologies for studying religion – history, theology, anthropology, and laboratory psychology – “stood aloof from real, lived religious experience” (p. 79). James claimed that to understand so human an experience as religion, practitioners ought to take seriously, well, human experience. Subjective individual testimony was as important as objective analysis in getting at the essence of the thing called religion, and should hence be incorporated within the discipline. Turner contended that James's approach did not permeate the field for over a generation: only in the 1960s, when scholars were no longer as concerned with adjudicating the standing of Christianity against other world religions, would consideration of religious experience gain a seat at the table alongside attention to religious content and practice.

Extracurricular Religious Life

Even as administrators and faculty have debated and shifted the role of religion in American higher education, religion has always maintained various expressions outside the classroom. Sometimes these have come with official imprimatur – like required chapel. Other times, the imprimatur has been less official but still cooperative – like optional chapel, university-sponsored denominational chaplains, or administrative enmeshment with turn-of-the-twentieth-century Protestant student organizations that provided student services. At still other times, students have joined religious groups and engaged in religious activities with no further official involvement than the institution's tolerance of the groups' presence on campus. As

previously noted, many works that broadly address the history of religion in American higher education have included this aspect of collegiate religious life. Other works have zeroed in on the subject.

College chapels are the site of Margaret Grubiak's 2014 analysis of universities' attempt to navigate the role of religion in the era immediately following the rise of the research university, an understudied moment in the narrative. Using a source base of representative elite private universities – because they were neither subject to a particular religious body nor bound to honor the separation of church and state – she sought to explain the paradox of a wave of chapel construction on these campuses during the 1920s and 1930s, the decades just after the functional disestablishment of Protestantism from these and other campuses. Grubiak argued that as universities dropped or decreased required chapel services while investing in huge new libraries and laboratories, erecting new chapels – or even buildings that looked like chapels – affirmed a continuing role for religion. Like the recent turn to the humanities to instill moral values, the chapels' Gothic architecture sought to lure students toward higher values by appealing to their emotional and aesthetic ideals rather than their intellectual ones. Although a national religious revival in the 1950s produced an attendant revival in chapel construction, by that time widespread acceptance of pluralism sought to make space on campus for all faiths and for none. The results were smaller-scale and less distinctive chapels.

The largest amount of historical scholarship on voluntary student religion has focused on the pan-Protestant Young Men's Christian Association (YMCA) and Young Women's Christian Association (YWCA), which for many decades around 1900 absolutely dominated the extracurricular religious life of American campuses: at state universities, 20% of men belonged to the YMCA, and 50% (!) of women belonged to the YWCA (Turpin 2016, p. 237). The "Ys," as they were known, were large national organizations of which college ministry was only a part; other aspects included, for example, ministry to urban workers and professionals, rural residents, and soldiers. The common thread was indeed the "Y" – young – as the organizations sought to communicate Protestant faith and values to the next generation on the cusp of adulthood. Consequently, most books on the history of the Ys contain sections devoted to their college ministry, but few books focus exclusively on it.

The most significant work on the collegiate YMCA specifically was David Setran's *The College "Y": Student Religion in the Era of Secularization* (2007). Setran examined how college administrators turned to voluntary religious organizations, particularly the YMCA and the YWCA (although Setran confined his analysis to the men's organization), to assume responsibility for students' moral and religious lives. He traced how theological changes within the men's organization – namely, a shift from evangelicalism to modernism – contributed to the ultimate secularization of the student experience. Setran argued that the Y shifted from a focus on transmitting theological beliefs to a focus on encouraging ethical action, eventually so much so that theological beliefs became optional. An older internal history covering a similar time frame is *Student Religion During Fifty Years: Programs and Policies of the Intercollegiate YMCA* (Morgan 1935). The best overall history of the YMCA,

which incorporates the history of work with students, is *History of the YMCA in North America* (Hopkins 1951).

No books focus solely on the YWCA's collegiate ministry. A couple recent works, however, tell the history of the larger movement and include an account of student work: *Liberal Christianity and Women's Global Activism: The YWCA of the USA and the Maryknoll Sisters* (Izzo 2018) and *Christian Sisterhood, Race Relations, and the YWCA, 1906–46* (Robertson 2007). Turpin (2016) also traced the role of both the YMCA and YWCA in the evolution of campus religious life. Older internal histories of the domestic YWCA that likewise incorporate student work include *The YWCA: An Unfolding Purpose* (Sims 1950); *The Natural History of a Social Institution: The Young Women's Christian Association* (Sims 1936); *The Religious and Educational Philosophy of the Young Women's Christian Association* (Wilson 1933); and *Fifty Years of Association Work Among Young Women, 1866–1916: A History of Young Women's Christian Associations in the United States of America* (Wilson 1916).

Two works published the same year recounted the history of the related campus religious organization, the Student Volunteer Movement for Foreign Missions (SVM): *The Kingdom of Character: The Student Volunteer Movement for Foreign Missions (1886–1926)* (Parker 1998) and *The End of a Crusade: The Student Volunteer Movement for Foreign Missions* (Showalter 1998). The SVM originated in 1886 in a student conference that met in the home of evangelist Dwight L. Moody in Northfield, MA. The movement attracted both liberal and conservative Protestant students from a variety of denominations to devote their lives to foreign missions, which meant everything from evangelism to relief work. SVM's slogan, "The Evangelization of the World in This Generation," motivated students to spread worldwide the Christian message, understood at the time as nearly synonymous with western civilization. Parker noted both the organization's idealism and benevolence and its dark side of imperialism, racism, and paternalism. In the years 1890–1930, the SVM recruited over 15,000 missionaries of both sexes (by 1916 over half of the SVM membership was female). World War I, however, led to a steady decline in membership as the war's nationalism strained the organization's international coalition and the fundamentalist-modernist controversy of the 1920s strained the ability of liberal and conservative Protestants to work together.

A pair of works by Clarence Shedd in the 1930s presented a fairly comprehensive treatment of student voluntary religion to date: *Two Centuries of Student Christian Movements: Their Origin and Intercollegiate Life* (1934) and *The Church Follows Its Students* (1938). Shedd, who taught courses in religion and education at Yale Divinity School, traced the history of voluntary student religious organizations starting as far back as colonial Harvard under Cotton Mather. The second book focused specifically on the work among college students organized by denominations themselves – mostly Protestant, but also Catholic and Jewish. This book also constitutes a primary source on the 1930s as Shedd covered current practice at six universities and based much of the contemporary portion on a 1930 survey he conducted at Yale.

Religious Cooperation in State Universities: An Historical Sketch (Smith 1957), published to commemorate the centennial of student religious work at the University of Michigan, sought to build on Shedd's research by delving more deeply into the dynamics of student voluntary religious life at the University of Michigan, the University of Pennsylvania, and Cornell University. In keeping with the mid-century consensus mindset, Smith focused specifically on the question of cooperation across religious groups in student work. He analyzed the history of campus cooperation and competition between the pan-Protestant YMCA and individual denominations, and then later Protestant-Catholic-Jewish cooperation via the National Conference of Christians and Jews and the Religious Education Association, even as by the 1950s denominations became more interested once again in their distinctive claims and practices. He also considered some curricular innovations at state universities connected to specific religious groups, such as Bible chairs and Schools of Religion. The book parsed how state universities supported this variety of religious presence on campus, including by paying the salaries of coordinators of religious activities and administrative directors of Schools of Religion.

How students experienced their religious life in the mid-twentieth century was subsequently documented in *Commitment on Campus: Changes in Religion and Values Over Five Decades* (Hoge 1974). Using survey data from various colleges, including a questionnaire for "orthodoxy," Hoge traced changing student religious beliefs, practices, and values. College student religious orthodoxy declined from the early 1920s to the mid-1930s, and then increased again to the levels of the mid-1920s between 1952 and 1955. It subsequently declined again to the levels of the early and late 1930s. Students in the natural sciences, business, and engineering were more consistently orthodox than their peers in the humanities and social sciences. Additionally, high SAT verbal scores and family incomes proved to be predictors of social and religious liberalism. Yet even in eras when interest in the institutional church was not pervasive among college students, they continued to enroll in religion classes, and the early 1970s revealed an uptick in general religious interest on campus.

A second study of the mid-twentieth century produced a complementary analysis. *Journeys that Opened Up the World: Women, Student Christian Movements, and Social Justice, 1955–1975* (Evans 2003) gathered memoirs from women involved in collegiate Christian movements during the titular years – not only the YWCA but also the World Christian Student Federation and various liberal Protestant denominational ministries. Involvement in these groups produced – at least anecdotally – lifelong commitment to liberal activism, both among graduates who remained religious and those who did not.

In 2008, John Turner turned an analytical lens on the conservative side of twentieth-century student religious life in his *Bill Bright and Campus Crusade for Christ: The Renewal of Evangelicalism in Postwar America*. This "contextualized biography" of Bright, the founder of Campus Crusade (now Cru), was also an organizational biography of Crusade. It explored evangelical Protestants' engagement with campuses nationwide during a time of universities' focus on research on the one hand and college athletics on the other. Bright and his coworkers, as had

many YMCA and YWCA workers before them, saw winning the hearts and minds of college students as a means of shaping the nation's future. Both a carrot – millennial hopes connected with the nation's 1976 bicentennial – and a stick – fear of godless communism – incentivized Bright and Crusade to partner with conservative businessmen who bankrolled the organization to seek to remake college campuses. A pragmatist, Bright simultaneously moved the organization in progressive directions: he expanded opportunities for female leadership (but never equalized gender roles entirely), allowed staff to dress like hippies, and incorporated rock music into worship, thereby helping shape a new, more modern culture for the next generation of evangelicals. We still lack comprehensive histories of the other two large postwar conservative pan-Protestant campus organizations: The Navigators and InterVarsity.

Neither all liberal nor all conservative, campus religious organizations have long attracted and influenced a wide variety of students seeking deeper meaning as they prepare themselves for the world outside the college gates. Historians of higher education would do well to incorporate this aspect of students' experiences as they reconstruct the nature not only of earlier American higher education but of its more recent history as well.

Faith-Based Institutions of Higher Education

Theological Seminary Education

A certain type of religious instruction began moving out of the college in the early nineteenth century: ministerial training. Andover Theological Seminary was founded in 1807 by orthodox Congregationalists to carve out a space for training their ministers once Harvard's Hollis Chair of Divinity was filled by a Unitarian, Henry Ware, in 1806. From this time on, American colleges' original function of training ministers was slowly siphoned off by theological seminaries or divinity schools, sometimes associated with colleges or universities, and sometimes freestanding.

Primary and secondary sources available for the study of this field were summarized in 1985 by Heather F. Day, former librarian for the Lilly Endowment, in *Protestant Theological Education in America: A Bibliography*. Many of the resources listed came from the research being undertaken by Glenn Miller. He subsequently published the most comprehensive study of the goals and purposes of American theological education in a three-volume analysis: *Piety and Intellect* (1990) on the pre-Civil War period, *Piety and Profession* (2007) on the period between the Civil War and the 1960s, and *Piety and Plurality* (2014) on the 1960s to present. Miller's argument of change over time can be traced through his titles. Miller claimed early nineteenth-century theological seminaries, regardless of denominational affiliation, shared a focus on hammering out how best to rationally set forth and intellectually defend the faith.

This focus stands in distinction from the shift after the Civil War toward preparing students for the ministry as a modern profession. Theological seminaries in this sense became professional schools more than sites of advanced education in the

study of divinity – though Miller noted a few conservative holdouts such as Presbyterian Westminster and Missouri Synod Lutheran Concordia. Most theological seminaries sought to prepare students to translate the faith and its applications to urban and middle-class constituents and hence included, along with new theological formulations and approaches – both liberal and conservative – courses in religious education, social ethics, and in-the-field training. Modern professional training came with its own modern professional organization: the accrediting body of the American Association of Theological Schools.

Miller highlighted that during the decades around 1900 there also arose a different type of theological institution: Bible schools and specialized training schools for missions. Brereton's *Training God's Army: The American Bible School, 1880–1940* (1990) delved into the origins of the first of these new types of institutions. Brereton argued that these schools partook of the spirit of the age: they enrolled the same sorts of students as secular normal (teacher training) schools – middle- and working-class women and men seeking vocational training – and likewise focused on practical training for a type of teaching. Specifically, they sought to prepare students to evangelize the urban-dwellers and immigrants whose numbers ballooned during the Gilded Age and Progressive Era. In the period roughly 1915–1930, these schools moved in a more traditional collegiate direction by offering more full-time instruction, more classroom work, and larger facilities. After 1940, they professionalized by offering degrees, forming accrediting associations, and often moving from the city to the suburbs. Nevertheless, they delayed seeking full collegiate status and incorporating a liberal arts core because of a strong sense of special religious calling and heritage.

Miller called his final installment, *Piety and Plurality* (2014), on the 1960s to the present, a “midlevel source.” In other words, the book was informed by his own observations of the period, but also drew on other primary and secondary source data. Essentially, Miller argued that theological education during this era reflected the zeitgeist – what Daniel Rodgers has called the “Age of Fracture” (2011). Different goals and purposes for theological education proliferated, seminaries debated their structure and funding, and theological training opened wider to new populations: women, along with racial, ethnic, and sexual minorities. To the extent that theological education had a unifying theme, it was a restatement of the professional ministerial ideal in terms of reflective religious leadership.

Conrad Cherry (1995) zeroed in on divinity schools over the time period covered by Miller's second two books, namely the 1880s to the present. His *Hurrying Toward Zion: Universities, Divinity Schools, and American Protestantism* (1995) constituted part of the mid-1990s moment seeking to understand in fresh ways the shifting role of religion in American higher education. Like other authors, he situated this shift in the wider context of changing theological convictions among Protestants and the changing social and cultural milieu that resulted from industrialization, urbanization, and immigration.

Cherry's unique contribution was to argue that many Protestants saw university divinity schools – founded at Harvard, Chicago, Yale, Emory, and the like – as the right way to Protestantize the country through higher education. Namely, these

schools would train ministers socialized through professional training to unify the nation through ministry to both rich and poor. He therefore highlighted the theme emerging in the 1990s that university leaders were often still Protestants who believed that their system of thought and practice ought to be adopted by the nation at large – they simply had a new modernist way of understanding that faith and practice and how it should be transmitted. However, by embracing the university's new culture of professionalization and specialization, divinity schools contributed to the cordoning off of religion from other aspects of higher education rather than to the ability of religion to serve as a unifying force. Cherry likewise followed other 1990s authors in arguing that the best balance for the present was for religion not to seek to dominate the academy but to have a seat at the common table, and not a smaller one off in the corner. To accomplish this purpose, divinity schools – many now no longer exclusively Protestant or even Christian – must be better integrated into the university as a whole.

Denominational Higher Education

As already described, most early American higher education could have been classified as “denominational,” and most historians have noted this fact. As alternatives arose and types of higher educational institutions proliferated, however, denominational colleges often got dropped from the synthetic story historians would tell. Yet these colleges remained, and still do, and they constitute a significant proportion of the American higher educational landscape. *Religious Colleges and Universities in America: A Selected Bibliography* (Hunt and Carper 1988) provides an extensive list of works on the titular topic. Several of these, as well as works published later, zero in on these institutions' histories, often focusing on a particular denominational tradition.

A good example is Baptists. *A Historical Study of the Educational Agencies of the Southern Baptist Convention, 1845–1945* (Magruder 1951) considered the topic from the side of the denominational machinery designed to connect Southern Baptists to their educational endeavors, including but not limited to institutions of higher education. (Additional educational initiatives included the Baptist General Tract Society, home and foreign missions, Sunday School, and young people's organizations, among others.) Four years later, *Higher Education of Southern Baptists: An Institutional History, 1826–1954* (Johnson 1955), written by the 20-year chairman of the education commission of the Southern Baptist Convention, provided a more extensive survey of higher educational institutions specifically. Decades later, David Potts focused in on the antebellum years of Baptist higher education, 1812–1861 – and thereby expanded his treatment beyond Southern Baptists – in his published dissertation *Baptist Colleges in the Development of American Society* (1988).

William Brackney's 2008 *Congregation and Campus: North American Baptists in Higher Education* constitutes the most updated and comprehensive treatment. This book teased out the complications involved in narrating something as seemingly well-defined as “Baptist higher education.” Both halves of that phrase could arguably be contested in the case of any given institution. Brackney defined

“Baptist” institutions as those that had at least one of the following: a Baptist trustee board, Baptist executive leadership, ownership or sponsorship by a Baptist ecclesial body, and/or Baptist religious practices. Likewise, he included under the rubric of “higher education” a wide variety of institutional types: colleges, universities, manual labor schools, literary and theological institutions, theological schools, and Bible colleges. Brackney argued that an “egalitarian spirit” led Baptists to more success than other Protestant denominations at incorporating into their institutions marginalized populations, especially women and African Americans. He refused to reduce the motivations of institutions that disaffiliated from a Baptist organization to simple “secularization,” noting that doing so was one way to play out the Baptist theological distinctive of individual autonomy. Brackney’s 2008 publication date also enabled him to note the unusual case of historically Baptist Baylor University’s twenty-first-century quest to become a distinctively Christian top-tier research university. Brackney concluded that like other denominational institutions in a pluralistic environment, the challenge for contemporary Baptist colleges and universities is to balance fidelity to Baptist distinctives with openness to participation by and cooperation with other groups.

Presbyterians have also been the subject of a fair number of books dedicated to their higher educational endeavors, seemingly in large part because Princeton was Presbyterian. Douglas Sloan’s 1971 *The Scottish Enlightenment and the American College Ideal* focused largely on Princeton, along with some Presbyterian academies, to explain Americans’ receptivity to the Scottish Enlightenment. Miller’s *The Revolutionary College: American Presbyterian Higher Education, 1707–1837* (1976) argued the larger claim that Presbyterian higher education constituted a lens through which we can observe and understand that denomination’s shifting understanding of its role in American society – and perhaps by extension, that of other Protestant denominations as well. Miller traced changes in the philosophy, curriculum, discipline, and denominational support of Presbyterian colleges, concluding that they pointed to three phases of the denomination’s self-understanding: (1) cooperating with other denominations to build up a Christian commonwealth (1707–1775), (2) cooperating with other denominations to build up a virtuous republic, and, finally (3) embracing the newly competitive religious marketplace of disestablishment by battering the hatches and competing with other denominations for adherents. Miller understandably drew largely on Princeton, but also included institutions such as Hampden-Sydney and Liberty Hall (Washington and Lee University) in Virginia, Dickinson College in Pennsylvania, and Transylvania in Kentucky. Two institutional histories of Princeton are also worth highlighting for their in-depth treatment of religion and the connection of their narrative to the wider story of American higher education: *Princeton and the Republic, 1768–1822: The Search for a Christian Enlightenment in the Era of Samuel Stanhope Smith* (Noll 1989) and *Princeton in the Nation’s Service: Religious Ideals and Educational Practice, 1868–1928* (Kemeny 1998).

Quakers also founded a number of significant institutions of American higher education – including Swarthmore, Haverford, Bryn Mawr, Cornell, and Johns Hopkins – as detailed in *Founded by Friends: The Quaker Heritage of Fifteen*

American Colleges and Universities (Oliver et al. 2007). This edited volume explored how distinctly Quaker motivations underlay the original conception of these institutions. One prominent motivation was the nineteenth-century liberal-conservative Hicksite-Orthodox split among Quakers, which led each side to found its own institutions. A second was the desire to give Quaker children a “guarded” education that would include specifically Quaker outlook and practices in a way designed to keep the next generation within the fold. Finally, Quakers’ shift from an informal to a formal ministry made providing higher educational training for ministers a priority. The book also explored how Quakers’ egalitarian commitments in terms of gender and race did and did not translate into their colleges and universities.

A couple works focused more closely on the intersection of race and denomination in American higher education: *Black Theology as the Foundation of Three Methodist Colleges: The Educational Views and Labors of Daniel Payne, Joseph Price, Isaac Lane* (Griffin 1984) and *The Cost of Unity: African American Agency and Education in the Christian Church, 1865–1914* (Burnley 2008). Griffin connected the specifically Methodist religious thought of black educational reformers to the shape three colleges finally took: Wilberforce College, OH; Livingstone College, NC; and Lane College, TN. Burnley examined the educational efforts of the Christian Church (Disciples of Christ) denomination on behalf of African Americans between the end of the Civil War and World War I. He showed that African Americans flocked to the Christian Church after the Civil War because it offered congregational autonomy – but not, in the end, as much as desired or expected. Nevertheless, even in the midst of white domination (and contrary to the existing historiography), African Americans in the Christian Church exercised agency within the denomination’s educational work, helping found such schools as the Piedmont School of Industry (VA), Jarvis Christian Institute (later College) (TX), and Tennessee Manual Labor University.

Non-denominational Higher Education

A separate set of works have focused on what could be called “non-denominational” institutions. These colleges, almost always Protestant and often evangelical, did not affiliate with a specific religious denomination but did continue to make their affiliation with Christianity a substantial aspect of their identity.

Still the widest coverage of this topic arrived in 1984 with William Ringenberg’s *The Christian College: A History of Protestant Higher Education in America*. In a second edition, Ringenberg updated the volume with a new chapter bringing the narrative up to 2006 (Ringenberg 2006), but did not revise the original text in light of new scholarship. *The Christian College* understood its topic broadly and covered both denominational and non-denominational institutions, along with the processes by which some formerly religious institutions subsequently disaffiliated. He also considered the ways in which Protestant denominations held substantial influence over state universities in the nineteenth century. In the updated 2006 chapter, Ringenberg treated how the Council for Christian Colleges and Universities (CCCU) has brought “structure, influence, and recognition” (p. 210) to Christian

institutions within the wider academy since its founding in 1975. (The brief book *Shining Lights: A History of the Council for Christian Colleges and Universities* (Patterson 2001) provided a more extensive look into the origins, birth, and development of this professional association.) Like many surveys of religion in American higher education, Ringenberg's was weak in its treatment of women and racial minorities.

The edited volume *Making Higher Education Christian: The History and Mission of Evangelical Colleges in America* (Carpenter and Shippis 1987) zeroed in on specifically evangelical Protestant higher educational institutions, noting their comparative neglect in studies of American higher education at large. The book was a hybrid that revealed the investment of many of the scholars who had begun to pay fresh attention to religion in American higher education. It grew out of a 1985 conference, "The Task of Evangelical Education," hosted by Wheaton College in Illinois, home at the time to the Institute for the Study of American Evangelicals (defunct as of 2014). The first half of the book featured essays that put American evangelical higher education into historical perspective – as far back as medieval Europe – while the second half offered commentary and policy suggestions for contemporary evangelical colleges.

Two recent histories of postwar American evangelicalism also included substantial discussion of evangelical higher education: *Apostles of Reason: The Crisis of Authority in American Evangelicalism* (Worthen 2013) and *Awakening the Evangelical Mind: An Intellectual History of the Neo-Evangelical Movement* (Strachan 2015). Of particularly note is that both discussed the understudied failed attempt in the 1950s and 1960s at establishing an evangelical research university to be called Crusade University.

The most comprehensive treatment of the history of those non-denominational fundamentalist and evangelical colleges that remained robustly and explicitly religious after mainstream "secularization" is Adam Laats's *Fundamentalist U: Keeping the Faith in American Higher Education* (2018). This book built off a line of inquiry in Laats's 2010 *Fundamentalism and Education in the Scopes Era: God, Darwin, and the Roots of America's Culture Wars*, which noted that part of the fundamentalist-modernist controversy between Protestant conservatives and liberals constituted a fight over control of state universities. When fundamentalists lost, they turned their attention to denominational colleges as well as establishing new, friendlier institutions.

The book analyzes "a network of interdenominational conservative evangelical colleges and universities" (p. 2), including particularly deep archival work at six institutions: Wheaton College in Illinois, Bob Jones University in South Carolina, Biola University in California, Gordon College in Massachusetts, Liberty University in Virginia, and Moody Bible Institute in Chicago. Although titled *Fundamentalist U*, the book actually analyzes both fundamentalist and evangelical colleges: institutions on the fundamentalist side were more separatist, while those on the evangelical side were more willing to engage with the outside world, and some shifted from one camp to the other over time. Both were founded by conservative Protestants who believed secular colleges and universities had

grown godless in their epistemological assumptions and mores, especially by questioning the veracity of the Bible and embracing Darwinism.

But Laats argued that in most ways these Christian institutions ended up looking a lot like any other college. Like others, they needed money to survive. These institutions constantly had to convince donors and tuition-paying students that they were simultaneously religiously “orthodox” – however defined at the time – and “real” colleges – however defined at the time. Their problem was exacerbated by the fact that these colleges did not affiliate with any one denomination and therefore had no formal hierarchy to which to appeal on questions of belief or practice. They were subject instead to the ever-changing court of fundamentalist opinion. Thus, their stories illuminate both the changing norms of American higher education and how these intersected with the nation’s changing religious and moral norms.

A good example is gender. Although conservative Protestant institutions gave even greater attention to gender roles than the surrounding culture, they hired female faculty at approximately the same rate as secular schools. What professors taught mattered more than who was doing the teaching. Likewise, before the cultural upheavals of the 1960s, most colleges placed restrictions on male and female students’ interactions, and most colleges were harsher on women’s behavior. Conservative Protestant colleges were the same – but more so. Similarly, before the 1960s, state universities and Christian colleges both expelled students accused of homosexual behavior, but Christian colleges used even harsher language in denunciation. Ultimately, parents sent their children to these institutions for a “safe” education, in every way, not only theologically but also culturally. Laats is one of the few historians to have written on the intersection of religion and LGBT student experience, and further research could advance our understanding considerably, particularly in light of present-day controversies over the status of student faith organizations that require either members or officers to limit sexual activity to heterosexual marriage. Graves (2018) noted a few additional starting points for interested scholars.

How race and politics intertwined with these institutions was even more complicated. Some Christian institutions were more progressive on racial integration than their secular peers (Wheaton, for a time) and some were more regressive (famously, Bob Jones). Likewise, Laats noted that both fundamentalist and evangelical college administrations have been reliably conservative politically throughout the twentieth century, but evangelical students and faculty have consistently covered a much broader political spectrum. Nevertheless, the average student and faculty outlook at both types of conservative Christian colleges leaned further right than at secular institutions.

Religion in Recent Synthetic Narratives

Rudolph would likely be pleased to know that recent years have witnessed a return to writing synthetic histories of American higher education. Indeed, six such works were published in the brief period of 2014–2019: *The History of American Higher*

Education: Learning and Culture from the Founding to World War II (Geiger 2014); *Wisdom's Workshop: The Rise of the Modern University* (Axtell 2016); *For the Common Good: A New History of Higher Education in America* (Dorn 2017); *American Academic Cultures: A History of Higher Education* (Mattingly 2017); *A Perfect Mess: The Unlikely Ascendancy of American Higher Education* (Labaree 2017); and *American Higher Education Since World War II: A History* (Geiger 2019). How these works have treated the role of religion in American higher education serves as a barometer for how far the field has come and how far it has yet to go.

Because of recent debates on the purposes of American higher education, all these works have been attentive to how that question has historically been answered. Geiger (2014) analyzed the development from three angles: culture, careers, and knowledge. Through these different perspectives, he sought to answer two main questions: How did institutions of higher education understand their purpose? And who went to college and why? In other words, how did the developing vision of educational leaders combine with the developing desires of students to carve out a changing role for higher education in American society? Geiger's treatment of the broader place of religion in American higher education contained both great strengths and some notable weaknesses.

For roughly the first half of the book – through the late nineteenth century – Geiger handled the relative role of religious concerns in educators' thought with truly unusual sensitivity, displaying a deft ability to tease out how even subtle debates over theology could alter the course of education in a region. Then, surprisingly, the religious motives of educators almost entirely dropped out of the narrative with hardly any explanation. Sympathetically, this shift can be partly explained by the fact that the Protestant modernism that dominated turn-of-the-century American higher education closely identified the purposes of God with the progress of human understanding. Thus to pursue the latter was *ipso facto* to pursue the former. Yet this narrative overlooked research by scholars such as Julie Reuben, Jon Roberts, James Turner, and George Marsden that made clear that educators themselves still consciously wrestled with how to transmit what they understood to be Christian morality to their students, and that this struggle shaped the approaches they took toward the curriculum and student activities. Where Geiger did excel in the second half of the book was in his portrayal of the continuing presence of religion in campus extracurricular life. Drawing substantially on the work of David Setran, Geiger provided what is, to my knowledge, the most thorough treatment of the pan-Protestant YMCA's dominance within turn-of-the-century student life available in any larger narrative of that era. Geiger's treatment of religious pluralism was uneven. He thoroughly considered the systematic exclusion of Jews from many early twentieth-century colleges and universities, but only gestured toward the particularities of Catholic higher education.

In keeping with many other narrative overviews, Geiger's 2019 sequel covering the history from World War II to the present did not incorporate as much discussion of religion. Geiger did, however, note continuing discrimination against Jewish students during the first part of this era and gave some attention to Catholic education. He also noted the role of the Protestant YMCA in founding public

urban universities out of a religious impulse to serve working-class students. He did not address denominational or evangelical colleges. Geiger's major religious history intervention was to argue that "religion, family, and patriotism" collectively undergirded the 1950s consensus of "the American way of life" (p. 180) – but that, in his telling, religion was not the major dividing line in the subsequent backlash of the 1960s or the culture wars of the 1980s and beyond that swirled around American campuses. Rather, the fault lines occurred between differing views of the American project and higher education's role in it.

Axtell (2016) focused on the development of one form of higher education, the modern American research university, and put it in deep historical and international context. Thus, the book grounded a central aspect of American higher education in decidedly religious roots – those of the medieval European university. Axtell was highly attentive not just to ideology but to contingency, and so did not reduce the origins of the American research university to a particular philosophical outlook. Rather, he sought to show that America's leading universities – "the world's standard- and pace-setters" – should be considered "not as unique, *sui generis*, creations, but as variable, contingent products of specific times, places, and conditions in a long lineage of similar, though never identical, institutions" (p. xiv). Overall, Axtell's narrative was quite compelling: broad-ranging, thoroughly researched, and organizationally sound. In the more modern period, though, it slighted religion, considering neither the religious beliefs and motivations that animated many American university founders nor the role of secularization in these institutions' ultimate form.

Dorn (2017) even more intentionally framed his narrative of American higher education around the question of its specifically moral purposes, though recognizing that other purposes have always coexisted as well. He contended that during the Early National Period, civic-mindedness was the dominant note within American higher education. Next, however, the antebellum and Civil War eras featured an emphasis on practicality. Then from Reconstruction through the Second World War, Dorn asserted that an ethos of commercialism dominated. Finally, during the Cold War and into the twenty-first century, the pursuit of affluence has taken center stage. In broad strokes, Dorn argued that over time the messaging of higher education has gradually shifted from serving the community to serving the individual, but without entirely losing concern for the community. At times, Dorn noted how this commitment was tied to a particular religious or philosophical outlook, but this question was not a focus of the book. Dorn critiqued aspects of these developments, but also asserted that the ability to cater to multiple constituencies and purposes has contributed to the strength of the American higher educational system.

Mattingly (2017) likewise ordered his narrative of the whole field of American higher education from the colonial period through the 1960s according to what he saw as the changing moral priorities of different eras, which he then organized according to distinct "generational cultures" that dominated at various times. Religion was absolutely central to the first culture, centered on eighteenth-century New England and Middle Colony colleges shaped by the Great Awakening. It took Yale as its model and viewed the college as a "moral community" (p. 16). This culture

then merged with Thomas Jefferson's vision for republican higher education to produce the culture of antebellum colleges, which promoted a nondenominational form of "moral character" reinforced by Enlightenment-based sensibilities (p. 51). He also noted the importance of both Catholicism and Protestantism to the early higher education of women. As in many synthetic works, Mattingly's discussion of religion was confined mostly to the first half of the narrative, but he did trace its changing role during the rise of the research university and devoted some sustained attention to Catholic higher education in the twentieth century. Finally, Mattingly also briefly noted the challenges faced and solutions offered by religious voices in the modern university.

Finally, Labaree (2017) intentionally wrote a concise introduction to the history of American higher education, but its concision resulted in an almost total exclusion of religion. He stated at the outset that "religious institutions and private liberal arts colleges" were outside of the "four tiers" covered by his book: Ivy League schools, land-grant colleges, normal schools (and their descendants), and junior colleges (and their descendants). Labaree did not cite any of the major secondary sources on the history of religion in American higher education and mostly confined his commentary to noting that most antebellum colleges were founded by religious denominations to spread the faith; he did not include information on the research universities, both public and private, that likewise had religious roots.

Conclusion

Much scholarship has unearthed a wide variety of ways that religion of various types has shaped the development of American higher education. Some of this work has made it into the way we often narrate the story, but much has not. In some ways, this fact is discouraging, but it also means we possess an untapped resource for contemporary conversations about the purposes, moral and otherwise, of American higher education. Throughout American history, debating the role of religion in the academy has triggered discussion on these issues. Reflecting on that history, and the pros and cons of decisions ultimately made, offers us wisdom for the present and future. And more of the story still remains to be unearthed. Particularly beneficial for the future will be additional exploration of the ways that various types of religion have either aided or hindered the educational advancement of marginalized communities, the variety of ways that faith has intersected the academy since World War II, and the evolving nature of an increasingly pluralistic student body's engagement with religious life over the course of the twentieth and twenty-first centuries.

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An Interdisciplinary Return to Queer and Trans* Studies in Higher Education

3

Implications for Research and Practice

Antonio Duran, Reginald A. Blockett, and Z Nicolazzo

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Abstract

Over the past few decades, scholars have increasingly highlighted the experiences of queer and transgender individuals on college campuses. Yet, too often, studies in higher education have positioned queerness and trans*ness as purely embodied identities, as opposed to embracing queer and trans* ways of thinking and knowing. To highlight this reality, this chapter begins by synthesizing the existing body of queer and transgender research in the field of higher education, specifically focusing on the literature published during the past decade. The authors then argue that higher education would benefit from increased engagement with work being done on queerness and trans*ness outside of the education field. In order to actualize the potential that interdisciplinary perspectives offer, this chapter provides several arguments on how interdisciplinary thinking can inform the work done in higher education. The authors then conclude by asking what research and practice in the academy would look like from an interdisciplinary queer and trans* approach.

Keywords

Queer · Transgender · Interdisciplinary · Feminist studies · Cultural studies · Critical race studies · Trap doors · Queer politics · Embodiment · Queerness · Trans*ness · Heterosexism · Racism · Settler colonialism · Trans* oppression · World-making

An Interdisciplinary Return to Queer and Trans* Studies in Higher Education

Scholarship in higher education has increasingly focused on the lives of queer and trans* individuals navigating college campuses. Yet, in looking at the larger landscape of queer and trans* scholarship in higher education, a troubling paradox emerges: though queer and trans* students have received more attention from scholars (see Pryor et al. 2016; Renn 2010), the ways in which the academy understands queerness and trans*ness have not shifted in recent history. In her

2010 assessment of the state of LGBT and queer research in the field, Renn (2010) declared that institutions “have stalwartly resisted the queering of higher education itself” (p. 132) by not conceptualizing how one can queer organizations themselves, an observation that still rings true to this date. Reflecting on this sentiment that is now a decade old led us to consider how the field of higher education has engaged with queerness and trans*ness in research. Furthermore, in this exploration, we contemplated how current approaches have fallen short of imagining equitable futures that center queerness and trans*ness in our education system.

In this piece, we argue that one way to advance the field’s relationship with queerness and trans*ness is by returning to higher education’s interdisciplinary roots. Despite the fact that the academy has been seen to value interdisciplinary knowledge (Haycock 2007; Holley 2009b), research and theory in higher education has not actualized the full potential of using ideas beyond this discipline to inform the field’s ways of thinking. What this means is that to move beyond current conceptualizations of queer and trans* studies requires individuals in the field to interact with epistemologies, methodologies, and theories outside of higher education that can function as a major influence for our work. It is when we can move beyond our narrow understandings of queerness and trans*ness as solely representing identities a person holds that we can comprehend how queer and trans* studies can guide how we think about practices, environments, and policies in higher education. In particular, we believe that embracing queerness and trans*ness as forms of thinking and knowing can reshape the field’s prioritization on topics such as scientism, neoliberalism, and modernist conceptions of the self-contentions that we explore further below.

In this chapter, we investigate the ways that higher education scholarship has discussed queerness and trans*ness within collegiate contexts, in addition to considering how interdisciplinary approaches can further the discipline of higher education moving forward. The following questions guided our exploration: (1) What are the themes that emerge in research in higher education about queerness and trans*ness? (2) What are central concepts from outside the field of higher education that can inform queer and trans* studies? (3) How can interdisciplinary perspectives on queerness and trans*ness help us envision different approaches to research and practice within higher education? With these inquiries at the helm, we then structure the manuscript by posing sub-questions throughout in the spirit of queer and trans* theorizing’s challenge to normative ways of knowing and doing.

We first set the stage for our chapter by provide an introduction to key terms and explain four questions that shaped how we orchestrated the literature review. Notably, we introduce the metaphor of a trap door (see Gossett et al. 2017) to illustrate how we analyzed the scholarly landscape of queer and trans* studies in higher education. Next, we offer reflexivity statements as a way to signal that our identities, backgrounds, and points of views inevitably informed how we understood the scholarship included in this review. We also outline how engaging in this project together impacted us and our thinking, moving beyond positionalities to the act of reflexivity.

The following section then synthesizes the existing research in higher education, identifying the themes that have emerged about queer and trans* experiences.

Specifically, our review of the literature revolved around five questions that scholars are answering in their studies: who is being centered; what is being centered; how are scholars framing their studies; how are scholars engaging power in their scholarship; and who is doing the work? Following this, we searched for interdisciplinary texts that provide a different and much-needed perspective about queerness and trans*ness, filling in the gaps noticeable in higher education scholarship. In this interdisciplinary section, we take up the same five questions listed above and showcase how other disciplines can expand upon the literature on queer and trans* studies in higher education.

Professionals in higher education will benefit from this exploration as the field continues to consider how we construct educational environments that are equitable and socially just, especially for individuals who reside on the margins. Of note, we as scholars challenge faculty and staff to imagine what queerness and trans*ness means for the academy beyond providing insight into queer and trans* lives. Should the field of higher education return to interdisciplinary perspectives about queerness and trans*ness that extends beyond simply learning about queer and trans* people, then the possibility to reshape educational structures with marginalized populations at the center increases.

A Note on Language

Throughout this manuscript, we employ terms and concepts that speak to queer and trans* experiences. In developing our arguments, we encountered a difficult paradox as it relates to our use of certain language, an issue that other queer and trans* scholars frequently face. First, we recognize that providing absolute definitions about these complex concepts reduces their meaning in anti-queer ways. Furthermore, we would be remiss to not acknowledge that it is frequently queer and trans* people who are asked to write glossaries to describe their experiences, positioning them as populations that always need defining. Yet, to help scholars think about queerness and trans*ness as politics that should permeate higher education broadly, we see the value of introducing certain concepts to guide readers while encouraging them to do their own work in learning more about these ideas. Table 1 serves as an entryway to our arguments, offering the ways we employ terms. When appropriate, we also discuss other terminology throughout the manuscript and offer citations for readers to learn more about these concepts.

Situating Our Investigation of Queer and Trans* Studies in Higher Education

As we strove to identify the central concepts that have emerged within and outside of this discipline, we made numerous decisions that dictated how we would frame this investigation. Specifically, we introduce the metaphor of a trap door (see Gossett et al. 2017) that we utilize throughout the manuscript to make sense of the current

Table 1 Key terms and concepts

Term/concept	Meaning and uses
Queer/queerness/ queer politic	The term “queer” shows up in various contexts throughout this chapter. Queer works as an identity marker to destabilize normative conceptions of gender and sexuality. Deployed as a politic, queer moves beyond the boundaries of an identity marker, making the term useful in examining one’s cultural, social, and performative agendas and interest (Somerville 2014). As an analytic, queer centers non-normative sexual and gendered behaviors, expressions, and discourses from the margins, giving the term potential to deconstruct heteronormativity. Conversely, queer works to destabilize homonormativity by disrupting fixed ideologies of both sexual and gender subjectivities
Trans*/trans*ness	As Nicolazzo (2017b) explained, “this term refers to those who transgress the socially constructed discourse of how we identify, express, and embody our genders” (p. 169). The asterisk, while not used widely, does speak to various representations of trans* identities (e.g., transgender, transsexual, transitioning). Because trans* identities exist on a spectrum, trans*ness refers to the level of adaptation or disidentification with a trans* identities
Out/outness	Can be thought of as the ability to authentically represent one’s gender or sexual performances in a way that aligns with their romantic and/or erotic desires. Coming or being “out” is not an indicator of moral superiority, nor a goal of all queer and trans people. Indeed, the concept has been critically contested by gender and sexuality studies who seek to dismantle the coming out imperative inscribed by traditional psychology theories (Klein et al. 2015)
Body/embodyment	Beyond the terms reference to the physical/material make up of human beings and other living objects, the term body has various political and representative meanings outside of its normal use. Cherniavsky (2014) explained that “there are no bodies <i>without</i> culture, since the body as a kind of material composition requires a cultural <i>grammar</i> of embodyment” (para 6). Cultural grammaring of bodies inscribes particular performances of gender, sexuality, and raciality onto persons and their politics, by way of the norms of commercial and political culture in the United States and abroad (Butler 1990; Muñoz 1999)
World-making	Refers to the epistemological, discursive, and performative politics that queer and trans* folk employ as they destabilize compulsory heterosexual and heterogender spaces and locations into anti-oppressive, heterogeneous counterpublics (Berlant and Warner 1998). Muñoz’ (1999) theory of disidentifications is central to understanding the labor that queers of color endure as they create new politics, possibilities, and futurities. This cultural phenomenon, which Muñoz refers to as queer world-making, represents “oppositional ideologies that function as critiques of oppressive regimes of ‘truth’ that subjugate minoritarian people” (p. 195)

landscape of queer and trans* studies in higher education. Moreover, in order to profess the applicability of interdisciplinary approaches in queer and trans* studies, we needed to deconstruct what queerness and trans*ness represents, as well as what interdisciplinarity means. Additionally, we created a plan to identify the literature that we would highlight in this manuscript and how we would analyze this

scholarship. The following section provides the answer to four important questions that led to the creation of this chapter: (1) How are we approaching this project? (2) What is queerness and trans*ness beyond bodies? (3) What does it mean to be interdisciplinary? (4) What literature are we drawing on?

How Are We Approaching This Project? The Metaphor of the Trap Door

Writing about trans* cultural production, Gossett et al. (2017) elucidated the paradox of the current politics of visibility for queer and trans* populations. That is, despite our being in a time of increased social visibility, we are concurrently experiencing a time of heightened vulnerability, threat, and death, especially for those who are most vulnerable among queer and trans* communities. Although Gossett et al. discussed cultural production vis-à-vis art and visual representations, there is significant overlap with educational contexts. In many ways, higher education researchers, scholars, and practitioners have fallen into the trap of representation. We have focused on naming, codifying, classifying, and (re)producing coherent populations, for whom we attempt to bend the arc of educational justice.

Though benefits to representation may exist, Renn (2010) articulated that our queer theorizing has yet to queer the institutions in which we research, teach, and in which queer students live and learn. In this sense, then, it seems we have taken the bait, but have not been rewarded for our investments in increasing the visibility of difference in higher education. In a cruel twist of fate, scholars have even surmised that our increased focus on proliferating difference via the project of visibility has allowed institutions to forward visions of their embracing difference without having to actually invest in transforming environments that always were – and continue to be – quite problematic for vulnerable populations (Ahmed 2012; Ferguson 2012; Patel 2015). As Spade (2015) wrote, those who are the most vulnerable are never well served by surveillance regimes that seek to categorize for two reasons: (1) many will inherently be categorized *out* of the populations with which they identify, and (2) such administrative categorization serves to regulate lives rather than proliferate life chances. Indeed, it may seem like there are various traps with the project of visibility, many of which we – including us as authors of this chapter – have been complicit in furthering.

And yet, Gossett et al. (2017) also observed trap doors as having the ability to bring us to *something new*. Put another way, Gossett et al. (2017) stated that “representations do not simply re-present an already existing reality but are also doors into *making new futures possible*” (p. xviii, emphasis added). As a theoretical, metaphorical, and ontological reality, trap doors have the ability to transport us, to bring us to new worlds, and to create novel possibilities for our collective futures. However, it is important to remain vigilant in our desiring possible futures, for “if we do not attend to representation and work collectively to bring new visual grammars into existence (while remembering and unearthing suppressed ones), then we will remain caught in the traps of the past” (Gossett et al. 2017, p. xviii). In other words, if

we do not think about how, when, why, and with whom we attend to questions of representation, we run the risk of falling into the aforementioned traps and, as a result, move further away from the liberation we seek as queer and trans* peoples.

Gossett et al. (2017) introduced an important metaphor through which we address our chapter: the trap door, which one can also understand in the plural, as there are various trap doors through which one may come to un/know queer and trans*ness in higher education. So, while there are traps into which we may fall when doing research with and for queer and trans* populations in higher education, there are also ways in which this research – and the practice and policies derived from this research – provides “doors into making new futures possible” (p. xvii). It is not merely as easy as making more populations visible, but it is also not so complex a project that we become so vexed by fear to the point where we do nothing. And, although some of the “solutions” one seeks to create in higher education may pose new traps/problems, the very attempt to moving through the various doors available to (re)think queer and transness in higher education allows researchers, scholars, practitioners, and policy makers to keep imagining new environments, striving for the liberatory futures we all need, especially for those who are the most vulnerable among us.

What Is Queerness and Trans*ness beyond Bodies?

As we discuss throughout our manuscript, there has been increased attention paid as of late to queer and trans* people (i.e., students, faculty, and staff) in higher education, albeit still small in comparison to other populations. Moreover, as one looks for research on queer and trans* people with multiple marginalized identities, the higher education literature thins considerably. For example, research on trans* women of color (TWOC) in higher education is far too marginal, and belies the significant role TWOC have continued to play in the ongoing legacy of queer activism in the USA. Thus, much of this text will – and rightly should – focus on elucidating the ways in which queer and trans* people experience, interact with/in, learn, teach, and develop in higher education contexts.

That said, we take seriously the paradox Renn (2010) raised:

Although colleges and universities are the source of much queer theory, they have remained substantially untouched by the queer agenda. Higher education is a strongly modernist system of organizations that contain LGBT/queer people but that have not been transformed by the postmodern project. (p. 132)

In essence, Renn articulated that while queer people have always been present and have demanded increased recognition in higher education, the “queer agenda” of queer and trans* theories, epistemologies, methodologies, and ways of being in the world have yet to create substantive changes to the organization of higher education. In the time since Renn’s piece was published, little has changed, in that higher education research and practice has remained rather impervious to the queer

(and trans*) agenda(s). Part of this ongoing trend, we surmise, may have to do with the overwhelming attention of *queerness and trans*ness as purely embodied identities*, or those identities that one comes to know as only about one's physical body morphology. In other words, higher education professionals may be coming around to knowing queerness and trans*ness as categories, but they are largely doing so as categories that explain queer and trans* people's lived experiences, or that "stick" to queer and trans* people's bodies.

What has been far too underdeveloped, then, is how higher education professionals come to know queerness and trans*ness as existing beyond bodies. Put another way, little attention has been paid in higher education to queerness and trans*ness in relation to theories of knowledge (i.e., epistemologies), research methodologies and methods for data analysis, pedagogical perspectives, theories of leadership, the organization, administration, and financing of education, environments, and other nodes through which higher education operates. Although Renn (2010) did not use this particular language, this is most likely what she was alluding to in referencing "the queer agenda" that has yet to shift the organization of higher education. Surely there is an ongoing awakening – whether wanted or not by all – of queer and trans* people in higher education, but knowledge of queerness and trans*ness as concepts that extend beyond queer and trans* people has remained largely unknown. As a result, this agenda has not had the influence it could – and we would argue that it should – on the practicing of higher education.

Far from being an either/or proposition (i.e., either one focuses on queer and trans* people or on queer and trans* formations beyond the body), we attempt to use a both/and paradigm throughout this manuscript. We address queer and trans* people in higher education, and queerness and trans*ness as concepts that move beyond embodiment. Additionally, because much of the scholarship conceptualizing queer- and trans*ness beyond the body has been published outside of the discipline of higher education, we will not limit ourselves to thinking about queerness and trans*ness as purely embodied cultural formations. We hope this approach can further amplify the "queer agenda" Renn (2010) described as a way to not-so-subtly call for shifts to how all constituencies connected to and concerned with higher education go about doing their work.

Though we do not suffer from visions of grandeur and think this manuscript will provide the ultimate intervention to stemming the paradox Renn (2010) posed, we know that not attempting is not a possibility. Indeed, the stakes are far too high to not attempt to create liberatory environments how and wherever one can in higher education (Blockett 2017; Nicolazzo 2017b; Vaccaro 2012). In a sociocultural moment when the increased visibility of queer and trans* people is uncomfortably situated alongside our increased vulnerability, threat, and death, *not* trying to forward critical interventions to increase life chances of our communities in all the ways we can is a dangerous non-strategy. This is especially true in higher education settings, which are often imagined as liberal, but have proven to be anything but for queer people, particularly queer people of color, across time (e.g., Ferguson 2012; Nicolazzo et al. 2015; Mobley and Johnson 2019; Wright 2005). While we understand this manuscript – or any scholarly contribution – will not correct how

heteronormativity and trans* oppression mediate queer and trans* people's lives in higher education, we feel hopeful it can create some spaces in which queer and trans* people can live more freely.

What Does It Mean to Be Interdisciplinary?

This literature review weaves together several bodies of knowledge both within and outside of educational research. Scholarship across several disciplines including trans* studies, queer studies, feminist studies, cultural studies, and critical race studies are all utilized in service to the interdisciplinarity of this chapter. This research explores the cultural politics that queer and trans* individuals and communities produce as they survive and thrive in postsecondary settings. Literature from critical trans* politics exposes the labor, resilience, and political realities embedded in the performance and embodiment of gender. By centering gender as a category of analysis, this chapter has potential to explore masculinities, femininities, and other gender embodiments from the perspective of other disciplines. These disciplines critically interrogate heterosexism, heterogenderism, and heterocisnormativity that is bounded to straight, cis, male dominance, among other forms of power. Similarly, scholarship within the fields of queer and sexuality studies challenge status quo ideologies around sexuality, sexual orientation, and sexual subjectivities that maintain compulsory heterosexuality. Sexuality scholars call into question the constructions of heteronormativity, homonormativity, and heteropatriarchy, mapping these social ills to lineages of imperialism, colonialism, and globalization. Lastly, critical race studies literature centers its investigations on the historical, legal, cultural, and political experiences and impacts of racialization. Scholars engaging critical race theory illuminate white supremacy and the production of racism within and outside of the USA. By incorporating cultural studies literature from disciplines within the humanities, this chapter situates queer and trans* communities in a larger societal context and specifically considers dominant discourses and material conditions can circumscribe their life trajectories.

Lattuca (2002) urged higher education scholars to engage sociocultural theory in studies that explore college student learning and campus climates. She stated:

Today, theorists from various fields have begun to think about how to repair the mind-body duality, to argue that learning cannot be separated from the contexts in which it occurs, and to reconceptualize cognition and learning as activities that occur through social interaction. (p. 712)

According to Lattuca, researchers must consider social, political, and historical context to fully capture the phenomena under investigation. This notion of repairing the "mind-body duality" becomes central to this chapter when considering the impact of sociocultural influences on queer and trans* subject formations (Bailey 2013; Ferguson 2004). As a field of study, education is generally considered to be interdisciplinary in nature; however, research examining doctoral dissertations

suggests that the field is actually intradisciplinary, building upon studies within education research as a broader field (Haycock 2007). In Haycock's (2007) study of curriculum and instruction dissertations, she found multiple examples of literature reviews, research methodologies, and theoretical frameworks using knowledge solely from education subdisciplines (e.g., science education and instructional systems technologies). This sort of intradisciplinary research that relies primarily on various education disciplines and subdisciplines has the potential to ignore bodies of work outside of the field, heightening the potential to perpetuate mind-body duality that Lattuca (2002) posited.

The sole usage of educational research and theories could limit the possibilities of inquiry that this study intends to unearth. Although the academy can be resistant and at times hostile toward interdisciplinary projects (Friedman 1998; Holley 2009a; Lattuca 2001), the insights from theoretical frameworks, methodologies, and interventions emphasized in our review of the literature call for a layered analysis of queer and trans* studies. This chapter highlights literary works within, across, and outside of educational scholarship, advancing the goodness of the research and dismantling stagnant approaches to the study of intersectional subjects. In the following section, we highlight the criteria we have employed to select literature to conduct this review.

What Literature Are We Drawing On?

After framing the ideas such as interdisciplinary, queerness, and trans*ness, we decided on an approach to select the pieces of literature that we would review and analyze. Importantly, this project required us to further familiarize ourselves with the scholarship in and outside of higher education discussing queerness and trans*ness. To compile literature focused specifically on higher education, we searched for scholarship using academic databases like Academic OneFile, Education Research Complete, Educational Resources Information Center, PubMed, PsycINFO, and WorldCat. We used the following terms to locate articles, chapters, and dissertations: *LGBTQ college*, *queer college*, *trans* college*, *LGBTQ higher education*, *queer higher education*, *trans* higher education*, *gay college student*, *lesbian college student*, *bisexual college student*, *pansexual college student*, *asexual college student*, *transgender college student*, and *queer college student*. In these searches, we also made sure to review the reference lists found in these pieces to obtain an expansive view of the research. Existing meta-analyses of queer and trans* scholarship in higher education (see Duran 2018; Mitchell Jr. and Means 2014; Renn 2010) also assisted us with this process. Because of the vast strides made in scholarship on queer and trans* topics over the past decade, we compiled literature that was primarily published after 2009. This decision to focus in on the last 10 years intentionally picked up where formative texts on queer and trans* studies in higher education left off (e.g., Marine 2011; Renn 2010). As we conducted this review of this literature, we simultaneously sought out scholarly works that existed outside of higher education.

The task of identifying the texts that would assist us in envisioning interdisciplinary futures in queer and trans* studies in higher education was admittedly more difficult. We knew it was not enough to rely upon texts that have been deemed canonical or classics in the academy. Ahmed (2017a) underscored this point in her call to bring feminist theory home stating, “But the texts that reach us, that make a connection, are not necessarily the ones that are taught in the academy, or that make it to the official classics edition” (p. 17). Acknowledging the limitations of classics (though not ruling them out altogether), we decided to search for pieces of literature that have substantially advanced queer and trans* studies. We identified scholarship in disciplines outside of higher education such as the following: trans* studies, queer studies, feminist studies, cultural studies, and critical race studies. Though each of us had readings that we regularly engage with and that we consider an integral part of our development of scholars, we wanted to expand our scope and learn about how other academics in higher education were incorporating these perspectives into their own thinking. As a result, we reached out to scholars that we admire and asked them to share literature outside of higher education that they use in their study of queerness and trans*ness in college. Doing so allowed us to further imagine the potentials of interdisciplinary perspectives in queer and trans* research. When we analyzed the existing body of scholarship in higher education, we then intentionally selected interdisciplinary scholarship that filled in some of the gaps that we discovered. In the process of identifying and analyzing the literature, we reflected on our subjectivities that influenced how we engaged with this project and how the project affected us.

Reflexivity

Extending the metaphor of the trap door further, it behooves us to mention how reflexivity statements are themselves vexing. On one front, these statements often lead scholars to create “a list of attributes separated by those proverbial commas (gender, sexuality, race, class), that usually mean that we have not yet figured out how to think [about] the relations we seek to mark” (Butler 2011, p. 123). Said otherwise, while scholars delineate the identities they hold, we wonder how this delineation may in and of itself be a way of occluding how our identities influence the way we come to the projects in which we are involved. In relation to queer and trans* communities – about whom this particular project is focused – the notions of passing, realness, normativity, and intragroup diversity suggest that perhaps what – or who – one “sees” cannot be taken at face value. Picking up on Ahmed’s (2012) notion of how identities do (not) “stick” to certain bodies, we find it important to acknowledge how simply listing our identities as scholars does not explain how others make sense of us, or how we come to our work with various sedimented histories that are themselves extremely meaningful to determining how we are framing this text. For example, a discussion of what pronouns we use may not be wholly indicative of how we as authors are gendered socially, and thus, may not articulate our dis/connections to gendering as a relational process (Meadow 2018).

Recalling the earlier Butler (2011) quote, the mere naming of identities (e.g., via indicators such as pronouns) may be a trap in that it does not describe how “to think [about] the relations we seek to mark” (p. 123).

And yet, we also recognize that discussing our reflexivity, and doing so thoughtfully, has the ability to lead us – as well as readers – to new understandings about the queer and trans* populations who are central to this text. For example, if we as authors are able to articulate not only our own individual positionalities, but also discuss our positionality as a group, then we may be able to find a trap door leading to deeper understandings of queer and trans* community building, kinship, and world-making practices. Also, if we are able to articulate our various commitments to queer and trans* racialization, then we may be able to find a trap door that leads us *back* to our historical roots as a way of *moving forward* in desiring queer and trans* liberation. And, if we are able to negotiate these trap doors, if we are able to move back and forth between the ways the trap of reflexivity both proliferates and constrains our collective work, then we hold hope for the possibilities of movements toward queer and trans* liberation.

In negotiating the trap door of reflexivity, we offer multiple ways of making meaning about who we are and how we come to our work. First, we discuss our own ways of coming to this work. In doing this, we move beyond a mere naming of identities to a positioning of ourselves in queer and trans* genealogies. Next, we discuss our reflexivity as a group, which serves as a recognition of how queer and trans* movements have always been *leaderfull* (see Carruthers 2018). That is, similar to the Movement for Black Lives (e.g., Ransby 2018), queer and trans* people, as well as our movements and communal liberation, have always been community oriented. As such, we root our coming together as scholars as a practice in community-oriented queer and trans* world-making.

Antonio

In thinking about my relationship with this project, I am reminded about the identities and experiences that influence the ways that I engage in queer and trans* scholarship. Of note, in surveying the extant literature on queer and trans* identities, I simultaneously see myself represented and erased in how the field of higher education frames concepts of queerness. As a queer person of color, I always see my queerness in conversation with my racial identity. My Latinidad is core to who I am, which means that it has substantially shaped how I have come to explore my identity as a queer individual. I have found solace in the writings of people who share the experience of navigating these borderlands (Anzaldúa 1987), existing in multiple cultures but never feeling as though I belong fully in them. Yet, too often, I have read texts that fail to illuminate the ways that queerness operates for those within communities of color. For this reason, I engage in critical reflexivity in order to comprehend how I myself contribute to the erasure of other identities. I have considered how my privileged identities have benefited me in a patriarchal, trans* oppressive, and ableist society. In turn, I use these reflections to guide me as I seek to

produce research and scholarship that betters the lives of queer and trans* communities. These identities and the ways that I am situated in society consequently informed my approach to this manuscript. However, I find that is just as important to describe how this project also affected me.

To write this piece alongside two people who have consistently pushed my own thinking proved to be an inspiring and humbling experience. Notably, having the opportunity to explore the scholarly landscape of queer and trans* literature with Reggie and Z once again reminded me of the role that kinship networks play in my life. This project then pushed me to think about how we, as queer and trans* scholars, create scholarship that can have this effect on readers. I wondered how I could extend the feelings of validation that I felt with Reggie and Z to those who read our writing. The process to produce this manuscript also allowed me to imagine societies and educational systems that center the knowledge of queer and trans* with other marginalized identities. In reflecting upon the queer and trans* people of color who have constantly been on the forefront of our communities, I think about how queer and trans* scholars in higher education can honor these histories through our work. This project showed me how far the field has come as it relates to perspectives on queer and trans* selves, while at the same time highlighting the potential futures that lay ahead of us.

Reggie

I come to this work with baggage. Over the last several years, I have witnessed, experienced, and studied the paradox of identity formations for queer and trans* people, specifically queer and trans* collegians of color. I am acutely aware of the freedoms and liberties that LGBTQ people have accessed during this time, specifically in terms of marriage equality and expansive gender identity, and expression laws that have surely impacted the lives of people across the US. Queer and trans* representations within popular culture and in media have also enhanced. Shows like *Pose* (Canals and Howard 2018) and *My House* (Gordon and Bailey 2018) have made their way to network television to make public the labor and cultural work queer and trans* people take on, particularly in urban communities. While these projects have highlighted the political agendas and community cultural wealth (Yosso 2005) possessed and enacted by queer and trans* people, I am reminded that these liberties are bounded to violence that our community has simultaneously experienced. According to the Human Rights Campaign (2018), 2017 marked a year of the highest recorded murders of trans* people with 29 reports of slain individuals, most of which were Black and Latinx trans* women. One year prior in 2016 marked the deadliest terrorist murders on US soil since the 9/11 attacks, when a gunman opened fire at a popular night club in Orlando wounding 53 and killing 49 LGBTQ people, most of whom were Latinx. These irrational incidents and others are central to my thoughts as I write this chapter and attempt to synthesize the vast scholarship addressing the experiences and conditions of LGBTQ collegians.

As a co-author with Z and Antonio, I am also aware of our professional and personal relationships that compound how we collectively approach this work. As gender, sexual, and racial minorities, we are interested in improving the educational and lived conditions of LGBTQ and other minoritized collegians. I am compelled to explore how structures and systems impede on the developmental trajectories of marginalized students. I am especially interested in grappling with the paradoxical identity politics that are cultivated by and through dominant power structures, which is how I primarily interact with the literature I have reviewed. My lens as a critical scholar allows me to interrogate the insidious forms of oppression that LGBTQ collegians experience as they thrive and survive within postsecondary contexts. This chapter allows us to construct new narratives that theoretically and discursively demarcate queer and trans* subjectivities as pathologic.

Z

I understand my arrival to this project most notably through my racial, gender, and dis/ability identities, as well as my complicity in the ongoing project of settler colonialism and its implications in furthering cultural discourses of the gender binary. I am also keenly aware of how my multiple identities converge to mediate the livability of my life. For example, while I identify as trans* feminine, my whiteness makes my life far less precarious. That is, while trans* women, girls, and feminine people are deemed less-than-human as a result of cultural manifestations of transmisogyny (Serano 2007), my whiteness means I am always already less likely to be the target of violence. Similarly, I have recently come to understand myself as having several invisible disabilities, resulting in an exploration of how notions of in/visibility serve to connect and enrich trans* and dis/ability theorizing and world-making. The merging of my trans*ness with my disabilities has also afforded me new insights into notions of ab/normality, cure, and desired futures (e.g., Clare 2017; Kafer 2013). In line with Tourmaline's suggestion, then, the intertwined nature of my trans* and disability identities has allowed me to

...not just to think about what we want to dismantle and organize against, but also what we want to defend: the ways we laugh, and love, and study together. The ways we come together to make meaning. Our radical, irrespectable, undesirable, irresistible sociability. (Grace 2015, para. 16)

Moreover, as I learn more about the ongoing processes of violence and extraction that mark settler colonialism, the more I realize how the vice grip of the gender binary is, in and of itself, a byproduct of colonization. That is, the gender diversity within various Indigenous communities has been erased through the process of settler colonialism, which both continues to benefit me as a white settler, and harm me and my communities as a trans* person.

As a result of these intertwined realities of my converging identities on an individual, micro-level, as well as how broader, macro-level systems of inequity press/proliferate my life chances, this project is both one of reclamation and

community for me. First, I desire to reclaim previous histories that are being stubbornly held onto, largely by queer and trans* people of color (Rawson and Devor 2015). Secondly, I also hold resolute to the reality that, as a result of this project of reclamation, we can envision new futures for ourselves as queer and trans* people that are in line with how we have always found our strength as a matriarchal and femme-centered community (Nicolazzo 2017a). Thus, I argue who we are as queer and trans* people has always been community based. As such, my coming together with other queer and trans* scholars – for this project as well as others (e.g., Jourian and Nicolazzo 2017) – is an essential component to our world-making practices alongside those whom we research, teach, write, live, and love.

Our Scholarly Group

We come to this work together with more than a little trepidation. What may we have to offer that is unique? Who are we to write this manuscript? In what ways may our own perspectives, grounded in our own positionalities, overlook the various people, organizations, and community-based projects doing life-affirming queer and trans* work in and beyond the academy? While no set of authors would be beyond these questions, we find it important to not distance ourselves from these fragile – and potentially fractious – beginnings.

As we traced our shared concerns, we found ourselves coalescing around the values we hold dear throughout our life and work, most notably an ethic of queer justice with and alongside our communities. We are under no illusion that we will always “get it right”; we will inevitably leave histories untold, and there will be absences in our work, thinking, and stretching, all of which are hard realities for us to accept. However, we also recognize that “getting it right” may not be the main point of our writing this manuscript. If our desire is to do justice to our communities, then perhaps the striving and the cultivating of more capacious ways of thinking and being is itself enough. Perhaps we need not “get it right,” but instead work to crack it open, where the *it* is the (re)telling of queerness and trans*ness beyond boundaries, borders, and disciplines. In this sense, then, we can find a different method of doing justice centered on opening up rather than capturing totality (as if that were ever truly possible).

Of further importance for us as a group in relation to this project is our desire for *more*. We have a collective yearning to stretch for the tantalizing queer futures that have yet to be understood, in much the same vein as Muñoz (1999) forwarded the idea of *cruising utopia* as a way to escape the violent anti-queer here and now. Especially in a world in which – as Reggie denoted above – some queer and trans* people have become subsumed under the nation-state in various ways, we find our shared desire for more to be particularly significant. That is, we are unsettled by the ways some have settled for visibility, coherence, and respectability. In this sense, our desiring more is a desiring of those very ways of being, thinking, and researching in the world that are uncontained and uncontainable. In line with Cohen’s (1997) theorizing, we desire educational worlds in which those deemed most unwelcome

– as she wrote, *the punks, bulldaggers, and welfare queens* – are at the very center of how we move forward. And, as we have discussed above, our desiring more is deeply connected to notions of who is (in)visible, as well as what ways of thinking, organizing, researching, and expanding knowledges (does not) exist in institutionally recognized forms. As a result, we hope our manuscript will provide one potential approach to guide scholarship that advances the perspectives of queer and trans* people, rather than projecting any false sense of definitive conclusions or pronouncements. Having elucidated our individual and collective arrivals to this project, we now move to taking stock of what queer and trans* research looks like presently in the field of higher education.

Central Themes in Queer and Trans* Research in Higher Education

Over the past 10 years, queer and trans* research in higher education has developed in several ways. New populations of queer and trans* students have gained the attention of higher education professionals. Moreover, scholars have begun moving beyond deficit ways of understanding these communities, investigating notions of belonging, resilience, and kinship-building (e.g., Blockett 2017; Duran 2019; Nicolazzo 2016b, 2017b) – concepts that will further be discussed below. Yet, while the quantity of research continues to grow, the content of these studies has not largely pushed ideas of queerness and trans*ness in higher education, while scholars have continued to prioritize matters of visibility of queer and trans* populations. Researchers have made people and experiences more recognizable without interrogating queerness and trans*ness beyond bodies. This is a central tension that currently exists in the literature, one that interdisciplinary ways of thinking can challenge and address. To illustrate what trap doors are present in queer and trans* studies, we organize this section around five questions: Who is being centered? What is being centered? How are scholars framing their studies? How are scholars engaging power in their scholarship? Who is doing the work? We as authors believe it is important to understand central themes in queer and trans* research in higher education in order to then outline what possibilities interdisciplinary perspectives offer for scholarship.

Who Is Being Represented?

Reviewing the queer and trans* scholarship in higher education sensitized us as authors to take up the question of who is being represented in this body of literature. In analyzing the available body of scholarship, we noted which identities within queer and trans* communities – both social (e.g., race, ability status, and spirituality) and personal (e.g., faculty/staff vs. students) – are being centered in higher education. This exploration revealed the identities that have consistently been highlighted in queer and trans* research in addition to those populations that have gained the

attention of individuals in recent years. Lastly, we also observed who is *not* being represented yet in the literature. Though the research on queer and trans* individuals has continued to grow, certain demographics of people who identify as part of queer and trans* communities have yet to be thoroughly seen in the scholarship. For example, in many ways, the scholarship on queer and trans* people continues to oppress those most marginalized in these communities (e.g., trans* women of color) in favor of centering those with privileged identities (e.g., white individuals and cisgender men). As we will argue, this privileging of certain populations over others can limit the full range of ways that queerness and trans*ness manifest in higher education.

A brief introduction to scholarship on queer and trans students.* This section provides a brief overview on different subgroups within the queer and trans* community that scholars have examined through their studies. To begin, researchers have been exploring specific institutional, intellectual, and extracurricular contexts that queer students navigate, describing how environments inform the ways that individuals make sense of their sexuality. For example, scholars have examined how students navigate sexuality in community colleges (e.g., Garvey et al. 2015; Leider 2012; Nguyen et al. 2018), religiously-affiliated institutions (Wolff et al. 2016), Historically Black Colleges and Universities (HBCUs; e.g., Carter 2013; Harris 2014; Means and Jaeger 2013; Patton 2011; Strayhorn et al. 2013), or Hispanic-Serving Institutions (HSIs; e.g., Vega 2016). Researchers have also shown how students' experiences of their queer identities differ based on their academic majors (Linley et al. 2018), role as a student leader/activist (Abustan 2017; Miller and Vaccaro 2016; Vaccaro and Mena 2011), or their 1-year status (Vaccaro and Newman 2017).

In addition to the research on those who identify as sexual minorities, scholarship has also largely started to investigate the experiences of trans* students on college campuses (e.g., Beemyn 2012; Catalano 2015, 2017; Dugan et al. 2012; Duran and Nicolazzo 2017; Goldberg et al. 2019a, b; Johnson 2017; Jourian 2017a, b, 2018; Nicolazzo 2016a, b; Nicolazzo et al. 2017; Pryor 2015). As Nicolazzo (2017b) noted in her text, *Trans* in College: Transgender Students' Strategies for Navigating Campus Life and the Institutional Politics of Inclusion*, trans* identities have progressively entered into mainstream society; literature in higher education echoes this reality with scholarship on transgender students continuing to grow. While some research centers trans* students broadly, subsets of the literature specifically explore the experiences of trans* men (Catalano 2015, 2017), trans*masculine (Jourian 2017a, b), or those who identify as non-binary (Johnson 2017; Nicolazzo 2016a). These perspectives on trans* collegians are necessary to interrogate the ways that college campuses perpetuate environments steeped in trans* oppression. Furthermore, researchers have also shown how those who identify as trans* are resilient and form kinship networks in order to succeed, a point examined in a subsequent section.

The intersecting identities of queer and trans students.* Importantly, recent years have seen a rise in scholarship that seeks to understand how individual's queer and trans* identities intersect with other social identities. Namely, researchers have investigated how race, spirituality, and ability play a role in the ways that people

experience their queer and trans* identity. In his systematic literature review on queer collegians of color, Duran (2018) described that scholars have progressively highlighted the experiences of students who identify as queer people of color in higher education. This is a significant shift from past research that fell short of the “complexity that exists in residing at the intersection of two marginalized identities” (Duran 2018, p. 1). Scholarship has underscored how queer students of color encounter manifestations of racism and heterosexism on college campuses, necessitating an attention on this population from both practitioners and scholars alike (Johnson and Javier 2017). While some researchers have looked at the experiences of queer students of color broadly, other studies have focused on queer individuals from specific racial backgrounds (see Table 2 for examples of studies).

Both of these lines of scholarship – those that focus on queer collegians of color and those that center specific communities within this umbrella – offer different perspectives on what it means to be an individual who holds a minoritized racial and sexual identity.

In addition to the intersections with racial identity, an emerging area of research has examined how queerness interacts with matters of spirituality (Gold and Stewart 2011; Means 2017; Means and Jaeger 2013, 2015, 2016; Woods 2017). What these studies revealed is that though students may receive negative messages about sexuality from organized religions, queer and trans* collegians can still see spirituality as an integral part of their identity. As Means et al. (2017) revealed in his research on Black gay and bisexual male college students, participants engaged in a process of reclaiming their spiritual selves by reconciling spirituality and sexuality; this also included developing counterspaces, “positive, self-enhancing, and affirming spiritual spaces for one’s identities” (Means 2017, p. 237).

Lastly, another significant thread in the literature interrogates the interactions between queerness and disability (Henry et al. 2010; Miller 2015, 2017, 2018). These studies have shown how disability can be more salient than sexuality for students (Henry et al. 2010) and the importance of digital communities for individuals who hold both of these identities (Miller 2015). Of note, this research stresses the agency of queer students with disabilities, communicating how these collegians

Table 2 Studies on queer students of color by racial background

Racial backgrounds	Example studies
Queer students of color broadly	Duran (2019), Garvey et al. (2018c), Miller and Vaccaro (2016), Vaccaro and Mena (2011)
Black	Blockett (2017), Carter (2013), Goode-Cross and Tager (2011), Holloman and Strayhorn (2010), Means (2017), Means and Jaeger (2013, 2015, 2016), Patton (2011), Strayhorn (2013), Strayhorn and Tillman-Kelly (2013a, b)
Latinx/a/o	Duran and Pérez (2017, 2019), Eaton and Rios (2017), Peña-Talamantes (2013), Rios and Eaton (2016), Rosado (2011), Rosado and Toya (2016), Vega (2016)
Asian/Asian American	Chan (2017), Narui (2011, 2014), Strayhorn (2014)
Multiracial	King (2011, 2013)

learn how to strategically disclose their identities based on different contexts (Miller 2015, 2017). Consequently, this scholarship highlights the necessity to examine the intersecting identities of queer students and how other identities shape how individuals engage with their queerness.

Queer and trans faculty and staff.* Beyond the attention to students, scholars in higher education has also begun highlighting the experiences of faculty and staff who identify as part of the queer and trans* community (Aguilar and Johnson 2017; Bilimoria and Stewart 2009; Garvey and Rankin 2018; Jourian et al. 2015; Pitcher 2017, 2018; Simmons 2016; Vaccaro 2012; Weiser et al. 2019). This emerging body of scholarship is significant because it illuminates that institutional environments not only have an effect on students, but also, these contexts shape the realities of people working at colleges and universities. For example, those examining queer and trans* faculty have illustrated how campus climates (Garvey and Rankin 2018), institutional logics and structures (Pitcher 2018), as well as interpersonal dynamics (Bilimoria and Stewart 2009; Pitcher 2017; Vaccaro 2012) negatively impact the experiences of these individuals. Similarly, the available literature on staff who identify as part of the queer and trans* community underscore how marginalization exists on college campuses on the student *and* the staff level (see Aguilar and Johnson 2017; Vaccaro 2012). However, the study of queer and trans* faculty and staff is still limited compared to the work available on college students. This is an important gap to better understand because as Pitcher (2018) argued, trans* faculty face institutional logics steeped in genderism and other forms of oppression; by understanding the ways that systems of power manifest in the lives of queer and trans* faculty, professionals and scholars may be better equipped to combat marginalization that occurs interpersonally and institutionally in higher education.

Lack of representation of certain queer and trans identities.* Observing the shortage of research on queer and trans* faculty and staff leads us to provide perspective on other identities that are not being represented in higher education literature. These gaps are significant because they signal incomplete understandings of what queerness and trans*ness can look like. Few studies exist that examine what it means to be bisexual and pansexual (Garvey et al. 2018b; King 2011), as well as asexual (Mollet 2018; Mollet and Lackman 2018), in higher education. Yet, as Mollet and Lackman (2018) argued, this invisibility in research about asexual students mirrors the invisibility that these individuals frequently encounter within queer communities. This reality also exists for people who are attracted to multiple genders (e.g., bisexual, pansexual, and demisexual). By lacking research on pansexual students, for example, practitioners may be less likely to comprehend the lives of individuals who do not fit within a dominant narrative on what it means to be a part of the queer community. Thus, scholarship in higher education would benefit from additional examination of these identities in order to comprehend how these colleagues may face marginalization in society, but also within queer and trans* communities.

Furthermore, the manner in which the trans* community is being represented continues to develop in higher education. Nevertheless, a shortage of research on those who identify as non-binary still persists, though some exceptions have

emerged (see Beemyn 2019; Johnson 2017; Nicolazzo 2016a). The perspectives of these individuals is necessary to expand understandings of trans*ness within the field and to challenge trans*normativity, a form of policing that regulates who is recognized as trans* based on how well they fit with the gender binary. Moreover, researchers in higher education have yet to substantially center those who identify as trans* people of color. Scholars such as Nicolazzo (2016a) and Jourian (2017a) have commenced this work by shedding light on the experiences of Black non-binary trans* collegians and trans* masculine students of color. Yet, additional research is still essential. As Nicolazzo (2016a) argued, it is “imperative to resist flattening trans* students’ experiences to understanding them solely through a lens of gender” (p. 1184). Trans* people of color navigate interlocking systems of genderism and racism on campus that manifest interpersonally and institutionally, knowledge that is critical to reimagine how educational structures work. As we, the authors, refer back to who we wish to center in our scholarship, this lack of research on trans* people of color serves a dire call to scholars to examine the experiences of trans* students of color and especially trans* women of color. Understanding who is not being discussed in queer and trans* scholarship in higher education results in the question of how this gap then affects what we know about queer and trans* experiences on college campuses. To better draw these connections between who and what is being represented, the following section takes up the question of the subject matters that scholars are highlighting in the literature.

What Is Being Represented?

Beyond this question of *who* people are writing about in the scholarly landscape, our analysis examined *what* scholars are discussing as it relates to queer and trans* individuals at colleges and universities. Of note, research has indicated the ways in which queer and trans* students, staff, and faculty encounter oppressive environments within the academy, oftentimes shown through campus climate studies or those focused on specific contexts (e.g., classrooms). Serving as a contrast to this body of literature, scholars have also shown how queer and trans* students experience belonging, resilience, and support networks. Lastly, a small area of research has explored how queer and trans* students make meaning of their identities and negotiate the management of their identities. These topics and the studies that touch upon them are further surveyed in the sections below.

Campus climate and harassment. Queer and trans* research in higher education has long examined how students who identify as part of these communities face hostile environments on college campuses (Rankin et al. 2010). The attention to the ways that queer and trans* individuals perceive their college campuses based on the “attitudes, behaviors, standards, and practices” they notice are typically studied as matters of campus climate (Garvey et al. 2017a). Because of its connection to student outcomes, campus climate for LGBTQ students has been a heavily researched area within higher education scholarship and has spanned multiple decades (Garvey et al. 2017a, b). This focus on campus climate in the literature is also mirrored in

conference presentations, a finding from Pryor et al.'s (2016) study of ACPA (College Student Educators International) and NASPA (Student Affairs Administrators in Higher Education) presentations from the past 30 years. Since campus climates can change over time, it is no surprise that researchers have continued to examine these environments in the past decade (e.g., Evans et al. 2017; Garvey et al. 2015, 2017b; Garvey and Rankin 2015a, b; Katz et al. 2016; Squire and Mobley Jr. 2015; Taylor et al. 2018; Woodford and Kulick 2015).

Campus climate research about queer and trans* communities in higher education vary in their topics of interest with scholarship looking specifically at measures of climate and other studies looking at its effects on student outcomes. For example, Evans et al. (2017) represents a qualitative study that examined those who identified as part of the LGBTQ community and their perceptions of campus climate at a large public research institution. In a similar fashion, literature has explored campus climate at other institutional contexts such as community colleges (Garvey et al. 2015; Taylor et al. 2018). Another line of research has investigated the relationship between campus climates and other outcomes/experiences, including academic integration (Woodford and Kulick 2015), outness – or the level to which one is open about their sexuality and/or gender with others – (Garvey and Rankin 2015a), and even college choice (Squire and Mobley Jr. 2015). What these studies on campus climate also exemplify is a larger focus on the marginalization and harassment that queer and trans* individuals face in higher education.

An abundant body of research has been published that sheds light on the harassment and discrimination that affect queer and trans* collegians (Evans et al. 2017; Hong et al. 2016; Kulick et al. 2017; Schmidt et al. 2011; Schneider and Dimito 2010; Seelman et al. 2017; Woodford et al. 2015, 2018, 2017). One subsection of this literature explores the microaggressions directed at queer and trans* individuals and what effects that this has on matters of mental health (Kulick et al. 2017; Seelman et al. 2017; Woodford et al. 2010, 2015, 2017, 2018). What studies reveal are the significant impacts that harassment in the form of microaggressions (see Nadal et al. 2010 for examples of sexual orientation microaggressions) can have for these students. Studies have also shown the influence that forms of discrimination has on aspects such as career development (Schmidt et al. 2011), as well as career and academic choices broadly (Schneider and Dimito 2010). To better comprehend the academic lives of students and how marginalization may also be present in these spaces, the following section analyzes the research available about another topic of interest in queer and trans* higher education literature: that of academic and extracurricular experiences.

Academic and extracurricular experiences. Beyond broad notions of campus climate and instances of marginalization that queer and trans* students encounter, scholars have also chosen to highlight the specific experiences that these individuals have within academic and extracurricular spaces. First, the body of literature pertaining to queer and trans* collegians' academics has shown the nature of their relationship with faculty, with their fellow classmates, as well as with the curriculum (see Duran and Nicolazzo 2017; Garvey et al. 2015, 2018a; Garvey and Rankin 2015b; Goldberg et al. 2019b; Linley et al. 2016, 2018; Linley and Nguyen 2015;

Miller 2015; Pryor 2015). For trans* college students, for example, research such as that of Duran and Nicolazzo et al. (2017), Garvey and Rankin (2015b), Goldberg, Kunalanka, et al. (2019), and Pryor (2015) revealed how trans* individuals regularly face marginalization in the classroom from their peers and their faculty. Participants across these studies conveyed how they encountered misgendering (the act of referring to an individual using incorrect pronouns or types of address), micro-aggressions, and a need to educate others in the classroom about trans* identities. Of note, Goldberg, Kunalanka, et al.'s (2019) research filled a gap in the literature by uplifting the voices of trans* graduate students, an underrepresented population in the scholarship. In particular, Goldberg, Kunalanka, et al. (2019) employed a mixed-methods approach to investigate the lives of graduate students, finding that this demographic continues to face harassment from different groups (though the relationship with faculty advisors varied). Nevertheless, the experiences that they shared were largely similar to that of undergraduate collegians, a concerning reality.

Though the aforementioned studies specifically centered trans* students, other studies exist that look at the academic experiences of queer and trans* students broadly. This scholarship also echoes the marginalization that students face in academic spaces while at the same time, stressing the agency of collegians as they choose to strategically disclose identities (e.g., Miller 2015). Further, this research has shown the vital roles of support that faculty can play for queer and trans* students by actively showing support in the classroom or interrupting bias perpetuated by peers (see Linley et al. 2016). The presence of positive faculty interactions for queer and trans* students is significant considering the research showing the influence that these relationships can have on collegians' participation in other areas of the university (Garvey et al. 2018a). Connected to this finding, other researchers have looked at the manners in which queer and trans* students engage with extracurricular opportunities at their institutions.

Research in higher education about queer and trans* students emphasizes the impact that extracurricular activities can have in the lives of these individuals. Examples of this can be seen in studies that showed that participation in student organizations and clubs – those that are identity based (e.g., LGBTQ clubs) or non-identity based (e.g., activist organizations) – can lead to positive outcomes; these outcomes include increased meaning-making about identities (Blockett 2017; Carter 2013; Tillapaugh 2015), creation of kinship networks or chosen family (Duran and Pérez 2017, 2019; Nicolazzo et al. 2017), and contributing to matters of persistence (Goode-Cross and Tager 2011). Such participation can serve as queer and/or trans* counterspaces in contrast to oppressive campus environments (Blockett 2017; Miller and Vaccaro 2016; Revilla 2010).

Yet, it is imperative to consider the ways that student organizations themselves may marginalize certain populations of queer and trans* collegians. As Miller and Vaccaro (2016) communicated in their study on queer student leaders of color, these participants perceived white student organizations as marginalizing, leading them to create their own spaces. This reality is also echoed in activist communities according to Kulick et al. (2017) who found that LGBTQ students of color experienced increased harassment in LGBTQ activism; consequently, this may suggest that

queer and trans* students of color may feel hypervisible in these movements and are subject to oppressive behaviors by their white counterparts. Though a large body of research has focused on these matters of harassment and discrimination, a growing area of study has also sought to understand how queer and trans* people are resilient, as well as develop belongingness and support networks in higher education.

Queer and trans belonging, resilience, and support networks.* Building on the base of knowledge about how queer and trans* individuals are marginalized in higher education and in society, scholars have started to produce studies that approach this population from more asset-based perspectives. This has resulted in scholarship that looks at belongingness and resilience for queer and trans* communities (Duran 2019; King 2011; Nicolazzo 2016b; Nicolazzo et al. 2017; Peña-Talamantes 2013; Strayhorn 2012; Vaccaro and Newman 2017). To begin, studies have discussed what contributes to belongingness for queer students. For example, Vaccaro and Newman (2017) argued that belongingness (the feeling that one feels connected to a collective and the sentiment that one matters) manifested on three different levels for LGBPQ (lesbian, gay, bisexual, pansexual, queer) students: university, group, and friendship. However, as other research such as that of Duran (2019) has shown, it may be more difficult to experience belongingness on a university level for those who identify with multiple marginalized identities; this most likely stems from the reality that these collegians encounter numerous forms of oppression in different areas on campus. In addition to belongingness, Nicolazzo (2016b), Nicolazzo et al. (2017) has shed light on the ways that resilience is not only something that people have, but that trans* students practice resilience during their time in college. A significant intervention that Nicolazzo (2016b, 2017b) introduced into the research in higher education is that resilience does not operate as a noun, but rather as a verb. This acknowledged the ways that resilience is a practice that trans* collegians can be doing in the face of genderism even if they do not realize it. For example, Nicolazzo (2016b, 2017b) drew similarities between performativity and resilience. In her collaborative ethnographic study on nine transgender students at a larger research university, participants discussed ways that they *did resilience* in the same ways in a way that resembles the *doing of* gender. Importantly, resilience is a practice that can be done in community, establishing meaningful connections between peers in order to succeed.

Though numerous studies describe the different support networks that queer and trans* individuals develop in higher education, one area of study identifies the various ways that people create family and kinship networks (Blockett 2017; Nicolazzo 2016b Nicolazzo et al. 2017; Duran and Pérez 2017, 2019; Strayhorn 2012). This scholarship has integrated theories from other disciplines, such as anthropology, to understand these bonds. Duran and Pérez (2017) and Strayhorn (2012) both showed how in the potential absence of biological family members in their lives, queer students of color may develop family ties with people on and off campus, including faculty, staff, and students. These chosen family members provide integral bonds to have these collegians succeed. For example, Duran and Pérez (2019) commented on how chosen family bolstered the aspirational, navigational, and resistant capital of queer Latino men at selective institutions. In a similar

manner, scholars such as Blockett (2017), Nicolazzo (2016b) and Nicolazzo et al. (2017) addressed how queer and trans* collegians form kinship networks. Blockett's (2017) study showcased how Black queer men at a predominantly white institution produced kinship bonds through a peer-support group, which was crucial to contend with the oppression they faced as racial and sexual minorities on campus. Echoing this point, Nicolazzo et al.'s (2017) study used data from the National Study of LGBTQ Student Success contending that trans* individuals' kinship can be a strategy to facilitate trans* student success. Trans* kinship in Nicolazzo et al.'s (2017) research highlighted that trans* collegians can develop kinship through physical relationships but also those fostered through online spaces. Such networks of support, however, are typically initiated by students outside of formal university organizations and spaces (Blockett 2017). This lack of infrastructure in higher education organizations may have dire effects on how queer and trans* students explore their identities in collegiate environments.

Identity and identity management. As for students from other backgrounds, researchers have argued that college is a distinctive time for queer and trans* people to explore their identities (King 2011; Strayhorn 2014; Wilkerson et al. 2010). Given the fluidity of gender and sexual identities, research has explored how queer and trans* individuals come to know their gender and sexuality. Moreover, scholars have also shown how they queer and trans* people manage these identities in different contexts, making intentional decisions about disclosure and performance. These studies interrogate what university and societal structures help facilitate students exploring their identities and how they learn how to negotiate them (e.g., Chan 2017; Garvey et al. 2018c; Goode-Cross and Good 2009; Goode-Cross and Tager 2011; Hughes and Hurtado 2018; Jourian 2017b; King 2011; Miller 2018; Narui 2011, 2014; Patton 2011; Peña-Talamantes 2013; Strayhorn 2014; Strayhorn and Tillman-Kelly 2013a; Tillapaugh 2013, 2015). The collegiate environments that help influence individuals' understandings of their sexuality and gender is one area of focus within this scholarship (Hughes and Hurtado 2018; King 2011; Tillapaugh 2015). Tillapaugh's (2015) research on sexual minority males, for example, indicated that experiences such as being involved in queer and trans* affirming spaces or engaging intimately with other men in college contributed to participants' meaning-making about their experiences. Related to this study, literature has also examined how queer and trans* collegians who identify as men explore their masculinity in relationship with their sexual/gender minority status (see Chan 2017; Goode-Cross and Good 2009; Jourian 2017b; Tillapaugh 2015). Interestingly, this pattern is not seen to the same degree for those queer and trans* individuals who identify as women in higher education.

Research on identity and identity management also reveals that queer and trans* collegians from multiple marginalized backgrounds negotiate their identities across various groups (e.g., communities of color or queer communities; see Chan 2017; Garvey et al. 2018c; Goode-Cross and Good 2009; Goode-Cross and Tager 2011; Jourian 2017a; King 2011; Miller 2018; Narui 2011; Patton 2011; Peña-Talamantes 2013; Strayhorn 2014; Strayhorn and Tillman-Kelly 2013b). As Narui (2011, 2014) indicated in her research on Asian/Asian gay, lesbian, and bisexual students, these

individuals needed to learn how to navigate multiple expectations/norms regulating sexuality across different environments – at home, in college, and in other communities. Despite the potential challenges of navigating different communities, Peña-Talamantes (2013) underscored that this process of negotiating identities across different worlds can lead to a sense of self-empowerment that students develop. Although research does still address notions of identity disclosure and coming out (e.g., Duran and Pérez II. 2017; Eaton and Rios 2017; Garvey and Rankin 2015a; Garvey et al. 2018c; Pryor 2015), scholars have progressively challenged the ideas of coming out using poststructural frameworks that discuss matters of agency and performativity. This trend thus necessitates a closer look at the possibilities that various paradigms offer queer and trans* scholarship in higher education.

How Are Higher Education Scholars Framing Their Studies?

In addition to understanding who/what is currently represented in higher education literature, another topic of interest is *how* scholars are conducting the studies, using different paradigmatic traditions and methodological approaches. In particular, the ways that scholars apply different paradigms has important implications for the ways that they engage with perspectives in other disciplines. In this section, we outline the ways that quantitative, mixed-methods, constructionist/constructivist, critical, as well as poststructural approaches appear in the current landscape of research in higher education. Table 3 also lists examples of scholarship reviewed broken down by their respective research approaches.

Quantitative and mixed methods. Studies continue to utilize quantitative data sets in order to advance vital knowledge about the experiences of queer and trans* individuals in the field of higher education. Scholars have employed quantitative

Table 3 Studies on queer and trans* individuals by research approaches

Research approaches	Example studies
Quantitative and mixed-methods	Garvey and Rankin (2015a, b), Garvey et al. (2017a, b, 2018a, c), Hong et al. (2016), Hughes and Hurtado (2018), Kulick et al. (2017), Rockenbach et al. (2017), Russon and Schmidt (2014), Schmidt et al. (2011), Wolff et al. (2016), Woodford and Kulick (2015), Woodford et al. (2010)
Constructivist and constructionist	Chan (2017), Goode-Cross and Tager (2011), Henry et al. (2010), King (2011), Lange and Moore (2017), Means and Jaeger (2016), Miller (2018), Nicolazzo et al. (2017), Strayhorn (2014), Strayhorn and Tillman-Kelly (2013a), Tillapaugh (2015), Tillapaugh and Nicolazzo (2016), Vaccaro and Newman (2017)
Critical and poststructural	Blockett (2017), Carter (2013), Catalano (2015), Denton (2014), Duran and Nicolazzo (2017), Jourian (2017a, b, 2018), Lange and Moore (2017), Means and Jaeger (2013, 2015), Miller (2015, 2018), Miller and Vaccaro (2016), Narui (2011, 2014), Nicolazzo (2016a, b), Nicolazzo et al. (2017), Nicolazzo and Marine (2015), Revilla (2010), Tillapaugh and Nicolazzo (2016), Vaccaro and Mena (2011)

methods to show how people of various sexual and gender identities differ from one another within the queer and trans* community or when compared to heterosexual collegians. This knowledge can thus inform practice within higher education, knowing how populations compare to each another. Of note, studies such as Kulick et al. (2017) have used critical quantitative approaches to indicate how systems of oppression differentially affect people within the queer and trans* community. Kulick et al. (2017) highlighted how experiences of heterosexism and depression differ between those who identify as white and those who are people of color. By showing that LGBTQ students of color “may experience higher rates of discrimination and distress compared to white students” (Kulick et al. 2017, p. 1134), for example, quantitative research can identify issues of power and oppression as it relates to queer and trans* community.

In examining the landscape of quantitative research on queer and trans* communities, several limitations emerge. For example, a number of studies named the limitation that they employed cross-sectional data, thus limiting their ability to measure development over time (e.g., Hong et al. 2016; Hughes and Hurtado 2018; Kulick et al. 2017; Woodford et al. 2010, 2017). More pertinent to queer and trans* scholarship, researchers have noted concerns of generalizability to all LGBTQ students or to all institutions, especially knowing that university contexts influence how queerness and trans*ness is experienced (Garvey et al. 2017a, 2018c; Hong et al. 2016; Woodford et al. 2010). A similar issue that scholars have discussed is the ways in which the actual measures of sexuality and gender were collected (Rockenbach et al. 2017); the challenge involves being able to capture how people describe their identities through quantitative means. Collecting data and developing variables pertaining to gender and sexuality remains an important area for future research (Garvey 2017; Rankin and Garvey 2015).

In addition to the quantitative studies about queer and trans* students in higher education, scholars have also increasingly utilized mixed-methods approaches to further understand the complexities of these collegians’ experiences (e.g., Garvey et al. 2015; Goldberg et al. 2019b; Nguyen et al. 2018; Woodford et al. 2017). These researchers conducted studies using data sets originating from the *Campus Pride: 2010 National College Climate Survey* (a survey documented the experiences of 6000 students, faculty, staff, and administrators; Rankin et al. 2010) or the *National Study of LGBTQ Student Success*, in which data was collected at the Midwest Bisexual, Lesbian, Gay, Transgender, Ally College Conference (MBLGTACC). This body of mixed-methods scholarship combines the utility of quantitative approaches and the ways that qualitative approaches can examine the perspectives of queer and trans* students.

However, researchers themselves cite a number of limitations that relate to these current mixed-methods approaches. For example, Nguyen et al. (2018) stated that because they used a preexisting data set collected at a conference for queer and trans* students, this convenience sampling may not capture the experiences of those individuals who may not feel comfortable to attend such a conference. Connected to this, other limitations highlighted concern the issue that no data is available about the population of queer and trans* college students, which in turn means that it is not

possible to know if a sample is representative of the population (Garvey et al. 2015; Woodford et al. 2017). By identifying these limitations, scholars are drawing attention to the potential ways that future projects can better capture the experiences of queer and trans* individuals in higher education. Consequently, though mixed-methods approaches are valuable in further illuminate queer and trans* student experiences, the limitations listed above are important to keep in mind.

Constructionist and constructivist. In qualitative research, scholars have employed constructionist and constructivist paradigms to examine how queer and trans* students make meaning of their experiences on college campuses. These approaches center the perspectives of students, as researchers seek to comprehend their realities on campus. Yet, limitations do exist when it comes to constructionist and constructivist paradigmatic studies. As Chan (2017) described in his limitations of his constructionist qualitative study, he was unable to speak to the influences of structures of power on the participants and their understanding of the study phenomena in ways that research guided by critical theory could. In foregrounding the ways that queer and trans* students make meaning of their lived experiences, constructionist and constructivist paradigmatic research does not provide explicit tools to examine power relationships.

To mitigate such limitations, some researchers are blending different epistemological and theoretical traditions, including combining constructionism or constructivism with critical/poststructural traditions. When constructivism and critical/poststructural theories are blended, scholars further acknowledges the ways that students themselves make sense of experiences while also communicating how systems of power may be acting upon individuals without a conscious awareness of this reality (Means and Jaeger 2015; Miller 2018; Tillapaugh and Nicolazzo 2016). This attention to systemic injustices and the manners in which society constructs discourses related to gender and sexuality is then taken up more explicitly by those studies that utilize critical/poststructural schools of thought.

Critical and poststructural. During the past 10 years, researchers in higher education have increasingly utilized critical and poststructural frameworks in order to rethink the presence of systems of power in the lives of queer and trans* students, together with deconstructing the ways that identity is conceptualized. What is gained from these approaches is the explicit attention to systems of oppression in orienting the lives of queer and trans* individuals in higher education. For example, when examining the literature on queer and trans* collegians of color, frameworks such as intersectionality can illustrate how systems of racism, heterosexism, and genderism disproportionately affect those with multiple marginalized identities (Blockett 2017; Miller 2018; Miller and Vaccaro 2016; Nicolazzo 2016a). These types of studies reveal how institutions of higher education are constructed to marginalize those at the intersections of different oppressed groups, leading to ideas about how to change practice at colleges and universities to better account for axes of oppression. Consequently, this scholarship challenges the prevailing investment in whiteness that queer and trans* studies in the field typically furthers (e.g., Stewart and Nicolazzo 2018). Additionally, poststructural approaches interrogate issues of performativity as it relates to queer and trans* identities, including how individuals

may strategically deploy their identities to navigate their environments (e.g., Carter 2013; Lange and Moore 2017; Jourian 2017a; Miller 2015; Nicolazzo 2016a). For example, Lange and Moore (2017) discussed how participants felt that they needed to appear straight in certain university contexts in order to establish connections with peers on campus.

Interestingly, when surveying the literature using these approaches, scholars have largely blended different traditions within the larger umbrella of critical and post-structural theories to shed varied perspectives on their data. Miller (2015), for example, drew on concepts from queer theory and disability studies to understand how LGBTQ students with disabilities negotiated their multiple marginalized identities. Specifically, participants discussed how they disclosed identities strategically and needed to manage the perceptions that faculty and peers had of them. This combining of different theoretical traditions is not a simple challenge as scholars such as Nicolazzo (2016a) have described, knowing that some theories may have divergent ideas about how to approach matters of identity and power. In Nicolazzo's (2016a) research, she commented on the potential challenges that result from employing a poststructural theory arguing that identity is fluid in conjunction with intersectionality that identifies the ways that systemic oppression functions based on identities. Extant studies that do blend approaches often lean into the possibilities that are afforded when different frameworks are utilized, especially to communicate the complex realities of queer and trans* communities. Reflecting on the potential that critical and poststructural schools of thought have to understand the lives of queer and trans* individuals challenged us to examine the ways that power is (de)centered in the current scholarly literature.

How Are Scholars Engaging Power?

Continuing with the metaphor of the trap door (Gossett et al. 2017), in this section, we turn our attention to thinking about how higher education literature grapples with power. Specifically, our concerns here are rooted in addressing asymmetric power relationships that limit or circumscribe queer and trans* bodies, knowledges, performances, activism, and organizing. Higher education has historically proven to be hostile and violent toward queer and trans* collegians (Marine 2011; Marine and Nicolazzo 2014).

In the last 10 years, higher education research has addressed insidious forms of dominance impacting the lives of LGBTQ college students. Particularly, scholars have mobilized research agendas to critique, contest, and dismantle regimes of power like racialized hetero-cisnormativity – the regulatory social and cultural norms that privilege heterosexual and cisgender people and logics – (Blockett 2017; Carter 2013; Chan 2017; Duran and Pérez 2019; Lange and Moore 2017; McGuire et al. 2017; Means 2017; Means et al. 2017; Mobley and Johnson 2019; Narui 2011; Nicolazzo 2016a; Patton 2014), heterogenderism and trans* invisibility – the disregarding of gender non-conforming or gender queer people – (Duran and Nicolazzo 2017; Jourian 2017b, 2018; Nicolazzo 2016b; Pryor 2015), and sexualized ableism – the examination of compounded identities of sexuality and disability (Miller 2015, 2018).

Scholars in this area have employed intersectional, critical, and poststructural frameworks, as suggested by third wave perspectives on gender and sexuality research in higher education that emphasize how systems of power intricately shape discourses and identities (Denton 2016; Robbins and McGowan 2016). For example, Nicolazzo (2016a) put queer theory, Black queer theory, and intersectionality to work in her study to illuminate how anti-Blackness and trans* oppression operate to marginalize Black non-binary trans* collegians. The study employed critical collaborative ethnography, which seeks to disrupt hegemonic power structures by situating the researcher and the researched alongside one another. This methodological approach allowed Nicolazzo and study participants to interrogate both discursive and material forms of trans* oppression. She essentially argued that due to compounded forms of oppression, non-binary trans*folx of color are rendered invisible in postsecondary contexts as a result of racialized “reductive either/or binary (il)logics” (p. 12). The participants in Nicolazzo’s (2016a) research shared sentiments of erasure produced by structures on campus designed to support underserved communities. In particular, queer and Black spaces at their institution failed to acknowledge the realities that come with holding multiple oppressed identities, further marginalizing Black non-binary collegians. Nicolazzo and other scholars interrogated the ways in which power mediates how queer and trans* subjectivities show up, survive, and thrive in institutions that reify marginalization by way of curricula, policies, and practices.

A contested issue concerning how higher education researchers address and respond to power falls within debates regarding researcher positionality. As we argue earlier in this chapter, positionality situates the researcher within the cultural site under investigation. Attending to researcher positionality becomes especially important for studies involving queer and trans populations in educational research (Mayo 2007). Muhammad et al. (2015) delineated between the insider-outsider in terms of identity mismatches that occur between the researcher and the research participants. They suggested that “adding the concept of positionality directly incorporates ideas of power and privilege . . . and the researchers’ relationship to the specific research setting and community” (p. 1048). Their study found that researcher positionality or positionalities impacts what they refer to as “the epistemology of power” (p. 1049), or the exertion of power in the production of knowledge and knowledges of queer and trans* communities. This study and others offer evidence for arguments that urge educational researchers to grapple with not only their intersecting social identities, but also the role of their identities and unique subject positions on data interpretations, findings, interventions, and theory building in research. Unfortunately, not all researchers contend with power in the research process, yet again demonstrating another venue for colonization to permeate higher education (Patel 2016). Occasionally, scholars will incorporate techniques to reconcile how they will account for dominance that naturally unfolds in the research process. St. Louis and Barton (2002) encouraged researchers to consider how social, political, historical, educational and economic contexts influence their work. In other words, researchers must name and grapple with the points and positions of power which they have access to, and consider how their own ways of relating to others pits them with and against research participants. This requires more than naming

identities, but rather a continued and ongoing self-scrutiny by way of reflexivity, which is a process of “cyclical reflection” (St. Louis and Barton 2002, p. 12). This process of reflexivity is especially important for studies seeking to critique, contest, and deconstruct systems of inequity that reify oppression.

Miller (2018) convincingly disrupted compounded forms of oppression that influenced study participants and their intersectional identity perspectives as LGBTQ students with a disability. In his intersectional study on 25 LGBTQ students with a disability, Miller acknowledged the importance of engaging in a research process with a specific attention to reflexivity. “I sought to balance subjectivity (participants’ words and interpretation) with my own reflexivity (my interpretations informed by my positionality and philosophic commitments) in part by intentionally reflecting on my own identities and relationship to the research topic,” Miller explained (p. 335). Beyond naming his identity markers, Miller contended with his insider (queer identified, first-generation), outsider (temporarily able-bodied, without disability social/cultural context) capacity as a white, cisgender, man, realizing that his study participants may have reservations about disclosing all aspects of their disability identity. To do so, Miller found it important to engage with peer debriefers who shared identities held by participants, together with providing the students the opportunity to offer their opinions of preliminary findings. In all, this practice of reflexivity offers contemplation on how to respond to power, in this case able-bodied domination, both materially and discursively. Even when scholars’ social identities and/or experiences are similar to those of their participants, reflexivity offers an opportunity to address power dynamics that arise when one is situated as a researcher. This focus on the authors who produce research led us to consider the final question in reviewing the literature on queer and trans* studies: who is doing the work?

Who Is Doing the Work?

Although we are making specific choices around who to center in our work – which we discussed earlier – we are also cognizant of just who is producing scholarship about queer and trans* populations in higher education. In what may not be a surprise to many, in surveying the positionality statements of articles cited above, it is largely queer and trans* scholars who have conducted research on these populations. However, the predominance of queer and trans* people in conducting this research can be both liberating and constraining. While it is wonderful for queer and trans* people to be in control of our own community’s narratives, the siloing effect of who can/should/ought to do this work (i.e., queer and trans* people) acts as a way for others (e.g., non-queer and/or trans* folks) to inoculate themselves from having to ever address queerness and/or trans*ness. In other words, non-queer and/or non-trans* scholars may suggest through their scholarly (in)actions – tacitly or otherwise – that queer and trans* futures are still untouchable, impossible, and/or otherwise undesirable.

Furthermore, it is too simplistic to assume that because queer and trans* scholars have predominantly constructed narratives of our own populations in current scholarship, that we are invested in non-normative ways of thinking and doing research, let alone radically queer and trans* modes of becoming. As radical Black queer studies scholar Cohen (1997) remarked,

The inability of queer politics to effectively challenge heteronormativity rests, in part, on the fact that despite a surrounding discourse which highlights the destabilization and even deconstruction of sexual categories, queer politics has often been built around a simple dichotomy between those deemed queer and those deemed heterosexual. (p. 440)

Here, Cohen (1997) pointed to the ways that queerness as an identity cannot be assumed to be synonymous with queerness as a liberatory politic, a way of resisting domination. Furthermore, Cohen's argument points to the ways may queer people have long desired to be deemed "just like" other people. Similar to Warner's (1999) analysis of normalcy in relation to queer people, and Marine's (2011) historical treatment of the homophile movement, there has been a long-running desire for some queer people to subsume their queerness under the guise of being "ordinary" or "normal." Duggan (2002, 2003) named this phenomenon *homonormativity*, or the ways in which queer people may desire normative futures via processes of neoliberalism and assimilation. As such, we find it imperative to note how suggesting that queer and trans* scholars being the main producers of queer and trans* scholarship may not be as liberating as it may at first seem.

Finally, we also feel compelled to note the agency that comes with naming and claiming one's own narratives, and of centering queer and trans* perspectives throughout scholarly literature. The way queer and trans* people have continued to be central to this stream of knowledge production is beautiful in that it creates an ever-increasing body of possibility models for queer and trans* youth, who may otherwise not see themselves represented in intellectual production efforts. However, we echo the aforementioned cautions by Cohen (1997) and Duggan (2002, 2003): one cannot assume that a queer identity equates to a queer liberatory politic, and non-queer people would do well to consider how the over-representation of queer and trans* scholars doing queer and trans* research may allow them to distance themselves (further) from queer and trans* lives in ways that reify heteronormativity and gender binary discourse.

The Potential of Interdisciplinary Perspectives

In thinking about how interdisciplinarity mediates queer and trans* studies in higher education research and practice, it becomes important to tease apart the word "return." It may seem that the word return – as in the title of this chapter – means to go or give something back; to return to a place. This reading of return would suggest the field of higher education had always already been interdisciplinary, but

perhaps had lost its way at some point. If the field was previously interdisciplinary, then it would stand to reason that what the field would need to do would be to go back, and to return to that place. We assert, however, that despite claims that the education disciplines are or ought to be *interdisciplinary* (Holley 2009a, b; Lattuca 2001), scholars such as Haycock (2007) believe that research is oftentimes *intradisciplinary* instead. To be fair, there is indeed scholarship in higher education that pulls on interdisciplinary threads, much of it the queer and trans* literature we discuss throughout this chapter; however, there was never a point before when the field was interdisciplinary, but then lost its way. Instead, there have been several scholars – and, perhaps a resistant pool of queer and trans* scholars(hip) – who are pushing a notion of interdisciplinarity in a field that claims to support this approach to praxis, but has yet to do so in noticeable ways.

There is another way of thinking about return that may be more educative, however, and that is the notion of a return as a profit. A return, as in a return on an investment, signals not a going back to a previously held state or place, but the benefits assigned to a new development, change, or movement. If one yields a positive return, they are gaining something new, profiting from the work their investment has done. Admittedly, there is a danger in using notions of returns rooted in capitalistic logics; however, we find the reframe particularly helpful in deconstructing the various ways capitalism and neoliberalism have sought to compartmentalize, commodify, and consume minority difference (e.g., queerness and trans*ness; Ferguson 2012). We intend for the notion of return here to serve as a queer reclamation of the term that pokes holes in the ways queerness and trans*ness has been co-opted, commodified, and stripped of its radical potential in higher education.

Translating this to our manuscript, then, one can see how investing in an interdisciplinary approach with queer and trans* studies may prove to be a solid investment for the field of higher education. In other words, if scholars and practitioners recognized the positive benefits of the interdisciplinary work queer and trans* studies in higher education were doing for the field, we could think about how to grow that return, and how to replicate the return by embracing interdisciplinarity throughout. Here, we as authors are not suggesting we are returning as in going back, but as in moving forward to someplace new, someplace necessary.

Forward Movement

In his remarks on the way forward for trans* studies in higher education, Black trans studies scholar Kai Green (2017) wrote:

How do we continue to make space for ourselves as transgender and gnc [gender non-conforming] scholars? How do we create collaborations and communities so that we don't reproduce the kind of siloed academy that we have been born into? We do the work! We talk across fields. We make things together. We listen. Today we scholars of transgender studies

broadly speaking, must be careful to not rely too heavily on what might seem like the thing that connects us, gender non-conforming and transgender people. It is not a particular subjectivity itself that will hold us together, because identities change. We must be attuned and do the work of creating a collective intention and that intention is always to get a bit mo' free. (p. 321)

Here, Green provided a clarion call for higher education scholars and practitioners not to rely on their own siloed ways of making meaning, but to “talk across fields,” and to “make things together.” He suggested that beyond recognizing *a moment* for queer and trans* studies in higher education, the field needs to create *(a) movement*, and that doing so is the way we all “get a bit mo' free” – embracing an emancipatory politic in the process.

In this passage, Green also called for scholars to pivot away from merely thinking about identities as the main connective tissue between and amongst those of us committed to queer and trans* movement. Green was not saying social identities lack necessity, or that they are archaic or false symbols. Instead, he noted the shifting nature of identities, and in so doing, hailed the interdisciplinary work in queer and trans* studies that has for years gone beyond identities in thinking about forward movement, or using Green's words, ways to “get a bit mo' free” (e.g., Cohen 1997; Currah and Stryker 2014; Ellison et al. 2017; Halperin 2012; Muñoz 1999; Rubin 2006; Snorton 2017; Valentine 2007). Said another way, queer and trans* studies have been invested in queer and trans* people, but not as the sole arbiters of who or how movement should occur. Rather, queer and trans* studies have been invested in queer and trans* ways of thinking, researching, *and* being, recognizing all as interconnected and deeply important toward realizing a return that brings about forward movement. It is this scholarship that we now turn to in order to discuss how the discipline of higher education may itself move forward.

Trap Doors

Harkening back to the metaphor of the trap door as both posing challenges, and providing thresholds across which new possibilities are envisioned, we propose a renewed look at what returns queer and trans* studies offers higher education. In particular, we inquire how queer and trans* studies can be envisioned as an interdisciplinary trap door through which the field of higher education can progress in the cultivation and development of equity, justice, and liberation. Moreover, and perhaps more emphatically, we assert this is a trap door through which higher education – the discipline, as well as the scholars and practitioners who are located in it – *must move through*, to actualize the potential for freedom and liberation (e.g., Freire 2000; hooks 1994; Kumashiro 2000).

We frame our exploration of what could exist beyond these trap doors using the questions we posed when addressing the past and current state of queer and trans* scholarship in higher education. In this way, we return – as in come back to – the location in which we began as a way to seek new return – as in yield – for our

inquiry. Different from the previous section where we engaged these questions where we sought to develop themes in the literature, this imagining is just that a way to dream about a future in the field where queerness and trans*ness is centered throughout institutions and the academy. Consequently, we use our exploration to expose and begin to address some of the gaps we recognized in higher education scholarship as it currently exists. And, while the notion of “filling gaps in scholarship” will always be partial and unfinished, we feel compelled to state that what we detail below is not just about highlighting lost populations, but also underutilized ways of thinking and researching. As such, we suggest an ideological shift more than a need to increase the number of people and populations to which the scholarship turns (though such a growth is also needed).

The five questions we engage below are: Who is being represented? What is being represented? How are we doing this work? How can we engage power? Who is doing the work? In addressing each question, we echo Green’s (2017) aforementioned comment by leaning heavily on queer and trans* scholarship “broadly speaking.” Thus, while we recognize the works we engage below as being connected to queer and trans* studies, we also acknowledge their allegiances, alliances, and affinities to various other fields (e.g., Black studies), and feel no need to claim them in any way as only or first belonging to queer and trans* studies (as if doing so was ever possible to begin with).

Who Is Being Represented?

Though the higher education section, “Who Is Being Represented,” focused on the social and personal identities highlighted in extant literature, we argue that interdisciplinary perspectives may complicate the very notions of representation. As previously discussed, the trap of representation in higher education has been the paradoxical nature of an increase in queer and trans* people throughout the literature while at the same time there has been a noticeable lack of queer women of color, trans* people of color, and trans* women of color. These vacillating realities and effects of in/visibility result in an ongoing segmentation of “queer” and “trans*” from “of color” to the point that “queer” and “trans*” are understood as invested in whiteness (Bey 2017; Johnson 2001; Nicolazzo 2017b; Snorton 2017). That is, “queer” and “trans*” become further saturated and consumed by ideologies of whiteness, despite the ontological existence of queer and trans* people of color. Furthermore, if the possibilities of thinking together “queer” and “trans*” with “of color” become tenuous or strained (at best), then there are implications for how queer and trans* people of color can(not) imagine possible futures for themselves and their communities.

There are several trap doors through which interdisciplinary thinking allows higher education scholars and practitioners to move forward in relation to this paradox. One is by harnessing Hayward’s (2017) notion of *trans negativity*. In particular, Hayward theorized this concept through an Afro-Pessimist perspective, a school of thought that sees “critical theory’s lumping of blacks into the category of

the human (so that black suffering is theorized as homologous to the suffering of, say, Native Americans or workers or nonblack queers, or nonblack women) is critical theory's besetting hobble" (Douglass et al. 2018, para. 1). Hayward (2017) pointed to the ongoing anti-Blackness undergirding the notion of the human, and then pivoted to ask, "Is beingness the problem, rather than the solution, for addressing antitrans violence" (p. 192). Following Hayward's comment to its logical conclusion, if the answer to the paradox of representation is to increase representation vis-à-vis investment in proliferating possibilities for material visibility, then what we may be doing is furthering anti-Blackness (as seen above with the cleaving apart of "queer" and "trans*" with "of color"). How might the ontological move to recognize/make room for "more people at the table" be part of the problem itself?

In response, Hayward (2017) suggested thinking about how trans negativity, itself a way of thinking trans* beyond and apart from bodies, may "expose how the order of the subject, and the matter of ontology, are what make black trans* women, in particular, vulnerable to violence" (pp. 192–193). Here, Hayward's notion of trans negativity becomes a way of refusing white liberal notions of inclusion. In essence, she argued trans* people, and Black trans* individuals especially, need not continue to claim our own trans* humanity, especially for audiences who have not or will ever see us as human. We may get a (few more) chairs pulled up to the proverbial table of decision-making, but Hayward and other queer and trans* scholars deem this a non-performative act that reinvests in our being nonhuman, as it uses our bodies and experiences to suggest a white liberal "inclusion" that does not invest in our livelihoods. Thus, she suggested we should interrogate notions of who is considered human, and what constitutes humanity; a move various Afro-Pessimist and queer of color theorists have advocated (e.g., Ferguson 2012; Snorton 2017; Weheliye 2014), and would be well worth consideration by higher education scholars and practitioners. For example, when higher education scholars, professionals, and policy makers develop "trans-inclusive" policies/practices, how are they (not) investing in trans* humanity (e.g., Nicolazzo et al. 2018; Wagner et al. 2018)? Also, how may some policies/practices that are widely heralded as "foundational" in higher education (e.g., High Impact Practices) be damaging in relation to trans* people (Stewart and Nicolazzo 2018).

Scholars in and beyond higher education have taken up this call, although not all have named it as trans negativity. For example, in framing the concept of "equity" as more transformative than "inclusion," Stewart (2017a) urged for higher education professionals to recognize how adding more people/bodies does not itself radically reorient the ways oppression pervades systems and structures. Also, Snorton (2017) used Afro-Pessimism to discuss how gender has always been foreclosed to Black women due to chattel slavery, and as such, the need to push trans* past notions of embodiment is not only important, but necessary to get closer to understanding how discourses of gender mediate life chances. Similarly, Gossett et al.'s (2017) focus on trans* cultural production exposes the lie that increased representation equates to increased safety, a lie that is largely rooted in racialized capitalism. As a result, Bassichis et al. (2015) argued,

Impossibility may very well be our only possibility. What would it mean to *embrace*, rather than *shy away from*, the impossibility of our ways of living as well as our political visions? What would it mean to desire a future that we can't even imagine but that we are told couldn't ever exist? (p. 42)

So what does this all mean in relation to higher education? How can walking through the trap door of trans* representation proliferate possibilities for queer and trans* futures? And is moving beyond bodies desirable in institutions of higher education steeped in gender binary discourse, or normative understandings of gender as two distinct, “normal,” and “opposite” constructs (i.e., man/woman; Nicolazzo 2016b, 2017b)?

Most notably, embracing interdisciplinary approaches to queer(ness) and trans* (ness) as epistemologies and not just ontologies allows for us to move away from identity-specific interventions. That is, a recognition that “queer” and “trans*” are modes of thinking as well as being, then perhaps there are ways higher education scholars and practitioners can think across populations and perspectives to seek cross-coalitional liberatory praxis. For example, Spade (2015) argued for a praxis that “prioritizes building leadership and membership on a ‘most vulnerable first’ basis, centering the belief that social justice trickles up, not down and that meaningful change comes from below” (p. 137). Here, Spade was not dictating *who* is most vulnerable, but that if we address *vulnerability as a mode of being* that operates across identities, then we build a response to that vulnerability that is not entrenched in myopic single-axis visions of selfhood and inclusion.

It is also worth pointing out that these interdisciplinary frameworks specifically question the ways other fields have been entrenched in whiteness and other ideologies of normativity (e.g., quare theory, crip theory, critical trans politics). While some scholars, including those described in this piece, are employing these theories in queer and trans* higher education research, most have yet to embrace and use these ways of thinking and researching, which renders the state and status of the field normative (e.g., white, enabled, Western, middle to upper class). Furthermore, as Harris and Patton (2018) have elucidated in their analysis of the (mis)uses of intersectionality in higher education research, even those who espouse certain theoretical frameworks may be doing a disservice to the theories themselves, and thereby further entrenching the field in ideologies of whiteness. While Harris and Patton were not explicitly discussing queer and trans* research, we see parallels in the dangers of misusing theories, as well as not using them at all, in the reification of normalcy for multiple – and multiply – marginalized queer and trans* populations in higher education.

Moreover, thinking through philosophical work related to the epistemology of ignorance (Dotson 2011; Gilson 2011), actors require audience recognition to come into being. That is, if queer and trans* futures are to be recognized and represented, then audiences (e.g., higher education scholars and practitioners) need to recognize the potential(ity) of queerness and trans*ness as modes of thinking and being. Doing so, however, means addressing the ways institutions of higher education – and the educational audiences therein – have been continually invested in anti-Blackness

(Patton 2016), colonization (Wilder 2013), and trans* oppression (Nicolazzo 2017a). In other words, there are ways that educational scholars and practitioners *actively unknow queer and trans* possible futures*, and in so doing, foreclose the potentiality therein before it has a chance to be recognized. Work around the epistemology of ignorance, then, forces educational scholars and practitioners to engage in self-reflection around how they create queer and trans* ways of thinking and being as unknowable and impossible (Marine 2017; Nicolazzo 2017a; Spade 2015), and what effects their investments in such active ignorance has.

An interdisciplinary return on the question of who is being represented in queer and trans* higher education requires more than counting queer and trans* bodies. Though researchers frame the gathering of data on populations as beneficial in order to create the need for identity-specific interventions, the notion of counting has potentially deleterious effects, as it assumes a neoliberal position of numbers equating to significance (e.g., Currah and Stryker 2015; Nicolazzo 2019). It also assumes that identities can – and ought to – be codified into coherent static categories, which is in direct contrast with the notions of queerness and trans*ness themselves. Given this, we assert both practitioners and researchers must desire more than counting as a preferred mode of operating in higher education. Through desiring more/beyond counting, the return that becomes evident is the realization that expanding epistemologies, or modes of thinking, also have agentic force in proliferating liberatory possibilities, and for doing so in cross-coalitional ways. In other words, the interdisciplinary return is understanding that *how we come to know is foundational to who we (can) come to know*.

What Is Being Represented?

Though we saw higher education focusing on the experiences that queer and trans* people are having on college campuses, this section engages with interdisciplinary scholarship to question what is (not) captured in conversations about identity. Harkening back to Renn's (2010) comment that "although colleges and universities are the source of much queer theory, they have remained substantially untouched by the queer agenda" (p. 132), it may come as no surprise that a bulk of the queer and trans* higher education literature to date focuses on modernist constructions of the self. Furthermore, in reviewing the queer and trans* literature in higher education, we noticed a distinct focus on sexuality as identity-based, or as something one *has, acquires, or brings to the fore* over the course of their lifespan. Setting aside debates around whether sexuality/gender is innate, the way sexuality/gender is framed through the literature is as a static identity that, although it deepens, rarely, if ever, changes. The literature has also not considered how one's sexuality/gender may or may not align with one's desires and/or practices. Here, we invoke interdisciplinary work to expose how understanding sexuality/gender as a subjectivity provides a more complex understanding of the political, affective, historical, environmental, and sensual aspects of this mode of being.

For example, Valentine (2007) elucidated how the making of categorical understandings of the term “transgender” does not provide a clear picture of how the term operates in space. In essence, he explored transgender as a *cultural formation*, or a way of not only making sense of a population, but also thinking about how the term itself operated to proliferate and/or foreclose possibilities for how those one may deem “transgender” – or what he refers to as “transgender-identified” to point to the relationality of the term. In this sense, Valentine’s project is similar to that of Halperin’s (2012), who desired to explore gayness as a form of cultural difference. Again, both Valentine (2007) and Halperin (2012) are not making claims about what ‘makes someone queer,’ whatever that may mean. Instead, what they are doing is elucidating how the terms one uses as a marker of identity – a habit many in higher education have replicated without much further consideration – have histories that are politically, affectively, and contextually influenced. That is, how one uses certain terms, to what ends they are used, how they make one feel, and the ways these terms may shift in different temporal and spatial locations matters, and indeed change the meanings the labels carry. Others, including Brown (2008), Keegan (2018), Mattilda (2006), Rubin (2011), Snorton (2017), and Stewart (2017b) – to name but a few – have pushed the boundaries of what one can assume to know based on “identity markers.”

Moreover, queer of color scholars such as Decena (2011) and Ahmed (2010) have invited readers to imagine the affective motivations and invocations of queerness and trans*ness. For example, rather than making normative judgments about whether, when, or to whom one may be “out,” Decena (2011) articulated how some of the Dominican immigrant men with whom he studied refused the compulsion to come out. Their refusal was less about any presumed shame, and more about how the closet itself was “a collaborative effort” created in response to ongoing cultural discourses of heteronormativity (p. 32). Thus, these men’s refusal to come out was a response to cultural understandings of queerness as abject, and as something about which one ought to feel shameful. Here, queerness is not something one just has, but something that is produced through one’s relation to cultural discourses, as well as one’s spatial location.

In her work on happiness, Ahmed (2010) pointed to how this term has been framed through neoliberal constructs as something individuals should desire. Moreover, one’s achievement of happiness requires acquiescence to dominant cultural norms and standards, including to notions of appearance, relationship, and family. In this way, then, happiness is constructed as both heteronormative and homonormative, or the way some queer people seek assimilation into heterosexual fantasies of the future, of finding a place in the house that discourses of heterosexuality built. Responding through an analysis of queer fiction, Ahmed (2010) wrote,

A revolution of unhappiness might require an unhousing; it would require not legitimating more relationships, more houses, even more tables but delegitimating the world that ‘house’ some bodies but not others. The political energy of unhappy queers might depend on not being in house. (p. 106)

Similar to that of Decena (2011), Ahmed’s (2010) focus on the affective dimensions of queerness provide a strategy of world-making. In essence, following normative

notions of sexuality/gender is not only not desired, queer and trans* people have created worlds beyond these normalcies, with more being continually created by queer and trans* people, who have long been deemed deviant and abject due to our queerness and trans*ness. However, when one merely focuses on finding queer and trans* people, and locating them through specific categorizations (e.g., gay, lesbian, queer), these nuances are lost, and the cultural implications deemed inconsequential.

And what of queer and trans* world-making, anyway? This has been yet another recent development in queer and trans* higher education literature (e.g., Blockett 2017; Jourian and Nicolazzo 2017), but one worth further exploration. Specifically, the roots of queer and trans* world-making practices in and for communities of color – and as a response to the ongoing realities of racism, anti-Blackness, and colonization – should take center stage in exploring the interdisciplinary return of the concept. For example, Muñoz (1999) suggested the notion of *disidentification* as a way to create queer utopias. For Muñoz, a strategy of *not identifying with* became the response to racial, sexual, and gender normativity. In other words, by *disidentifying* with ideologies of whiteness, compulsory heterosexuality, and the gender binary, new worlds could be imagined and moved toward. And while these worlds were always fleeting – given their location within overarching systems of oppression, they could not exist in any other way than as momentary – this did not detract from their power, import, or utopic potential. In this sense, Muñoz (1999) discussed the notion of *cruising utopia* as a method through which one could strive, seek, and revel in queer worlds, however fleeting. That is, while Muñoz understood utopias were never permanent structures, he also recognized the importance of always seeking and desiring, or cruising, the potential for liberation therein. Similarly, Bailey (2013) described the utopic possibilities of disidentification through his work on ballroom culture in Detroit. Although currently produced for mass audiences in television shows like *Pose* (Canals and Howard 2018) and *My House* (Gordon and Bailey 2018), the ballroom remains an intimate space through which Black and Brown worlds are made through queerness and trans*ness.

Even exploring the higher education literature, how might we recognize world-making practices themselves as queer, regardless of the participants in a given empirical study? For example, Waterman's (2012) research with Haudenosaunee college students included only one queer student; however, the process of home-going ("returning home frequently while attending a residential post-secondary institution;" see Waterman 2012, p. 194) as a strategy of world-making could well be understood as a queer practice itself. While the discipline of higher education has constructed a normative discourse equating a sense of belonging with remaining on campus, becoming involved, and separation from families, perhaps the notion of Indigenous student home-going has always been a queer return. In other words, by resisting the belief that institutions are the primary place to experience community and instead returning to groups that embrace them wholeheartedly, students may be queering ideas of home and belongingness. Additionally, dismissing the study outright due to the low number of queer participants requires one to dismiss how queerness operates as a cultural formation, as has been previously discussed in this

section. Thus, queer as an identity may not be all that matters here; instead, queerness as a practice of making – or of going home to – worlds is itself worthy of exploration.

How Are We Doing This Work?

In existing higher education research, the *how* described the paradigmatic approaches scholars have taken in their studies; yet, this section takes a broader view at the landscape of the academy and how it may prevent researchers from truly engaging in queer and trans* approaches. If, as we assert, how one comes to know queer and trans* subject(ivitie)s is important, then it would also stand to reason that how one comes to produce new knowledge about queer and trans* people, phenomena, and discourses are themselves important. In other words, the *how* of empirical studies related to queerness and trans*ness in higher education is worth consideration in relation to the current reflection on interdisciplinary return. What, if anything, does interdisciplinarity have to offer research design in higher education? How might queering and trans*ing research methods offer new possibilities through which queerness and trans*ness can be understood? How have the current conditions of queer and trans* research in higher education been stifling to the point of occluding these possibilities? These are some of the questions we will address in this section.

If higher education has been guilty of focusing on materiality, on queer and trans* bodies, then it may be worth asking, are there other ways of considering queerness and trans*ness that would be valuable when (re)thinking higher education as an institution, an environment, or a space to which policy is aimed? How has the increased focus on scientism, recognized as the profound investment in narrow and objectivistic beliefs around what constitutes data/knowledge (Pasque et al. 2012), mediated the sole focus on materiality *to the detriment of* envisioning possibilities for an interdisciplinary return? Concurrently, how has the lack of venues for publishing queer and trans* work that is conceptual and/or theoretical in the discipline of higher education – particularly in top-tier journals in the field – moved us further away from envisioning these possibilities? Between a strong rebuke of theoretical and conceptual work in various venues, to the overwhelming press toward scientism, there seem to be no shortage of orientations toward queer and trans* knowledge in particular ways and, as a result, away from others.

We as authors do not mean to assert that queer and trans* knowledge production should do away with empiricism in the name of theoretical work. For example, each of us has, and continues to do, empirical research related to queer and trans* subjectivities. However, we are claiming that there is a strong need to deepen our commitment to conceptual arguments and theoretical treatments around queerness and trans*ness, especially those germinating from various interdisciplinary fields of study. In fact, we argue that by opening ourselves up to various different modes of creating queer and trans* knowledges, we will illuminate new possibilities for moving forward in the field of higher education. By recognizing the queerness and

trans*ness of methods – or the *how* of research – we can expand our understanding of the returns of queerness and trans*ness for higher education.

In thinking about queering and trans*ing research methods, proximity becomes an important aspect of inquiry. Specifically, the proximity of a researcher to participants, or to a topic of study, comes to the fore as important. For example, much of early trans* literature consists of memoirs. Even current iterations of trans* memoirs have caught fire, including Janet Mock's (2014, 2017) *Redefining Realness* and *Surpassing Certainty*, as well as Laura Jane Grace's (2016) *Tranny*, and have been taken up beyond a trans* readership. Bolstered by other trans* memoirs that are less well-read, but still offer valuable contributions [e.g., Justin Vivian Bond's 2011 *Tango: My Childhood, Backwards and in High Heels*] for understanding queerness and trans*ness. If, as Stewart (2010) and others (e.g., Jones et al. 2014) have articulated, the researcher is the instrument of research, then training our attention on that instrument, and how we have come to take up sexuality/gender discourses, should have more focus throughout conversations on research. Admittedly, the aforementioned texts are not research studies; however, what if one were to read them as a form of research? How might one's understanding of sexuality/gender shift were one to approach memoir as one of the most intimate and telling forms of research? And what possibilities may unfold were one to let go of the intense grip of generalizability that pervades the push toward scientism – and neoliberalism – in higher education research and practice (Pasque et al. 2012)? In other words, what may be possible *if we let go of what we thought research was*, and instead, embraced queer and trans* explorations of self, other, and environment on their own accord? We assert that increased proximity to the phenomenon under exploration – in this case, queerness and trans*ness as their effects on individual experience as discussed through memoir – has immense fecundity for higher education research and practice. In fact, we claim that the caution of one being “too close” to their research – understood in its broadest sense – may itself be a misnomer, a way of attempting to contain queer and trans* inquiries and interventions in higher education.

Extending the above considerations brings to the fore questions of the role of facticity, or what constitutes facts, in the research process. In many senses, the push toward scientism, and the increasing investments of higher education in neoliberalism, has meant a turn toward facts that are immutable, unimpeachable, and beyond reproach (Lather 2006; Pasque et al. 2012). In terms of research methods, then, scholars(hip) in higher education have been compelled to articulate exactly how such facts are derived, with these details scrutinized. Again, it needs to be said: we as authors are not saying that such scrutiny of research methods should not occur. However, we are saying that when there is a focus on a purist understanding of facticity, trained heavily on those phenomena that can be “proven,” and an audit trail can be created to show how they came to be, the queerness and trans*ness of methods – to say nothing of the queerness and trans*ness of lived experiences and phenomena – is largely missed. In other words, we suggest that a purist focus on facticity, as has largely been taken up in higher education research (Lather 2006), is itself an investment in normative sexuality/gender discourses, and as such, scholars

and practitioners would do well to question what is meant by the word “facts,” and to what end some answers are deemed “not enough.”

Readers who are familiar with queer and critical theory will recognize the above conversation, and may well understand the importance of eliding, even momentarily, demands for “facts.” Much of how we have come to understand the ongoing reality of racism in the United States is based on moving beyond scientism and empirical “fact.” For example, Bell’s (1989) chronicle of the space traders is an allegory, a future imagining that brings to the fore how racism could be understood as framing national policy decisions. Similarly, with its roots in literary criticism, much of queer theory (e.g., Anzaldúa 1987; Muñoz 1999; Sedgwick 2008) – including its offshoots like crip theory (e.g., McRuer 2006) – are based in queer (re)readings of literature and society. However, to dismiss this work as “not factual” is to dismiss the point and thrust of this work. In other words, the work was not created to “be factual” in accordance with normative sexuality/gender discourses, but as an intervention into how one can come to know queer and trans* subjectivities in the first place. In this sense, then, the “factual” nature of this work is not the point; the point is its exposure of that which are considered “facts” are structured along normative sexuality/gender scripts and, as a result, will always pose queerness and trans*ness as “not enough” (or as “too much,” as in the stretching of “facts” is too much for the discipline of higher education to deal with and thus, the work is dismissed).

For example, why might it be (un)important to locate Ahmed’s (2010) figure of the feminist killjoy as a generalizable “fact?” In introducing the notion of the feminist killjoy, Ahmed described the common scene of being at home with family around a shared dinner table. At the table, she mentioned how sexism was also present in words, actions, and behaviors. The more sexism pervaded the dinner scene, the more wound up the feminist gets, until she snaps, killing the joy in the room, punctuating “the moment a happy occasion ceases to be happy, the moment a dinner is ruined another meal ruined” (Ahmed 2017b, para. 1). Expounding on the notion of the feminist killjoy, Ahmed noted how the presence and prevalence of sexism (2010), racism (2012), and transmisogyny (2016) evoke a winding up of feminists until they snap. Far from being seen as a pejorative statement about the temperament of feminists, Ahmed (2017b) suggested their snappiness was a way of coming together, of creating a feminist army (2017a). In this way, the figuration of the feminist killjoy – both the embodiment of her, as well as the epistemological and axiological foundations upon which she bases her life – is a force with which to be reckoned. Moreover, she is a force regardless of how many killjoys there may be. That is, pointing out sexism, racism, and transmisogyny are important not *because* of how many people may be doing the pointing, but *in and of themselves as a matter of queer and trans* justice*.

Building from Ahmed’s conceptualization of the feminist killjoy, we wonder: how does the numerical frequency of the killjoy add anything to the usefulness of the figuration to thinking about possibilities for queer interventions into higher education? And, if there were a certain critical mass of killjoys who one could point to/count/hold up as a “statistically significant” population, how would that signal to an importance of the figuration that previously was not present? In response to these

questions, we argue that the “fact” of the figure of the feminist killjoy is far from the point of Ahmed’s conceptualization, as well as the possibilities she proliferates in and beyond higher education. In other words, Ahmed’s determining how many killjoys exist as a basis upon which to bolster her claim that they do – and that the figuration of the killjoy has import – was never part of her overall project. Put another way, the “fact” of the killjoy is not nearly as important as the ways the killjoy exposes normative discourses that pervade everyday life. Similarly, then, we assert that letting go how discourses of facticity delineate what counts as “good” and “proper” research opens up queer and trans* possibilities for higher education.

And finally, we again return to notions of queerness and trans*ness that supersede materiality, specifically notions of trans* as an analytic. Speaking to this, Green and Ellison (2014) coined the neologism tranifest, signaling ways

...to mobilize across the contradictions, divisions, and containment strategies produced by the state and other such large-scale organizations of power that work to limit our capacity to align with ourselves across differences in ways that are necessary for social transformation. (p. 222)

Here, Green and Ellison unlock a way of *making sense of the world through trans*ness*. Approached as an analytic, trans* becomes less of a defining feature that may segment or separate a particular group of people (i.e., trans* people) from others. Instead, trans* becomes a way of coming together across differences, and a way of recognizing how transgression as an act of becoming – be it oneself or a mobilizing body such as an organization – is itself imperative to creating social change. As Green (2016) later detailed,

I employ Trans* on multiple registers: as a decolonial demand; a question of how, when, and where one sees and knows; a reading practice that might help readers gain a reorientation to orientation. It is an analytic that has ontological, ideological, and epistemological ramifications. It is not perpetual alterity but perpetual presence. It makes different scales of movement or change legible. Trans* is the queer. Trans* is the colored. (p. 67)

In other words, harnessing the analytical possibilities of trans* becomes a way of not only making sense of the world, but stretching across populations and striving for sociopolitical transformation in ways that have always been desperately needed.

So what would understanding trans* as analytic do in relation to higher education research and practice? How would harnessing the *acrossness of trans*ness* as emblematic not just of trans* lives, but of various modes of seeing, being, and organizing? How might recognizing the analytical imperative of trans*ness allow one to hold fast to the queerness and Blackness of trans* in ways that it has largely previously been closely tethered to whiteness (Ellison et al. 2017; Snorton 2017)? Here, we do not mean to suggest that everyone is trans*; to assume this would be a facile rendering of a complex articulation of the possibility and potentiality of trans*. Rather, what we are surfacing through the work of Green and Ellison is how one particular understanding of trans* is not predicated solely – or even squarely – in its bodily manifestations, but on how the notion of trans* – as across, as deviant, as

movement – can be mobilized to encompass a range of dispositions, subjectivities, and ways of organizing such that social transformation is centered. In this way, Green and Ellison’s notion of tranifest, and Green’s articulation of trans* as analytic, calls to mind the aforementioned work of Cathy Cohen (1997), who sought to envision political movements grounded in the experiences of various, multiply marginalized people and ways of being in the world. Trans*ness, then, becomes interlocked with Black feminist praxis, which becomes a foundation upon which radical social movements in and beyond the academy can continue to take form (Green and Ellison 2014; Snorton 2017). Since both “Black feminism and transgender studies share an investment in destabilizing the gender and sexual normativities through which such injustices are perpetrated,” (Green and Ellison 2014, p. 224), these traditions can serve as ways to envision approaches to seeing, being, and organizing across movements.

How Can Power Be Represented?

Though our analyses revealed that higher education scholars have been increasingly attentive to the ways that power influences the lives of queer and trans* people, many opportunities still exist to develop the field’s understandings of systemic oppression, further examined in this section. Interdisciplinary frameworks have responded to systems of power and multiple forms of demarcation that mediate the lifeworlds of queer and trans* collegians. For example, queer theory critiques heteronormativity and binary logics that produce homophobia (Jagose 1996; Sedgwick 2008); quare theory examines how Black queer subjects come to sexual, gender, and racial knowledge (Johnson 2001, 2016); queer of color critique challenges projects like nationalism, capitalism, empiricism, and historical materialism for their origins to racialized heteronormativity and heteropatriarchy (Ferguson 2004; Muñoz 1999); critical trans* politics disrupts illogic state formations administering gender and their deployment of heterogenderism (Spade 2015); and crip theory takes on state-sanctioned violence that subjugates queerness and transness as able-bodied only constructions (McRuer 2006, 2011).

These frameworks critique and contest systems of domination that render queer and trans* subjectivities as deviant, lacking conformity, and unintelligible to the rights and protections of the US nation-state. Educational researchers have begun to employ these frameworks to expose the subtle and not-so-subtle enactments of violence and erasure experienced by queer and trans* collegians. For example, Brockenbrough (2015) encouraged scholars to conduct queer of color analysis that foregrounded the sociohistorical contexts that have shaped schooling practices which deprive queer and trans* youth of color of their agentic capital. Higher education researchers have taken up this call by putting the theory to work to explore how trans*masculine collegians of color access pathways to masculinity (Jourian 2017a, b). Moreover, Blockett (2018) proposed an analytical technique that “thinks with” queer of color critique and in turn, unearths the emancipatory possibilities produced when methodological designs are queered. These interdisciplinary frameworks are often coupled alongside other anti-oppressive theoretical interventions to

fully capture the impacts of power and the various ways in which queer and trans* subjects perform resiliency and transgress normativity.

Gender, race, and sexuality scholars find the theory of intersectionality useful in examining the compounded nature of multiple marginalized identities and in addressing the multidimensionality of power asymmetries. While Crenshaw (1989, 1991), Collins (1986, 2000), and other women activist and scholars of color are often considered the framers of intersectionality, the theory has become central to feminist scholarship broadly. The theory contends with power by interrogating identity categories and hierarchal social locations for their function in maintaining and regurgitating sociopolitical domination and superiority. One example of this in queer and trans* studies is Bailey's (2013) intersectional analysis of gender, race, sexuality, and class categories within the ballroom scene in Detroit. His multi-dimensional analysis reveals the cultural production of queer and trans* communities as they dismantle binary genderism and make space for at least six different gender identities and expressions in the ballroom culture.

While intersectionality interrogates the social, cultural, political, and historical contexts of social hierarchies and categorizations, the depth and breadth of intersectional analysis is determined by the researcher. Using intersectionality as a framework to analyze marginality requires dissecting systems of domination. As such, particular attention must be given to subject formations and their relation to/with power structures – like heteropatriarchy, heterogenderism, and white supremacy, for example. Recently, feminist scholar Barbara Tomlinson (2019) addressed this very issue in her latest book *Undermining Intersectionality: The Perils of Powerblind Feminism*, where she delineated the malpractices of employing intersectionality that lacks an analysis of power. She explained:

Critics routinely misrepresent the history and arguments of intersectional thinking, treat it as a unitary entity rather than an analytic tool used across a range of disciplines, distort its arguments, engage in “presentist” analytics, reduce its radical critique of power to desires for “identity” and “inclusion,” and offer a “de-politicized” or “de-radicalized” intersectionality as an asset for dominant disciplinary discourses. Critics tend to approach conceptions of intersectionality carelessly, through metacommentary and complaint, through recommendations to bring its radical critique under control by advocating recourse to specific and often deeply conservative disciplinary methods – without acknowledging that such methods may have long been criticized for their service to dominant discourses. (p. 6)

Here, Tomlinson made specific arguments directed toward scholars and scholarship that deflate and weaken the theory of intersectional analysis. She identified trends in the literature that almost always strip intersectionality of its sociopolitical agenda, effectively undoing the theory (Bilge 2013).

Higher education research too partitions intersectional analysis from its radical social justice agenda when scholarship “. . . fails to adequately represent a comprehensive intersectional lens or such analysis is limited to identity politics without greater emphasis on the confluence of multiple systems of oppression” (Harris and Patton 2018, p. 19). While intersectionality is concerned with representational value (Crenshaw 1991), the theoretical analysis should not rest on identity categories alone (Núñez 2014). As Tomlinson spelled out, careless approaches to the theory can

dislodge its interest in dismantling and deconstructing systems of power and oppression. These theoretical and analytical mishaps create a barrier – a trap door (Gossett et al. 2017) – that limits radical social justice agendas, effectively “undoing” intersectional analysis. Depoliticizing intersectionality constrains the theory from its potential to analyze systems of domination like heteropatriarchy, racism, genderism, and heterosexism. Scholars continue to employ interdisciplinary frameworks to challenge power and its various formations. To discuss the varied positionalities of academics engaging in these questions, the next section articulates how interdisciplinary schools of thought frame the idea of who is doing this work.

Who Is Doing This Work?

The question of who is doing the work of queer and trans* studies across the disciplines yields similarities and differences in comparison to who is doing this work in higher education, a tension that we wrestle with in this section. One evident characteristic is that queer and trans* studies continues to serve as an intellectual home for queer and trans* scholars. As insiders, queer and trans* scholars often have access to the lifeworlds occupied by queer and trans* cultural workers. These communities produce the very scholars that will eventually serve as interlocutors for their cultural expertise. Queer and trans* scholars and academics are intrinsically situated within subject positions that directly experience oppression and various forms of microaggressions on the basis of queer and trans* statuses (Pitcher 2017). Undoubtedly, as scholars and researchers, queer and trans* people also hold particular advantages, for example, possessors of knowledge production. It is from this marginalized space that scholars have employed and performed resiliency by way of theory building and decoding phenomena. For example, Bailey (2013) described how his access to the ballroom scene in Detroit began long before data were collected for his study. Having joined the Legendary House of Prestige in his youth, Bailey already had an insider perspective of the oppression mapped on to the lifeworlds of Black and Brown LGBTQ people. Likewise, the insider status also allowed Bailey to co-witness the elaborate non-binary gender system produced within the ballroom scene. Scholars have employed their insider knowledge and mobilized their research as an apparatus to change the material conditions and lived experiences of folx within their own communities. All the while, these scholars are policed by the same constraints and practices that require researchers to demonstrate trustworthiness, quality, and other offshoots produced by objectivist hegemony.

In this sociopolitical moment, scholarship with queer and trans* communities have played a profound role in how society thinks about their futures. Those doing the work represent what is intersectional, intergenerational, transnational, and transdisciplinary in queer and trans* studies. These scholars are as varied as they are resilient. They have picked up where others left the movement for queer and trans* liberation. In *Blacktino Queer Performance*, E. Patrick Johnson and Ramón H. Rivera-Servera (2016) drew connections to the lineages of Black and Brown queer and trans* cultural workers who have fought for recognition and empowerment.

Sixty some years before these scholars arrived on the scene, a similar-named duo joined forces to contend with the material conditions and discursive degradation experienced by queer and trans* people of color. Sylvia Rivera and Marsha P. Johnson, two trans* women of color co-activist in the movement for gay liberation, joined forces to reimagine the futures of LGBTQ people globally. Across the diaspora, Black and Latinx gender and sexual minoritized people have always and already mobilized to build coalitions with aims of liberation. The labor and sacrifices of these scholars and activist have pathed the way for a radical queer politics (Cohen 1997) that reimagines queer and trans* futurities. While the sociohistorical contexts in which queer and trans* subjects derive often positions this community in a status of struggle, contemporary political agendas have taken up the mantle of contesting the nation-state to fortify LGBTQ subjects as worthy of and deserving liberty, justice, and peace. Stated another way, queer and trans* activist movements must continue to “do the work” of the Sylvia and Marsha P by challenging and eventually altering the rules and social processes that relegate them/us in the first place.

In doing the work of queer and trans* scholarship in higher education, researchers and theorists must move beyond bodies and representation, as we have argued throughout this chapter. Rather, scholars must return to and engage with the frameworks that actually contest systems of power that marginalize queer and trans* knowledges, realities, and material conditions. We argue that inquirers must find value in cultural work and the labor produced by queer and trans communities as they rework systems and create new worlds. Therefore, to do the work of queer and trans* studies in higher education means that those of us within the enterprise must augment our paradigms out of current ideology which is inherently entrenched in knowledge production. To move this field forward, we must transgress it from the inside out. We must question uncritical adherence to higher education practices and policies that purport to advance diversity and inclusion, yet create hostile conditions for institutional change to become actualized (Jayakumar et al. 2018). Ahmed (2012) suggested that diversity has become a performative politic in higher education, signaling a trend to name diversity and inclusion in institutional values, yet nothing is actually produced or done different to live up to these values. Likewise, we must take up projects that dismantle the innate exclusion of queer and trans* subjects – including their knowledges, performances, and non-normative embodiments. In this sense, doing the work of queer and trans* studies in higher education will rely on undoing oppressive forms of domination that occupy postsecondary contexts. In the following section, we offer insights into what interdisciplinary futures might look and think like in higher education research.

Envisioning Interdisciplinary Futures in Research and Practice

In reflecting upon the ways that the literature in higher education has created several representations of what it means to engage in queer and trans* work, we return to Gossett et al.’s (2017) central contention that trap doors do not solely signal impasses. Instead, this metaphor of the trap door challenges researchers and

practitioners to envision new possibilities and worlds with queer and trans* studies at its center. Thus, this manuscript symbolizes both a return and a forward movement, recognizing the importance of surveying where higher education has been before discussing where it can progress. This final section centers on futures in research and practice, thus serving to engage the readers in what form interdisciplinary futures can take.

However, in an attempt to not produce a singular picture of what these futures are (thereby, reproducing certain traps), we refrain from offering a list of recommendations. Inevitably, any implication that we would include would inevitably fail to account for different contexts and other idiosyncrasies. Instead, we pose several questions that we believe are necessary for researchers and practitioners hoping to center interdisciplinary ideas in their work: What knowledge are we centering in the field? What type of work is valued? Who should be doing this work?

Whose Knowledge Are We Centering in the Field?

To begin, one of the central tensions that exists between interdisciplinary texts and the patterns in higher education concerns the focus on representation. Whereas higher education scholars have showed a great attention on simply increasing the number of studies that attend to previously-erased populations, texts such as Bassichis et al. (2015), Gossett et al. (2017), and Hayward (2017) emphasized the limitations of visibility for marginalized populations in society. As higher education scholar D-L Stewart (2017b) discussed, hiring or recruiting more minoritized people does not solve the issues present at institutions. In other words, researching different queer and trans* populations will not inherently move the needle to justice. Therefore, we call scholars and practitioners to shift one's thinking from *which bodies/populations are we centering to whose knowledge are we centering in the field?* The former represents a preoccupation on numbers and counting, whereas the latter opens up the possibilities of embracing new ways of knowing and being. Importantly, the latter question also has the potential to impact the former.

So what does this look like in research and practice? First, we contend that higher education scholars must take up epistemologies, frameworks, and theories that exist outside of the field to rethink the realities that exist at our postsecondary institutions. In fact, researchers who have engaged with critical or poststructural perspectives have largely begun to take up this charge. Beyond simply engaging with bodies of work from outside of the discipline of education, individuals should employ texts written by those that are most marginalized in our society. As highlighted earlier, theories such as quare theory and Black queer theory (Ferguson 2004; Johnson 2001, 2016; Muñoz 1999), as one example, can reshape how educators are conceptualizing heterosexism and racism. Our reasons for centering racially marginalized knowledges throughout our text are multiple. First, as has been (re)stated emphatically, higher education continues to be framed by anti-Black racism (e.g., Patton 2016; Wilder 2013). Furthermore, xenophobia (Muñoz and Maldonado 2012), wedge racial politics (Mahdawi 2018), and other enactments of white supremacy continue

to be omnipresent throughout higher education. As a result, authors can counteract these negative effects by foregrounding scholars(hip) of color when and where we can. Additionally, we believe it is important to return to our queer and trans* roots, which for us means recognizing how the heavy lifting of queer and trans* activism, world-making, and community cultivation has largely been done by queer and trans* people of color. As such, our centering queer and trans* people, knowledges, methodologies, and critiques of color seems not only necessary, but fitting as a way to return again to our roots as we move forward into our futures.

Next, this move toward valuing racially marginalized knowledges would require practitioners to think differently about queer and trans* populations with multiple oppressed identities. Rather than simply creating more spaces for these individuals (e.g., clubs for queer and trans* people of color), it would behoove practitioners to reflect on how other environments are constructed in manners that disenfranchise these students. Although these affinity-based spaces do fulfill valuable needs, they are insufficient because they relegate the responsibility of world-making onto students. This phenomenon is well-documented in the literature as seen in Blockett's (2017) discussion of how Black queer men needed to labor in order to forge community with one another due to the fact that there was "little facilitation from their institution" (p. 811). Though identity centers existed at their institutions, students were expected to create their own communities within their spaces. Likewise, Vaccaro and Mena's (2011) research about a group establishing a queer person of color club revealed how existing organizations were frequently focused on only one identity; moreover, the groups that were present overlooked the needs of those with multiple marginalized identities, leading queer students of color to construct their own space. These examples emphasize the reality that queerness and trans*ness is frequently entrenched in whiteness (Bey 2017; Johnson 2001; Nicolazzo 2017b; Snorton 2017) and other dominant ideologies. Consequently, highlighting racially marginalized knowledges would require professionals and educators to retool their environments with ideologies belonging to communities of color at the center. Moreover, institutions themselves would have to shift their focus on what work is valued.

What Type of Work Is Valued?

The next question that is necessary to ask is what type of work is valued in the academy. Referring back to the section of how interdisciplinary scholars are approaching queer and trans* studies, higher education has been preoccupied with the development of empirical knowledge and scientism (Pasque et al. 2012). In the search for facts, scholars have fallen short of engaging in the conceptual and theoretical practice that queer and trans* studies requires. Once again, we would emphasize that the two –empirical and conceptual/theoretical work – are not diametrically opposed to one another; however, it is when academic systems (e.g., those of promotion and tenure) privilege the former – empirical research – for the latter – conceptual/theoretical scholarship – that we limit the ability of individuals to think

beyond what institutions have socialized them to view as valuable. By moving beyond a concern on empiricism, scientism, and attaining “facts,” people can start to conceptualize queerness and trans*ness as existing beyond queer and trans* bodies. A paradigmatic shift would allow scholars to perform the kind of work that disrupts normative ways of being and knowing, while having significant influences on practice.

Second, as practitioners, we return to one of Renn’s (2010) preoccupations in her state of LGBT and queer research that has largely been obscured by those working at higher education institutions. Specifically, Renn (2010) challenged professionals to consider what educational practice could look like with LGBT issues at the forefront. We echo Renn’s (2010) call, while also extending it to argue that educational structures could be reimaged with queer and trans* frameworks at the helm. Specifically, one area that warrants attention is the classroom environment. To engage world-making practices would mean pushing against the entrenched power structures that have often marginalized those with queer and trans* identities (Kumashiro 2000). This world-making would require faculty to retool their curricula to center knowledge of the marginalized, consider new processes of assessing student learning, and conceptualize student-teacher relationships as existing to collectively fight against the oppressive systems engrained in the academy. Yet, these would have to be met with a different way of evaluating the labor that it takes for faculty and students to engage in the work. Ultimately, by shifting the narrative on what is valued, institutions can open up the possibilities of what learning and engagement could look like at colleges and universities. These changes would also require people across various identities to commit to engaging with queerness and trans*ness in ways that has long eluded the field of higher education.

Who Should Be Doing This Work?

Finally, throughout this manuscript, we have posed the question of who is doing the work to advance queer and trans* studies in and outside of higher education. In surveying the positionality statements of the manuscripts we reviewed, it is clear to see that the overwhelming majority of research on queer and trans* peoples has been conducted by those who identify with queer and trans* communities. Though these contributions to scholarship are valuable, it leads us to question: who should be doing this work? Specifically, we encourage both those who identify as and are not part of queer and trans* communities to critically engage with the possibility of participating in these movements.

For queer and trans* people who are engaging in this type of thinking in scholarship and practice, interdisciplinary perspectives would argue that is imperative to reflect on which visions of queerness and trans*ness are individuals replicating. For example, theorists have revealed the ways that queer and trans* individuals themselves may be socialized to and perpetuate forms of being that fit within homonormative ideologies and those entrenched in genderism (Cohen 1997; Duggan 2002, 2003; Warner 1999). Therefore, part of the work that queer and

trans* people must engage is reflecting on the ways that they have been inculcated into the systems that they may be attempting to push against. Furthermore, as articulated earlier, those who identify as queer and trans* must also make an intentional effort to question how their visions of liberation are embedded in white supremacy and settler colonialism.

Beyond those who identify as queer and trans*, we also implore those who hold privileged sexual and gender identities to take up the charge to participate in queer and trans* ways of thinking. By moving away from the notion that queerness and trans*ness is limited to identity markers, individuals of all identities can critically advance practices actualize queer and trans* studies as an analytic. Those who identify as heterosexual and as cisgender can ask the questions of: What does it look like to make sense of the world through trans*ness (Green and Ellison 2014)? What can world-making look like at higher education institutions (Muñoz 1999)? And ultimately, what does thinking about gayness (Halperin 2012) and trans*ness (Valentine 2007) as cultural formations, as opposed to identity categories, mean for the ways that we engage our campuses? In asking these types of questions, those who identify outside of queer and trans* communities can still play a role in envisioning educational structures in forms that are more equitable.

Conclusion: A Call to Higher Education Scholars

In reflecting upon the current scholarly landscape of queer and trans* studies in higher education, several trends and opportunities become clear as it pertains to the interdisciplinary potential present in the field. Notably, higher education researchers have continued to expand knowledge about who and what is represented in the literature. For example, scholars have progressively brought to light the stories of queer and trans* individuals who hold other marginalized identities (e.g., Chan 2017; Duran and Pérez II. 2017, 2019; Garvey et al. 2018c; Goode-Cross and Good 2009; Goode-Cross and Tager 2011; Jourian 2017a; King 2011; Miller 2015, 2017, 2018; Narui 2011; Nicolazzo 2016a; Patton 2011; Peña-Talamantes 2013; Strayhorn 2014; Strayhorn and Tillman-Kelly 2013a, b). These studies illuminate how systems such as genderism, heterosexism, racism, and ableism manifest in educational environments to differentially impact queer and trans* students. This shift toward centering those with multiple marginalized identities has been possible, in part, due to the rising amount of research that utilizes critical and poststructural approaches to explicate the role of societal discourses and structures of domination (e.g., Blockett 2017; Carter 2013; Catalano 2015; Denton 2014; Duran and Nicolazzo 2017; Jourian 2017a, b, 2018; Lange and Moore 2017; Means and Jaeger 2013, 2015; Miller 2015, 2018; Miller and Vaccaro 2016; Narui 2011, 2014; Nicolazzo 2016a, b, Nicolazzo et al. 2017; Nicolazzo and Marine 2015; Revilla 2010; Tillapaugh and Nicolazzo 2016; Vaccaro and Mena 2011). Although these studies mark considerable changes to the scholarship in higher education, we contend that numerous possibilities still exist to further engage with queer and trans* studies in the field.

In particular, we return to Gossett et al.'s (2017) argument concerning the limitations that result from a sole focus on representations. Though this growth in scholarship on queer and trans* people, especially those with other marginalized identities, seems to operate as a *door* (presumably for aims of equity), Gossett et al. (2017) stated that visibility frequently leads to a *trap*. This trap depicts the ways that individuals are only accepted insofar that they fit in within dominant discourses. Therefore, scholars have honed in on certain populations and the systems that impact them without envisioning what educational systems could look like with queerness and trans*ness in mind. This is where we see the potential to engage the metaphor of the *trap door*, imagining a third option that allows the field to imagine new worlds that can exist in higher education. And importantly, we contend that interdisciplinary perspectives are integral to this world-making process.

An interdisciplinary future in higher education requires individuals to move past notions of queerness and trans*ness as being affixed to bodies or as functioning simply as identity markers. Instead, queerness and trans*ness symbolizes a politic, an analytic, and a form of world-making. By making this shift, researchers and practitioners can challenge the ways that the academy has relied upon individualistic norms, a prioritization of empiricism, and systems entrenched in oppression. To this end, interdisciplinary perspectives on queer and trans* studies are necessary to enact change in higher education. This is our call to higher education scholars. In reflecting upon the history of queer and trans* movements in the United States, it is exactly this willingness to resist taken-for-granted norms and to interrogate the oppression that those with multiple marginalized identities face that has resulted in new possibilities and worlds. To embrace interdisciplinarity in queer and trans* studies means to envision futures of liberation, to move through the trap doors that currently exist in higher education scholarship.

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Toward a More Critical Understanding of the Experiences of Division I College Athletes

4

Eddie Comeaux

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Abstract

With the centrality of commercialism in college athletics, the academic, physical, and social well-being of Division I athletes are arguably at risk. Although the NCAA's amateurism principle was designed to protect athletes' best interests, its effectiveness in the context of a multi-billion-dollar enterprise remains unclear, and, at times, contentious. This chapter reviews more than 30 years of research on the wide range of issues affecting the academic and personal well-being of athletes. Keeping the current for-profit culture of intercollegiate athletics in mind, the chapter includes a discussion of formal NCAA and member institution policies, including Title IX, transfer rules, policies concerning concussive injuries, and social media; it also describes athletes' academic engagement and the supports designed to facilitate their academic success, as well as the effects of the campus racial climate on their experiences. The chapter highlights gaps in the literature to inform future scholarly research in these important areas.

Keywords

College athletes · Rights · Campus climate · Race · Gender · Equity · Inclusion · NCAA · Intercollegiate athletics · Commercialism · Black athlete · Amateurism · Title IX · Concussions · Social media · Data-driven practices

Toward a More Critical Understanding of the Experiences of Division I College Athletes

For decades, the pageantry and spectacle – and business – of college athletics have aroused passions and sparked national discussions about its role within US higher education (Clotfelter 2011; Comeaux 2015a; Duderstadt 2000; Gurney et al. 2017; Thelin 1996). At the core of these important conversations are concerns about fairness and well-being with respect to athletes in Division I “big-time” college and university athletics – that is, those competing in revenue-generating sports in the Power Five conferences.¹ These conversations stem, at least in part, from concerns about whether the role of athletics is eclipsing the role of academics, especially for athletes.

The Knight Commission on Intercollegiate Athletics (2010) noted, for example, that per-student spending on athletics between 2005 and 2008 increased at a rate 4–11 times faster than spending on academics. Relatedly, Desrochers (2013) found that in the public colleges and universities in the six major football conferences (Southeastern, Big 12, Pacific-10, Atlantic Coast, Big Ten, and Big East), median

¹Power Five conferences include the Atlantic Coast Conference (ACC), Big Ten Conference (BIG), Big 12 Conference, Pac-12 Conference, and Southeastern Conference (SEC).

annual athletic spending was more than \$100,000 per athlete – 6–12 times the amount spent per student on academics. The funds that have flowed into athletic programs at these schools have contributed to the creation of major commercial entertainment with considerable revenue-generating capabilities for postsecondary institutions as well as corporate sponsors (Eitzen 2016).

The total revenue received by the National Collegiate Athletic Association (NCAA) for the fiscal year ending in 2015 exceeded \$1 billion (NCAA 2015a); at present, a significant portion of the NCAA's revenue comes from a 14-year, \$10.8 billion agreement with CBS and Turner Sports for the television and marketing rights to the men's basketball tournament (Wolverton 2010). In 2011, the University of Texas agreed to a 20-year, \$300 million contract with ESPN to distribute its sports television network (Rosenberg 2011). And, in recent years, a number of schools have switched their conference affiliations – in an ongoing, and disruptive, process known as conference realignment – in a quest for greater revenue streams from radio and television contracts (Smith and Hattery 2017). Revenue from lucrative deals with corporate sponsors and media outlets allow many head football coaches to receive generous compensation packages, which may compromise academic values and demonstrate evidence of misplaced priorities of a college or university (Eitzen 2016; Gerdy 2006; Sperber and Minjares 2015). For instance, in 2019, Clemson University's head football coach, Dabo Swinney, received a 10-year, \$93 million contract extension and the average annual salary for head coaches in the Power Five conferences was more than \$3 million (Sallee 2019).

The NCAA and member conferences continue to push for ways to expand their product – including televised games and national commercial ad campaigns – even in the face of claims that athletics create an organizational culture whereby academic goals and obligations of athletes are devalued or are less of a priority among athletic stakeholders (Bowen and Levin 2003; Eitzen 2016; Gerdy 2006; Jayakumar and Comeaux 2016). Sack (2009) suggested that the organizational problems in college sports are a result of differences in underlying assumptions and values about higher education. He summarized three conceptual models – academic capitalism, intellectual elitism, and athletes' rights – each of which views the notion of commercialism – that is, the prioritization of making money from athletics – in a somewhat different way.

Academic capitalism supports the commercialization of college sports under the assumption that it provides revenue streams that broaden access to higher education as well as opportunities to enhance the academic talent development of athletes. Former NCAA president Myles Brand believed, according to Sack, that “commercialism is a good thing as long as commercial activities are perfectly in tune with the values, mission and goals of higher education” (2009, p. 79). In contrast, *intellectual elitists* prioritize the academic enterprise. According to Sack (2009), they believe excessive expenditures and an overemphasis on generating revenue and winning games detract from the fundamental values, practices, and mission of higher education at athletes' expense (Bowen and Levin 2003; Knight Commission 2010). Supporters of the intellectual elitist model, unlike academic capitalists, argue that the highly commercialized athletic enterprise, at times, contributes to the exploitation of students who participate in athletics as well as to the erosion of their academic success. They are concerned, for example, with the emphasis on, and drive for,

winning and profits that lead many schools to consider “special admit” athletes who may be underprepared academically or may not meet admissions standards of the institution.

Proponents of *athletes’ rights* argue that intercollegiate athletics is a commercial entertainment business aligned with NCAA and member institution policies that are inequitable for Division I athletes. They view athletes as part of an exploitive arrangement because they are not considered employees, even though they produce the demand for much of the product. The impressive (albeit educationally questionable) commercial success of the nonprofit NCAA and its member institutions has enabled disproportionately (privileged) White athletic power brokers – for example, coaches, athletic directors, conference commissioners, and externalities such as sponsors – to benefit financially from this agreement, conveniently relying on the sweat and undercompensated athletic labor of amateur athletes, who more often than not are Black students (Branch 2011).

While record sums of money continue to exchange hands, and the NCAA argues that student participation in intercollegiate athletics is an avocation, advocates of college athletes – for example, National College Players Association² – have raised concerns about whether the current system is fair to athletes and whether it sufficiently supports their academic or personal well-being. For example, athletes in the revenue-generating sports of football and basketball – most of whom are Black – are profitable commodities who expose themselves to life-altering and even life-threatening injuries, yet they do not receive equitable remuneration for their athletic labor (Borden et al. 2017; Huma and Staurowsky 2012).

Concerns about well-being go beyond physical health. Research has shown that special admit athletes do not perform well academically once they arrive on college campuses, and they pose unique challenges to their respective schools (Phillips 2008). The outcomes are especially striking at elite private schools, where special admit athletes tend to be positioned near the bottom of the class (Bowen and Levin 2003; Phillips 2008). In a survey administered to Atlantic Coast Conference schools, Barker (2012) revealed that special admit athletes graduated at lower rates and dropped out at higher rates than other athletes. At North Carolina State University, for example, only 35% of the 23 athletes classified as special admits in 2005 ultimately graduated, whereas the Graduate Success Rate for all athletes at the school was 77% (Barker 2012). These students are put in contradictory positions in which decisions associated with their athletic and academic commitment appear at odds with the fundamental values and goals of schools.

Reformers who fit both the intellectual elitist and athletes’ rights models are justifiably concerned with the commercialism and winning-at-any-cost mentality of campus athletic departments, including dishonest academic practices. Unfortunately, some Division I schools have acted unethically and found ways to game the system. Beginning in 2010, for example, there was a widely publicized corruption and

²Nonprofit organization comprised of current and former college athletes that work to protect the rights and well-being of college athletes.

academic fraud scheme at the University of North Carolina (UNC) at Chapel Hill. More than 3,100 UNC students – nearly half of whom were athletes – enrolled in a range of African and African American studies “no-show” classes or classes that never met and received unearned grades, keeping them eligible to play (see Berkowitz 2015). Situations like this raise important questions about whether athletes’ best interests are being served by the current system.

Given the vulnerability of athletes to competing obligations, schemes to keep them eligible for play, and general pressures surrounding athletic participation, it is essential that campus leaders explore the policies and procedures ostensibly put in place to protect them. In particular, they must determine whether formal NCAA and member institution policies and rules designed to protect athletes’ best interests are actually working. Likewise, we must have greater clarity concerning the effectiveness of intervention strategies designed to support their academic and personal well-being. And, given the racial demographics of athletes in revenue generating sports, we must understand the effects of a hostile campus racial climate on their experiences (Comeaux 2013a, 2017; Huma and Staurowsky 2012; Knight Commission 2010; Simons et al. 2007; Zimbalist and Sack 2013).

The goal of this chapter is to explore the literature on the range of issues that affect Division I athletes in US higher education. Athletes in Division I schools have high visibility in the athletic enterprise, and there is often a heavy push for Division I programs to generate revenue, win games, and successfully compete in post-season football bowls and other sports’ tournaments. As I discuss in the next section, compared to those in other divisional classifications, Division I athletes tend to experience the strongest internal and external pressures, and they are arguably in the crosshairs of major problems plaguing intercollegiate athletics (Nocera and Strauss 2016). Through a thorough exploration of the literature, I reveal knowledge gaps in our understanding of Division I athletes’ experiences – both as students and as athletes – and, in turn, highlight deficiencies in NCAA and member institution policies designed to ensure their inclusion, safety, and well-being. First, however, we need a better understanding of the students who participate in intercollegiate athletics. In the next section, I provide a broad description of this unique group.

Profile of Division I Athletes in US Higher Education

College athletes are a unique subset of the US higher education student population. Roughly half a million students on 19,750 teams at 1,120 4-year public and private colleges and universities compete in 24 sports each year across three NCAA classifications: Divisions I, II, and III (see NCAA 2019). My focus here is on Division I schools, which tend to be larger with more students and larger athletic operating budgets than Division II and III schools. Division I schools generally offer a wider range of sport participation opportunities and have more athletic scholarships as well as more stringent recruitment policies and academic requirements. Division II schools do offer athletic scholarships, but the vast majority cover only a

Table 1 Average graduation success rates (GSRs) for Division I athletes in 2015–2018 cohorts

	2015–2018 Cohorts (%)
Division I overall	87
Division I men	82
Division I women	93
Division I football bowl subdivision	87
Division I football championship	86
Division I (no football)	89

Source: 2018 NCAA Trends in Graduation Success Rates at NCAA Division I Institutions, <http://www.ncaa.org/about/resources/research/graduation-rates>

Note: GSR is a metric designed to better reflect the enrollment and transfer patterns of Division I athletes. The GSR accounts for athletes who depart or transfer to another school in good academic standing

portion of tuition and expenses; Division III schools do not offer athletic-related financial aid.

All schools in Division I are divided into groups based on football affiliation (see Shannon 2017). Football Bowl Subdivision (FBS) schools, which comprise about 10 conferences and 130 member schools, participate in bowl games; each can offer up to 85 full athletic scholarships to football players in any given year. In addition, there are about 124 Football Championship Subdivision (FCS) schools participating in NCAA-run football championships. These institutions can award up to 63 full scholarships to football players each year with the exception of the Ivy League, which does not offer athletic scholarships. A third group of Division I schools – with about 90 members – does not sponsor football at all; they are simply known as Division I (no football). Table 1 highlights the average Graduation Success Rates (GSRs)³ for Division I athletes in 2015–2018 cohorts.

In NCAA Division I institutions, differences between college athletes and their nonathlete peers can be subtle. Both groups tend to enroll in full course loads and, at times, are faced with stresses and expectations of the academic and social environment. Unlike students in the general population, however, college athletes have many demands outside the classroom as a result of their participation in sport, creating, at times, substantial challenges to student life (Comeaux and Harrison 2011). Within highly commercialized, big-time athletic departments, coaches expect a great deal of their athletes' time for practices, travel, team meetings, and competitions. On average, Division I college athletes devote more than 40 hours a week to sport-related activities (Wolverton 2008), despite the fact that under current NCAA rules, athletes are supposed to spend no more than 20 hours a week on required

³The NCAA designed the GSR metric to better reflect the enrollment and transfer patterns of Division I athletes. The GSR accounts for athletes who depart or transfer to another school in good academic standing. In the Federal Graduation Rate (FGR), these same athletes are considered non-graduates. The GSR generally is about 20 percentage points higher at most schools than the rate reported by the FGR (see Southall et al. (2012).

Table 2 2018 Graduation success rates (GSRs) for Division I athletes by race and gender

Athlete group	2018 GSRs (%)
Overall	88
White	92
Black	79
White males	88
Black males	75
White females	95
Black females	86

Source: 2018 NCAA Trends in Graduation Success Rates at NCAA Division I Institutions, <http://www.ncaa.org/about/resources/research/graduation-rates>

Note: GSR is a metric designed to better reflect the enrollment and transfer patterns of Division I athletes. The GSR accounts for athletes who depart or transfer to another school in good academic standing

athletic activities during a playing season and while school is in session, and 8 hours during the offseason (NCAA 2012–2013a).

Division I athletes endure mental fatigue, physical exhaustion, and nagging injuries, leaving them considerably less time for academic pursuits and other educationally sound activities. Moreover, whether by choice or as the result of influence from the business-like structure of athletics, college athletes often live, eat, study, and socialize together, and they are often tracked into the same majors, which can lead to academic and social isolation from the rest of the campus community (Fountain and Finley 2009; Jayakumar and Comeaux 2016). Division I athletes generally do not perform as well in the classroom as their nonathlete counterparts (Eitzen 2016; Pascarella et al. 1999).

Demographic factors, such as race, gender, and sport, also impact Division I athletes' campus experiences. Table 2 highlights the GSRs for Division I athletes by race and gender. It is well documented that Black men and women who compete on Division I teams experience some of the most detrimental stereotypes and negative labels on campus (Bruening et al. 2005; Comeaux 2018; Simons et al. 2007; Singer 2005). In particular, these athletes tend to be the objects of low academic expectations. Scholars have raised important questions about graduation rates and whether the most highly publicized Division I athletes in the revenue sports of football and men's basketball – who are disproportionately Black – are being educationally reimbursed or even receiving a meaningful education for their athletic labor (Eitzen 2016; Jayakumar and Comeaux 2016; Shropshire and Williams 2017).

Harper (2018) reported that only 55.2% of Black male athletes graduated within 6 years, compared to 69.3% of athletes overall. The lower average completion rates for Black athletes than for others are perhaps in part because the commercialism of athletics emphasizes a business model, superseding academic goals. Lack of care and investment in the quality of athletes' academic experiences is tied to race and inequity in complicated ways, as White supremacy has long been the bedrock of American identity and culture (Hawkins 2010). Black athletes, unlike their white counterparts, tend to be viewed as a disposable commodity, possessing value only

relative to the interests of primarily White athletics stakeholders, while their academic talents are ignored (Gayles et al. 2018). For reasons of racial equity – broadly defined as fair and just academic experiences, opportunities, and outcomes for students of color at predominantly White institutions (Harvey 2003) – athletic stakeholders must do more to improve the educational experience and school-to-career transitions of Black athletes and to strike a proper balance between their athletic pursuits and their academic achievement. At present, colleges and universities have done very little to address this exploitive structural arrangement.

Division I male athletes tend to have more challenges to their academic and athletic lives than their female athlete counterparts. Female athletes exhibit, on average, academic performance similar to that of their nonathletic peers and considerably better than that of male athletes (Simons et al. 1999). For Division I athletes entering college in 2010 and tracked over a 6-year period, female athletes graduated at a rate of 75%, compared to only 61% of their male counterparts (NCAA 2018a). These gender differences might be related to male athletes' over-identification with and strong commitment to the athletic role at the expense of their academic goals (Melendez 2007). Moreover, the values and organizational culture of male and female programs may help to explain why female athletes are more successful academically than male athletes (Southall et al. 2005). I expand on this unique group of Division I male and female athletes in the sections that follow. First, however, it is instructive to explore the history and guiding principles of the NCAA, which regulates so much of what happens in college athletics.

The NCAA Amateuism Model

In 1906, the NCAA assumed the core role of adopting and enforcing rules and policies in intercollegiate athletics, and it now serves as the governing and organizing body. The NCAA's stated purpose is "to maintain intercollegiate athletics as an integral part of the educational program and the athlete as an integral part of the student body and, by so doing, retain a clear line of demarcation between intercollegiate athletics and professional sports" (NCAA 2012–2013a, p. 1). As such, the policies and principles of the NCAA and its member institutions are at the heart of debates about whether Division I athletes are being treated fairly and justly. The NCAA's principle of amateurism has been considered a bedrock principle of the organization; it suggests that athletes are students first and foremost, and that they participate largely for quality educational benefits. NCAA amateurism ideal's history, evolution, and application are far from straightforward, however.

History of the Amateurism Model

Amateurism is the cornerstone of college athletics (Lemons 2017). The NCAA amateurism model originated from the nineteenth-century British aristocratic belief that amateurs who played sports purely for pleasure should not be competing against

working-class opponents who were financially compensated to play. Supporters of amateur ideals despised the idea of “pay for play” because they believed it would lead to unscrupulous behaviors. Following this model, the NCAA’s principle of amateurism states that college athletes “should be motivated primarily by education and by the physical, mental, and social benefits to be derived. Student participation in intercollegiate athletics is an avocation, and student-athletes should be protected from exploitation by professional and commercial enterprises” (NCAA 2012–2013a, p. 4). The evolution of the NCAA’s definition of amateurism from its origins to the present reveals the complexity of this principle.

The NCAA’s 1906 bylaws were consistent with the British ideal of sport for intrinsic reward, but boosters, alumni, and even athletic departments violated the rules – such as by providing illegal payments to athletes – to gain competitive advantage (Savage et al. 1929). For example, in 1929, Savage and colleagues looked at 112 colleges and universities and found that 81 had violated NCAA amateur rules. To ensure compliance with the rules, the NCAA developed a code of ethics and passed the 1948 Sanity Code, which enabled financial need-based aid (not on the basis of athletic ability) to athletes for tuition and meals. This move, some critics have argued, contradicted the British amateur sport model and served as the first step toward professionalism (Sack and Staurowsky 1998). After a lack of support and a repeal of the Sanity Code from participating schools, the NCAA eliminated the code altogether in 1952.

In 1956, roughly 50 years after adopting the British model, the NCAA changed its position on athletic scholarships and approved new legislation awarding 4-year grants-in-aid based on athletic ability. It argued that awarding this aid to athletes did not constitute “pay for play,” and as such did not violate amateurism principles (Muenzen 2002; Southall and Staurowsky 2013). During that period, to avoid workers compensation claims from athletes, the NCAA mandated that “financial aid could not be reduced or canceled due to injury, canceled on the basis of an athlete’s contribution to team success, injury, or decision not to participate” (Zimbalist and Sack 2013, p. 4). To remain consistent with the British model, the NCAA asserted that financial aid was not payment, and instead considered it a full cost-of-attendance allowance (or help to further the education of athletes).

Walter Byers – in 1964, while in his role as NCAA executive director – deliberately invented and mandated the use of the term “student-athlete” for the organization’s own political and economic interests and to protect its amateur principles. One goal of this calculated ploy was to persuade lawmakers, courts, and the public that athletes were ordinary students rather than professionals or employees (Sack and Staurowsky 1998). In his memoir, Byers (1995) reported, “We crafted the term student-athlete, and soon it was embedded in all NCAA rules and interpretations as a mandated substitute for such words as players and athletes.” This was done to avoid “the dreaded notion that NCAA athletes could be identified as *employees*” (p. 69). This public relations campaign served to protect the NCAA’s monopolistic practices and amateurism ideals while allowing the organization to enrich itself. It should be noted that the NCAA also pushes the narrative that more than 90% of their athletics revenue supports its member institutions. However, direct financial support for

academics is limited at many NCAA member institutions. According to Wolverton and Kambhampati (2017), “less than \$1 of every \$100 in revenue generated by major college athletic departments at public colleges is directed to academic programs” (para. 1).

In 1973, the NCAA drifted further away from the amateurism model, approving legislation that replaced 4-year scholarships with 1-year renewable grants, giving coaches the power to cancel scholarships for almost any reason (e.g., injury, athletic performance, and change in coaching staff). This approach more closely resembles an employment relationship, where compensation is directly connected to athletic performance (McCormick and McCormick 2006). Nevertheless, the NCAA has continued to argue that college athletes are not employees (see Patterson 2013).

Over the past two decades, numerous criticisms of the NCAA amateurism model have been raised (Branch 2011; Huma and Staurowsky 2011; McCormick and McCormick 2006; Muenzen 2002; Zimbalist and Sack 2013). Scholars have questioned: (a) the varying NCAA definitions of amateurism, which may be self-serving; (b) whether college athletes should still be considered “amateurs”; (c) why amateurism applies to college athletes but not the multibillion-dollar NCAA enterprise; and (d) whether the NCAA can defend its amateur sport ideals in antitrust claims made against the NCAA and member institutions. Taylor Branch (2011), for example, argued:

[T]wo of the noble principles on which the NCAA justifies its existence—“amateurism” and the “student-athlete”—are cynical hoaxes, legalistic confections propagated by the universities so they can exploit the skills and fame of young athletes. (p. 82)

Current literature has documented that the stated definition of amateurism has not changed in the NCAA manual, but its application has evolved over time as the NCAA and member institutions have responded to external pressures and demands from constituents and the public (Allison 2001; Byers 1995; Crowley 2006; Pierce et al. 2010; Sack and Staurowsky 1998; Thelin 1996). Given the various iterations over the years, the NCAA has been criticized for what many see as an ever-changing, self-serving notion of amateurism (Huma and Staurowsky 2011; Muenzen 2002). In a report endorsed by The Drake Group, Zimbalist and Sack (2013) concluded that “The NCAA maintains its own, idiosyncratic, changing, frequently arbitrary, and often illogical definition of amateurism [that is] constantly changing to meet industry needs” (p. 7).

The current NCAA manual (2012–2013a) states that a “student-athlete may receive athletically related financial aid administered by the institution without violating the principle of amateurism, provided the amount does not exceed the cost of education authorized by [the NCAA]” (p. 5). Huma and Staurowsky (2012) argued that this constitutes “pay for play,” and “only under the terms and conditions most favorable to NCAA leadership” (p. 6). They noted that if college sports revenue were distributed as in professional sports, the average Division I FBS player would be worth \$137,357 per year, while the average basketball player at that level would be worth \$289,031.

These and other authors have made compelling cases that the most highly publicized athletes in the revenue generating sports of football and men's basketball – athletes who are disproportionately Black – are denied their fair market value and, moreover, are not receiving adequate health benefits for their contributions to athletic programs (Branch 2011; Donnor 2005; Hawkins 2010; Huma and Staurowsky 2012). Meanwhile, the NCAA and member institutions, including primarily White coaches and athletic directors, reap the material benefits from this athletic enterprise (Sack 2009). The Ohio State athletic director, for example, received an \$18,000 bonus when one of the university's wrestlers won the NCAA championship. (The particular irony here is that most college wrestlers generally do not receive full athletic scholarships.) It seems clear that the NCAA, and its member institutions, continue to maximize its profits while athletes – particularly those in the revenue-generating sports of football and men's basketball – are undercompensated for their athletic labor.

Literature and Case Law on NCAA Amateurism

To date, the vast majority of literature on NCAA amateurism model NCAA amateurism has provided broad theoretical and conceptual guidance, but not empirical analysis. There has been little extant empirical research on the issue, even though we have witnessed a recent wave of court cases and ongoing antitrust claims – for example, *O'Bannon v. NCAA* (2009, 2015), *Agnew v. NCAA* (2011), *Alston v. NCAA* (McCann 2018), *Jenkins v. NCAA* (2014) – from current and former college athletes as well as other advocates for athletes. Some research has shown that external pressures have affected how the notion of amateurism has been applied (Allison 2001; Byers 1995; Crowley 2006; Pierce et al. 2010; Sack and Staurowsky 1998; Thelin 1996). For example, the NCAA has put a priority on advancing public perception that college athletes are amateurs or like other students rather than like paid professional athletes (Lemons 2017; Sack and Staurowsky 1998).

One notable study came from Pierce et al. (2010), who drew from the Eligibility and Secondary Infractions database within the Legislative Services Database for the Internet (LSDBi) to identify reinstatement cases involving amateurism violations. They examined NCAA actions from 1999 to 2006 to understand their application of amateurism, and they identified several influential factors. They discovered that the contemporary application of amateurism was influenced by the autonomy of NCAA member institutions in decision-making associated with their athletic programs. For example, in 1956, member institutions violated established NCAA amateur principles when they disregarded them and offered 4-year grants-in-aid based on athletic ability (Sack and Staurowsky 1998; Thelin 1996). As well, the authors found there has been an economic incentive for major athletic stakeholders – for example, successful coaches, athletic directors, and corporate sponsors – to convince the public and the athletic community that athletes are amateur to avoid fairly compensating those in revenue-generating sports for their labor (Lumpkin 2017). The great majority of coaches, senior-level administrators, and executives in athletics have

upheld this long-standing project of collecting the benefits of undercompensated athletic labor (Gayles et al. 2018).

Pierce et al. (2010) revealed that the winning-at-all-costs college athletics movement adopted by NCAA member institutions has altered the application of amateurism. Big-time athletic programs, for example, have struck massive deals with the highest bidders for naming rights on mega-football stadiums, basketball courts, and practice facilities while securing additional revenue streams for the purposes of increasing athletic expenditures to remain competitive in the “athletic arms race” and to enhance their chances of winning championships (Comeaux 2015a; Edwards 1984a). The irony is that additional spending in athletics does not equate to athletic success for many big-time athletic programs, which raises questions about reasons for the rampant spending spree (Hoffer and Pincin 2016). Zimbalist (1999) concluded: “the common arguments frequently made to justify committing large resources to college athletics—that they directly or indirectly support the school’s educational mission or its finances—do not stand up to empirical scrutiny” (p. 171). Too often, the increasing emphasis on and quest for winning games and championships and securing corporate sponsorships trumps NCAA amateur sport ideals (Thelin 1996).

Recent Court Cases Against the NCAA

The validity of the NCAA’s amateurism defense has weakened over time, primarily because of the undeniable existence of economic and commercial interests (e.g., athletic television contracts, bowl game revenue, conference realignment, etc.) that conflict with amateurism ideals (Lemons 2017). A number of high profile and important lawsuits have been brought against the NCAA by athletes over the past decade, alleging violation of US anti-trust laws because NCAA rules restrict what athletes can receive while playing sports. In *O’Bannon v. NCAA* (2009), for example, former football and men’s basketball players noted that athletes are not able to profit off their own names, images, or likenesses in games, NCAA video games, television, or advertising and argued that this violates federal anti-trust laws by limiting their compensation. In August 2014, District Judge Claudia Wilken ruled the NCAA’s restrictions violated antitrust laws. The ruling required the NCAA to permit member institutions to compensate athletes (a) up to the full cost of attendance and (b) up to \$5,000 per year in deferred compensation for commercial use of their images and likenesses after they leave school (*O’Bannon v. NCAA* 2009).

The NCAA appealed Wilken’s verdict to the United States Court of Appeals for the Ninth Circuit. In December 2015, the Ninth Circuit (in a 2–1 vote) affirmed that NCAA member institutions should provide athletes up to the full cost of attending college (*O’Bannon v. NCAA* 2015). However, the injunction that Judge Wilken imposed to pay athletes up to \$5,000 per year was reversed. The Ninth Circuit explained that the “district court ignored that not paying student-athletes is *precisely what makes them amateurs*” and that cash payments beyond the cost of attending college and educational expenses represent “a quantum leap” (*O’Bannon v. NCAA*

2015; emphasis added). College athletes can claim partial victory for the Ninth Circuit antitrust ruling and the O'Bannon case.

Several other cases further demonstrate the struggle between college athletes and the NCAA and member institutions over the NCAA's actions and the impact of amateurism ideals on college athletes. In *White v. NCAA* (2006), former NCAA Division I football and men's basketball players filed a class action antitrust lawsuit challenging the NCAA's rule limiting the maximum value of athletic scholarships to the value of tuition, fees, room and board, and books, which amounts to less than the true cost of attendance. In 2008, the NCAA agreed to a settlement that made, among other things, \$218 million available to athletes for those expenses through the end of the 2012–2013 season and allowed schools to give athletes healthcare coverage.

In October 2010, Joseph Agnew, a former Rice University football player, filed a class action lawsuit against the NCAA over its 1-year athletic scholarship policy (*Agnew v. NCAA* 2011). After Agnew sustained injuries during his sophomore season, his athletic scholarship was not renewed by the newly hired head football coach. In this case, Agnew appealed the university's decision and retained an athletic scholarship for his junior year, but his scholarship was not renewed for the following year (for other notable antitrust lawsuits, see *NCAA v. Board of Regents of University of Oklahoma* [1984]; *Banks v. NCAA* [1992]; *Jenkins v. NCAA* 2014).

The Challenges of Amateurism

In light of previous work (e.g., Hawkins et al. 2015; Huma and Staurowsky 2012; Pierce et al. 2010), it appears that the NCAA and member institutions act in ways that are inconsistent with the concept of amateurism and that athletes are not fairly treated or compensated for their athletic labor. Finding a balance between commercialism and the academic interests and well-being of students who participate in collegiate athletics is far from straightforward, yet a number of recommendations have been proposed. For example, students would benefit from keeping the playing season to a single academic term in all sports to reduce unnecessary academic pressures (Knight Commission 2010; Lumpkin 2012). To restore balance between athletics and academics, the Knight Commission (2010) recommended: (a) greater transparency, including better measures to compare spending on athletics to spending on academics; (b) rewards for practices and policies that make academic values a priority; and (c) treatment of college athletes first and foremost as students, rather than as professionals.

Even with changes such as these, public scrutiny of the NCAA's amateurism model from researchers, reformers, and other college athlete advocates – coupled with recent court rulings and pending antitrust claims – demonstrates that the current model does not fairly compensate athletes for their labor and forbids them from earning money on their name, image, and likeness. The current amateurism model can and should be reevaluated, and an equitable, evidence-based model considered (Branch 2011; Lemons 2017; Sack and Staurowsky 1998). Such a model must take into account the full range of issues that affect the experiences of athletes,

particularly those in high-profile, revenue-generating sports. With all of this in mind, in this chapter I explore what we know about the experiences of Division I athletes – both as students and as athletes – to identify areas in need of additional research and build a foundation for further work that ensures their academic and personal well-being. To do so, I draw from more than 30 years of published studies, compiled through a systemic review of the literature, which I describe next.

Review Method

To enhance the well-being of college athletes within the context of NCAA and member institution policies and priorities, we need to pay closer attention to their experiences – both on and off the playing field – from enrollment through graduation. There is an expanding body of literature on the topic of college athletes' financial, legal, and academic rights, as well as their personal and academic well-being (Berkowitz 2013; Comeaux 2017; Comeaux and Harrison 2011; Gayles and Hu 2009; Huma and Staurowsky 2011, 2012; Konsky 2003; McCormick and McCormick 2008; McCormick and McCormick 2006; Sack 2008; Sack and Staurowsky 1998; Snyder 2013). This work addresses topics that range from equity and fairness under NCAA rules (Comeaux 2017; Huma and Staurowsky 2012) to brain function in college football players who have experienced head injuries (Marchi et al. 2013). These issues and concerns have gained increased attention in recent years – perhaps in part because of ongoing antitrust litigation against the NCAA regarding concussions and compensation, as well as pressures from internal and external stakeholders of athletics about athletes' rights and collective well-being (Comeaux 2017). Policymakers, college and university leaders, and attorneys are searching for evidence to guide policy development and best practices (Staurowsky 2015). There is perhaps no better time to explore what we know and to highlight what has yet to be explored in the research.

To this end, I systematically reviewed more than 30 years of the extant research literature related to college athletes' experiences in US higher education. I restricted my search to works published between 1985 and 2018. I selected 1985 as the year to begin the search because, during that time, college athletics was becoming increasingly commercialized. Some scholars have argued that this is the year when college athletics began to drift away from both its amateur principles and the overall well-being of college athletes (Eitzen 2016; Sack and Staurowsky 1998).

I conducted a broad search of key databases, including Educational Resources Information Center (ERIC), Academic Search Premier, Sociological Collection, Google Scholar, JSTOR, and PsycINFO. I selected these databases because they catalog the highest quality research. I used a combination of two key terms – *college athlete* and *student-athlete experience* – with several other terms and phrases: *rights*, *financial rights*, *legal rights*, *NCAA amateurism*, *policy*, *compensation*, *campus climate*, *academic support*, *commercialism*, *racism*, *academic rights*, and *Title IX*. I chose these search terms after an initial scan of the literature on the college athlete experience, and based on Comeaux's (2017) anthology. This earlier volume

discussed NCAA bylaws and legal decisions that have influenced college athletes' abilities to pursue higher education and how formal policies of the NCAA and member institutions often leave athletes vulnerable and exploitable. I included peer-reviewed journal articles, dissertations, scholarly books, book chapters, essays, and research reports. I consulted the reference lists in these identified works to ensure that other important studies were not overlooked.

I also examined NCAA manuals for policy discussions and to offer additional context for this review. I used the Google search engine to identify and review the work of leading advocacy groups for college athletes' legal rights and their social, emotional, and academic well-being – for example, the Knight Commission on Intercollegiate Athletics, The Drake Group and the National College Players Association. These groups have developed and contributed comprehensive reports, and in some cases relevant athletics-related discussions, that help inform how we think about the Division I athlete experience. Lastly, several experts on college athletes reviewed the list of scholarly works that emerged from these methods and recommended additional sources for inclusion. Based on their recommendations, I reviewed a foundational Carnegie Foundation report by Savage and colleagues, published in 1929, because it informed current understandings of the college athlete experience and raised considerable concerns about commercialism and integrity in athletics.

Because of the relatively limited research on college athletes' experiences in US higher education, eligibility for inclusion in the review was necessarily broad. I first reviewed the title and abstract for each work to gauge its relevance and to determine whether it should be included in this study. I included large-scale quantitative studies and qualitative studies as well as case law. I also included relevant information on diverse expert opinions on college athletes' experiences, protections, and supports. After I culled the more than 1,380 works produced by my search to identify those associated with the athlete experience, I filtered the resulting list to approximately 260 studies that addressed particular aspects of the college athlete experience. I specifically looked for issues related to amateurism, well-being, equity, academic support, commercialism, campus climate, and rights – issues that all emerged as important in my earlier foundational work on the rights and well-being of college athletes (Comeaux 2017). Studies on campus climate tended to be associated with the quality of experience (or lack thereof) for college athletes, and specifically the influence of institutional characteristics, as mediated by climate, on athletes' academic success; studies on equity tended to be associated with Title IX and gender equity as well as racial inequities among athletes; case law studies tended to be related to NCAA amateurism ideals and athletes' rights. I then filtered the list to approximately 205 that addressed NCAA Division I college athletes, specifically those in Division I schools. The final list was further culled based on breadth and depth of empirical engagement to include studies in which characteristics of the Division I athlete experience were explicitly examined. This approach excluded some theoretical and conceptual analyses. For example, Orleans (2013) was excluded because it was limited to a conceptual discussion of the effects of the current economic model in college athletics on the

athlete experience, and further research is needed to confirm the proposed hypothesis.

In the sections that follow, I review the research on the wide range of issues that affect the academic and personal well-being of intercollegiate athletes. I begin with a discussion of formal NCAA and member institution policies, including Title IX, transfer rules, policies designed to protect athletes from long-lasting concussive injuries, and recently enacted social media guidelines. I then turn my attention to athletes' engagement in the academic experience and the types of supports that have been put in place to facilitate academic success. Finally, I discuss the effects of the campus racial climate on athletes' experiences – an especially important issue given the racial demographics of many Division I revenue-producing teams. In each section, I highlight implications for researchers as we move forward.

Formal Policies for College Athletes

In this section, I review the research on formal policies, including those created by the NCAA and member institutions. I begin with a discussion of the effects of Title IX legislation on women's participation in intercollegiate athletics. I then explore the NCAA's restrictions on athletes' ability to transfer between institutions and the potential effects on their academic interests. Next, I turn to concussions and how institutions and the NCAA can and do attempt to protect students from long-lasting harm. Finally, I describe policies and rules concerning athletes' social media usage and discuss whether these restrictions infringe on their individual rights.

Title IX: Opportunities for Women

Title IX of the Education Amendments of 1972 bars sex discrimination in all aspects of federally funded education programs, perhaps most notably intercollegiate athletics. The 1979 Policy Interpretation described three standards with which athletic programs must comply: (a) financial assistance (athletic scholarships) must be available proportional to the number of male and female participants in an institution's athletic program; (b) men and women must receive equivalent treatment, benefits, and opportunities, including equipment and supplies, facilities, games and practice times, and per diem; and (c) athletic interest and ability of male and female participants must be equally effectively accommodated (Johnson 1994). The third standard is evaluated based on a three-part test – athletic departments must: (a) provide participation opportunities for male and female students substantially proportionate to their respective undergraduate enrollment; (b) demonstrate a history and continuing practice of program expansion for the underrepresented sex; *or* (c) demonstrate that the interest and abilities of the underrepresented sex are fully and effectively accommodated (Anderson and Cheslock 2004).

Despite these requirements and the NCAA's gender equity principle for member schools, Title IX's goal has not been achieved (Acosta and Carpenter 2012;

Anderson and Cheslock 2004; Carroll and Humphreys 2000; Rishe 1999; Sigelman and Wahlbeck 1999; Staurowsky 1998). The NCAA's own data showed that, in 2004–2005, Division I men made up 47.4% of the undergraduate enrollment and 54.4% of intercollegiate athletes, while women made up 52.6% of undergraduates and 45.6% of athletes (NCAA 2012a). Division I member institutions have since made some gains, but female athletes still receive fewer participation opportunities; in 2010, Division I women's teams received approximately 28% of the total money spent on athletics, 36% of recruiting dollars, and 45% of athletic scholarship dollars. Acosta and Carpenter (2012), in a longitudinal national study, explored the impact of Title IX and the changing levels of women's participation, coaches, and athletic administrators for women's NCAA sports between 1977 and 1998. The authors discovered that while women's participation had steadily increased over the two-decade period, the numbers of female coaches in women's sports and female administrators for women's athletic programs had declined since the passage of Title IX.

Empirical research studies – typically quantitative studies – shed light on this participation and equity gap as well as level of compliance with regard to Title IX, although the findings do not paint a consistent picture. In 2004, Anderson and Cheslock examined equity between men and women in college sports at 703 institutions across all three divisional classifications. The authors discovered that institutions increased women's sports teams and the number of female athletes between 1995–1996 and 2001–2002, while there was virtually no change in men's teams, and the number of male athletes increased slightly. Findings differed by divisional classification. For example, Division I institutions added almost twice as many female athletes as their Division II and III counterparts. Anderson and Cheslock (2004) concluded that “in an era of rising higher education costs and unstable revenue sources, it is unrealistic to expect institutions to make all adjustments toward greater gender equity by adding female athletes; the cost of such leveling up would be prohibitive” (p. 310).

Certain institutional characteristics are negatively correlated with Title IX compliance, including having a large football program (Carroll and Humphreys 2000; Rishe 1999; Sigelman and Wahlbeck 1999). For example, Rishe (1999), using 1995–1996 data from 308 schools that were competing at the Division I level, found that the presence and profitability of a school's football program had a negative effect on the proportion of all expenditures for women athletes. Moreover, the presence of a large football program made it more challenging for schools to achieve financial gender equity when compared to schools without football programs. Similarly, Carroll and Humphreys (2000), employing multinomial logistic regression, developed a behavioral model of athletic directors' behavior under Title IX in a nonprofit college or university. Their theoretical model predicted that athletic departments would eliminate men's sports in order to comply with Title IX. The authors also revealed that the athletic program's size and prestige were inversely associated with the decision to drop men's sports.

Other studies (Anderson et al. 2006; Sigelman and Wahlbeck 1999; Stafford 2004) have explored the determinants of Title IX compliance in a regression model.

Stafford (2004), for example, examined the factors that determine whether an athletic program is in compliance with Title IX. Conducting a series of econometric regressions on the 2000–2001 compliance status of Division I institutions, she found that schools with a lower enrollment of women undergraduates were more likely to comply with Title IX, and schools with a football team were more likely to violate Title IX. Stafford concluded that the NCAA had not used its influence to encourage Title IX compliance from its NCAA member institutions. Sigelman and Wahlbeck (1999) found similar patterns. Analyzing data on more than 300 Division I athletic programs, they discovered that most schools – particularly those with football teams – were not in compliance. They also found that Title IX compliance was more common for schools with smaller athletic programs and those without football teams.

Anderson et al. (2006) examined the level of compliance with the substantial proportionality prong of Title IX across NCAA schools in the 2001–2002 academic year. Using a cross-sectional regression model, the authors in part found that, at schools where women represented 48–52% of the undergraduate student body, noncompliance rates were as high as 68–83%. Their findings also revealed that less selective, less wealthy, smaller schools with larger percentages of female students were less likely to be in compliance with substantial proportionality. As well, they noted regional differences: The gender proportionality gap in intercollegiate athletics was larger in schools in the Midwest and South, lending support to the work of Stafford (2004), who found that schools in the southern United States and Historically Black Colleges and Universities (HBCUs) were less likely to be in compliance.

Almost 50 years after the enactment of Title IX, women have greater opportunities to participate in intercollegiate athletics. However, the evidence demonstrates that the fight for gender equity in college athletics is far from over (Anderson et al. 2006). In recent years, formal complaints have been filed with the Department of Education's Office for Civil Rights, and several legal cases have been brought to courts (Samsel 2017). Given the potential public pressures of these actions, it would be instructive for additional studies, using complementary approaches such as case studies and surveys, to gauge how schools have improved Title IX compliance rates. Where they have failed to do so, we need a better understanding of both where the obstacles exist and how they can be addressed.

Future studies should continue to investigate positive and negative institutional characteristics associated with Title IX compliance as well as the relationship between the elimination of Division I men's sports and institutional policies and practices related to athletic spending. Colleges and universities should explore whether reducing budgetary excesses (e.g., coaching staff, travel distance, recruitment expenses, and travel staff) in football and men's basketball would allow for additional funds to be allocated to both women's and other men's sports (Knight Commission 2010; Lumpkin 2012). These steps would better enable colleges and universities to comply with Title IX requirements, achieve gender equity, and enhance participation opportunities for all athletes. Because schools in the South and Midwest tend to perform far worse in term of Title IX compliance than schools

in the West, future studies designed to understand sources of regional differences would be worthwhile.

Further, we do not know enough about the impact of Title IX on women's participation opportunities in college sports – particularly for women of color as athletes and administrators – or on male athletes. Future research should examine the influence of the Senior Woman Administrator (SWA) role, the highest-ranking woman in athletic administration among NCAA member schools, on the advancement of women of color leaders in intercollegiate athletics (Hoffman 2010). Under Title IX, sexual harassment and sexual violence are prohibited forms of gender discrimination. Yet these forms of gender discrimination are widely perpetuated (Acosta and Carpenter 2012). As such, to what degree are campus climate issues – including rape culture, sexual harassment, and discrimination on the basis of gender and other forms of identity – accounted for in determining Title IX compliance? Little qualitative work has investigated these issues or the quality of the educational environment the institution provides. Focus group discussions and semistructured interviews, for example, would allow more in-depth investigation into female college athletes' attitudes about and experiences with access to participation opportunities, gender equity, and gender discrimination. Through a feminist theory lens, with particular attention to race, we can better understand how athletes' experiences are gendered, as well as how sexism, racism, and other forms of oppression can be challenged. For example, we can document and explain the ways that women athletes have been marginalized and alienated because they do not meet the standards related to a specific form of hegemonic masculinity.

The discourse on gender equity tends to be framed around the idea that Title IX takes opportunities from male participants in athletics, which creates an adversarial road to gender equity and justice (Anderson and Cheslock 2004). As Staurowsky (1998) suggested, we need to reframe the conversation: "Once student education is again discussed with a fundamental respect for human dignity and the essential worth of every human being, there will be no need to discuss gender equity at all" (p. 23). This notion is very much in keeping with the idea that athletes' rights must be paramount, even in the context of a commercialized enterprise.

NCAA 4–4 Transfer Rules

The NCAA has restrictions on the process by which Division I college athletes can transfer from one 4-year institution to another, referred to as "4–4 transfer rules." Under NCAA Bylaw 14.5.1, unless exempted, athletes are required to complete one full academic year of residence at a certifying institution before they are eligible to compete (NCAA 2012–2013b). The transfer rules apply most stringently to Division I college athletes in baseball, football, men's ice hockey, and men's and women's basketball; these athletes are unlikely to be granted exceptions, waivers, or one-time transfers without penalty because they have, according to the NCAA, historically underperformed academically (Cali 2014).

In *McHale v. Cornell University* (1985), the NCAA argued that its transfer rules were designed to prevent transfers solely for athletic reasons, avoid the exploitation of student athletes, and allow students time to adjust to their environments. Scholars have questioned these stated goals, however (Jenkins 2006; Konsky 2003; Yasser and Fees 2005), and the extent to which NCAA regulations support the academic goals of college athletes is unclear. For instance, the rules do not provide an “academic exception” unless an athlete’s program of study is discontinued. As such, athletes who wish to transfer in order to change academic program or to acquire a higher quality educational experience are not allowed to do so without sitting out for a season. And the NCAA’s assertion that the transfer rules allow athletes to adjust to new environments is questionable. As Konsky (2003) argued, “These same restrictive rules...do not apply to student-athletes transferring from junior colleges to 4-year institutions. Arguably, junior college transfer students need as much, if not more, time to adjust” (p. 1598).

In the only empirical study on NCAA transfer rules to date, Heller et al. (2016) interviewed 47 Division I athletes from 20 schools about their views on NCAA transfer rules. The authors found that most participants believed that NCAA transfer rules are unfair because they are more restrictive for athletes than for head coaches. They concluded that the NCAA should “give athletes a greater voice in the governing process of intercollegiate athletics” (para. 49).

The current strict (and perhaps self-serving) NCAA transfer rules call into question the NCAA and member institutions’ motives and likewise their concern for athletes’ personal and academic well-being. As Konsky (2003) argued, the NCAA is motivated by commercial and economic interests, and thus their regulations should “come under the same scrutiny as those of other commercial organizations” and perhaps “be accomplished by less restrictive means” (p. 1607). It is worth noting that the NCAA is considering several proposals to reform the transfer rules, including head coaching change transfers and postgraduate transfers (Connelly 2018).

The research literature on NCAA 4–4 transfer rules has, to date, focused primarily on the protocol that college athletes must follow in order to transfer (Cali 2014). We know little about athletes’ actual transitions to other institutions – academic, athletic, or social – to know whether these rules ultimately benefit or hurt them. Future studies should explore qualitatively, through individual and focus group interviews and case studies, *why* athletes transfer and *how* transfer athletes adjust to their new environments after a full year of residency. Such an approach would offer a more robust understanding of athletes’ views about transferring, how transfer athletes adjust to their new environments, and how best their institutions and the NCAA can protect their academic and personal well-being. NCAA and athletic stakeholders – e.g., coaches, athletic directors, and conference commissioners – have been unwilling, at times, to grant transfer waivers to athletes (The Associated Press 2019). Future studies should examine qualitatively, through interviews, athletic stakeholders’ perspectives on NCAA transfer rules.

NCAA Concussion Policy

Over the past decade, sport-related concussions – particularly in sports like football, soccer, and hockey – have generated much public attention. A concussion, recognized by medical experts as a mild traumatic brain injury, was defined by the Congress of Neurological Surgeons (1996) as “a clinical syndrome characterized by immediate and transient posttraumatic impairment of neural functions, such as alteration of consciousness, disturbance of vision, equilibrium, etc., due to biomechanical forces” (p. 388). Concussions can vary widely in severity and may be caused by direct or indirect force to the head or elsewhere on the body that is transmitted to the head (Cantu 1996).

This type of injury is concerning for any athlete, but arguably especially for athletes who put their trust in colleges and universities to look out for their best interests. There is a good deal of recent empirical research on sport-related concussions over the past decade, due in part to the increased frequency of concussions in athletics (Duma and Rowson 2014), ongoing litigations (Axon 2014), and uncertainty surrounding concussion recovery (McClincy et al. 2006).

Concussions in College Athletics. The NCAA has come under scrutiny in recent years because of the high number of traumatic brain injuries in college sports. According to the organization’s own data, concussive injuries represent 5–18% of all reported injuries, depending on the sport. Between 2004 and 2009, college athletes suffered a total of 29,255 concussions, 16,277 (56%) of which were among football players. These numbers maybe understated because athletes may play through concussive injuries or may not report symptoms to avoid interruption in their playing time. Davies and Bird (2015) surveyed 193 Division I athletes and found that 45% did not report their suspected concussions, because they did not think the injury was serious enough, they did not want to have to leave a practice or game, or they did not know they had sustained a concussion.

Sport-related concussions are particularly a concern for football players, who have the highest concussion rates of any contact sport (Gessel et al. 2007). Crisco et al. (2010), in a study of 188 NCAA Division I football players from three teams, examined the frequency and location of head impacts that individual players received during a season. The authors revealed that a football player can receive as many as 1,400 head impacts during a single season, with the average number per game almost three times greater than the average number per practice. Moreover, they reported that most of the impacts occurred to the front of the helmet for all player positions with the exception of quarterbacks, who had a higher percentage of impact to the back of the helmet. These findings suggest that most players are likely to initiate and control the location of head impact, whereas quarterbacks are likely to have impacts to the back of the helmet, or fall backward and hit the backs of their head on the playing surface (Crisco et al. 2010).

In a study of 4,251 NCAA football players who suffered concussive injuries, Guskiewicz et al. (2003) found that the risk of sustaining a concussion is associated with the number of previously self-reported concussive injuries. In particular, the authors reported, athletes who had a history of three or more previous concussions

were three times more likely to have an incident of concussion than athletes with no concussion history. In addition, athletes with a concussion history experienced slower recovery of neurological function. Headaches were the most commonly reported symptom at the time of a concussive injury, followed by balance issues or dizziness; most symptoms lasted roughly 3.5 days.

Covassin et al. (2008) examined the neurocognitive performance of 263 college athletes with a history of zero to three or more concussions. Each participant was administered the ImpACT test battery to determine neurocognitive performance. The authors found that college athletes who reported a history of multiple concussions tended to take longer to recover on verbal memory and reaction time as compared to athletes with no previous concussions. These findings are consistent with the work of Covassin et al. (2013), who discovered that college athletes with multiple concussions had prolonged recovery on verbal memory compared to those with no history of concussions. And, in line with other studies, Marchi et al. (2013) found that frequent and routine impacts to the head can have a cumulative effect on football players' cognitive function over time.

NCAA Responses. In 1995, under the principle of student-athlete well-being, Article 2.2.3 was included in the NCAA Constitution: "It is the responsibility of each member institution to protect the health of, and provide a safe environment for, each of its participating student athletes" (NCAA 2012–2013a, article 2.2.3). Clearly, this puts the onus on member institutions to ensure the health of their athletes. In April 2010, the NCAA more specifically addressed concussive injury when it enacted a concussion management policy to diagnose and treat concussed athletes, requiring each member institution to develop and maintain its own concussion management plan. The policy stipulates that (a) all college athletes diagnosed with concussions shall not return to competition for at least the remainder of that day; (b) all college athletes should receive training each year on the signs and symptoms of concussions, and sign a statement in which they accept responsibility for reporting concussive injuries to the institutional medical staff; (c) any college athlete showing signs or symptoms of a concussion be evaluated by a healthcare provider with experience in the evaluation and management of concussions; and (d) those diagnosed with a concussion receive medical clearance by a physician or the physician's designee before returning to competition.

The NCAA concussion policy seems to be a promising first step. Kilcoyne et al. (2014) explored the rates of concussion diagnosis at three Division I football programs before and after it was adopted (2009–2010 and 2010–2011). The authors found a significant increase in diagnosis rates after the new policy was implemented, suggesting that it might be effective. Yet, shortly after the policy implementation, Fenno (2013) found the following:

An internal NCAA survey released in 2010 showed 50% of responding schools didn't require a concussed athlete to see a physician and around half would return an athlete to the same game after suffering a concussion. Just 66% of schools used baseline testing; of those that didn't, 70% indicated cost was a factor and 48% regarded the process as too time-consuming. (para. 12)

In 2014, the NCAA provided further concussion recommendations and guidelines, including best practices for concussion recognition, diagnosis and management, return to activity, and return to learn. In doing so, the NCAA once again delegated its legal obligation to protect the health and safety of college athletes to its member institutions. And, it appears that, despite guidelines for concussion management, the NCAA does not enforce its mandated concussion management policy or penalize athletic programs that do not comply with it (Fenno 2013). In addition, in the concussion lawsuit of former Frostburg State football player Derek Sheely, a 30-page court filing in part stated: “The NCAA denies that it has a legal duty to protect student-athletes” (Fenno 2013, para. 1). The NCAA and its member institutions are also under no obligation to cover medical expenses incurred from an athlete’s concussive injuries (Comeaux 2017).

Advocates for the collective well-being of college athletes believe the NCAA should be more actively engaged in preventing and addressing head trauma in college sports (see Graham et al. 2013). Indeed, as a result of their stance on the health and safety of college athletes, the NCAA has been hit with a number of concussion lawsuits, alleging that they were negligent in the protection of athletes (see Axon 2014). To date, more than 10 concussion lawsuits by former college athletes have been filed against the NCAA. Pending lawsuits, coupled with pressures from members of Congress, are likely to pose a major threat to the NCAA (see Waldron 2013).

Institutional and Other Responses. Recent studies have found that most NCAA member schools have concussion management plans in place (Baugh et al. 2015). Many athletic leaders have reported, however, that their schools need to improve these plans because they do not have formal processes for educating athletes about concussions (Baugh et al. 2015; Donaldson et al. 2015). Kaut et al. (2003) conducted a retrospective survey of 461 college athletes to identify symptoms of head injuries, asserting that this is one of the greatest challenges facing athletic personnel in college sports. They reported that recognition can be rather difficult; however, because some concussions have subtle symptoms – including headache, momentary confusion, and poor concentration – that might be resolved in short order. Thus, concussion education is essential because it can help improve recognition, management, and prevention of concussive injuries. Based on the findings of their survey of Division I athletes, Davies and Bird (2015) concluded that “the University may benefit from a formal education program for their student athletes and athletic staff about concussions, a program with information on prevention, the signs and symptoms, and proper management on and off the athletic field” (p. 110).

Although not universally implemented, concussion education programs for college athletes have the potential to serve as an important prevention method. Kroshus and Baugh (2016), in a study of 789 athletic trainers from 276 schools and 325 athletes from four schools, explored the content and delivery modalities of the concussion education provided to college athletes. The authors found that the source and delivery modalities varied from formal meetings or lectures (77%), written materials (75%), and video presentations (31%) to online materials (21%) and posters on a wall (20%). They also discovered that, at most schools, concussion

education was provided to athletes by the team's athletic trainers. Athlete participants reported that they preferred concussion education information from sources such as coaches and physicians who could create a culture of safety within their athletic programs.

Researchers continue to search for ways to manage concussions in order for athletes to return to participation and learning after a head injury (Broglia et al. 2007; Ferrara et al. 2001; Griffin 2017; Guskiewicz et al. 2004; Lynall et al. 2013; McCrory et al. 2009; Notebaert and Guskiewicz 2005). For example, Lynall et al. (2013) surveyed 1,053 National Athletic Trainers' Association members about their concussion diagnostic and return-to-participation practices. They found that athletic trainers use objective tools, such as balance testing and neuropsychological testing, to assess and manage concussed athletes; the use of clinical examinations and symptom evaluations has greatly decreased. The authors concluded that the athletic trainer "needs to remember that the most effective concussion management appears to come from the use of multiple tools" (p. 850).

Similarly, Kelly et al. (2014) surveyed a cross-sectional sample of college athletic trainers about their concussion management practices. They found that the majority of participants used a multifaceted approach at baseline, acute post-injury, and return to participation. Balance, symptom assessment, and neuropsychological testing were used to reduce the risk for additional injury by prematurely returning an athlete to participation. And Majerske et al. (2008), in a retrospective study, examined the neurocognitive test results of 95 athletes before and after concussion. Although there were no statistically significant relationships between symptom scores and levels of activity following injury of an athlete, their results suggest that all activity levels – low, moderate, and high – might be counterproductive for some concussed athletes. The authors recommended that, during the recovery process, athletes reduce coursework and physical activity, reschedule exams, shorten school days, and engage in one-on-one learning sessions. The researchers concluded that we need more research on the impact of concussion on return to play and return to learn. Indeed, we need to better understand the neurological effects of repeated concussions and subconcussive head impacts on college football players, especially their influence on short- and long-term cognitive function. More longitudinal studies and advanced quantitative research should carefully explore these issues, while considering differences by sport and level of competition. As well, Kroshus and Baugh (2016) found that college athletes prefer concussion education information from their coaches. Although coaches are less likely to be medical experts, future research should explore coaches' knowledge about concussions and how they make decisions about concussed athletes, as well as the ways, if any, they create a culture of safety within their athletic program. Relatedly, because multiple concussions can have a cumulative effect on the brain, future survey research and case studies should examine youth sport stakeholder's knowledge of concussion education, including coaches, parents/guardians, and game officials.

Researchers and athletic leaders have begun to take action not only to recognize and manage concussions but also to lower concussion rates in college athletics. For example, Rowson et al. (2014) conducted a study of eight collegiate football

teams to understand whether helmet design can reduce the risk of concussions. Accounting for the number of football players' head impacts, the authors compared two helmet designs. They found a 54% reduction in concussion risks for players wearing the helmet with 40% thicker foam. They concluded that "helmet design may never prevent all concussions from occurring in football, but the evidence illustrates that it can reduce the incidence of this injury" (p. 3). This is promising, but further research is needed to fully understand whether advances in equipment can sufficiently protect athletes from harm. We need a deeper understanding of concussive injuries in all respects. Future longitudinal, large-scale studies should track college athletes, collecting demographics, frequency, and nature of concussive injuries, protective equipment usage, and educational training. These studies should also investigate the effectiveness of concussion legislation to better understand, explain, and support the need for enhanced regulatory or legislative efforts for athletes.

Freedom of Expression: Social Media Policies

Social media has become increasingly popular among college athletes, fans, recruits, and other athletic stakeholders (Sanderson 2011). Fieldhouse Media conducted a 2015 study on social media usage by athletes across divisional classifications, and discovered that 73% of surveyed participants had a Twitter account, 94% had a Facebook account, and 81% had an Instagram account (DeShazo 2015). With growing demand for and interest in social media, the online activity of college athletes has created public relations issues and concerns about potential NCAA rules violations. Schools also understand that risky behavior on social media such as posting inappropriate or racy photos can threaten their reputation and profitability (Hawley 2014). For example, at UNC Chapel Hill, a football player posted information to his Twitter account about his relationship with a sports agent, which suggested he received improper benefits and violated NCAA amateurism rules (Epstein 2011). At Ohio State, a third-string quarterback was suspended for tweeting, "Why should we have to go to class if we came here to play FOOTBALL, we ain't come to play SCHOOL classes are POINTLESS" (Jones 2014). These and other incidents have pressured NCAA member institutions to develop social media policies for their athletes (Sanderson 2011; Snyder 2013). But questions remain about whether these policies are fair for athletes, who may feel their individual freedom of expression is being stifled.

A handful of studies have explored social media usage among athletes as well as athletic department social media policies. Based on semistructured interviews with 20 Division I athletes, one study found that players used Twitter primarily to maintain contact with family and friends, communicate with followers and read about their games and athletic performance. The authors concluded, "Twitter's rise in prominence corresponds to a need for sports organizations to proactively monitor and address its influence, particularly in the realm of college athletics" (Browning and Sanderson 2012, p. 517).

Beyond its Bylaw 13.10.2, which states that “a member institution shall not publicize (or arrange for publicity of) a prospective student-athlete’s visit to the institution’s campus” (NCAA 2012–2013a), the NCAA has not developed or enacted a social media policy; rather, institutions have created and maintained their own. In a content analysis of social media policies in student-athlete handbooks from 159 NCAA Division I institutions, Sanderson (2011) found the majority of policies were generally negative and content-restrictive, underscoring risk and punishment; some required athletes to provide athletic personnel with access to their social networking profiles or accounts. More recently, Snyder (2013) found that the majority of athlete participants believed it was unacceptable to have a complete ban on social media use (93%), a ban on social media while in season (82%), or a ban on game day (59%). They were accepting of social media policies monitored by the coach (75%), athletic department staff (72%), athletic director (68%), and team captain (62%).

A fundamental question is whether a formal college and university social media usage and monitoring policy infringes on constitutional free speech or social media privacy rights (LoMonte 2014). There is significant legal precedent supporting the idea that participation in college athletics is a *privilege* and not a *right* (Santovec 2013). As such, college athletes are likely to have less privacy and some degree of regulation associated with their social media usage. Nonetheless, because social media is a recent phenomenon, we do not know enough about NCAA member institution social media policies or the extent to which college athletes are protected or limited in their usage.

Research on social media policies in athletics is scant. We must undertake qualitative and quantitative analyses of college and university social media policies, and precisely understand the restrictions on athletes’ social media accounts across various institutional types. Integration of rigorous qualitative and quantitative designs will generate new knowledge for athletic leaders and policymakers grounded in evidence rather than assumptions. In this way, courts can determine whether these policies place undue restrictions and whether they would pass a narrowly tailored test (Gay 2011). The views of athletes and other internal stakeholders of athletics, including policymakers, will be most useful to those who advocate for athletes’ rights and collective well-being. And, given the proliferation of social media over the past decade, it would be instructive for researchers to also explore the use of visual platforms, including Instagram and Snapchat, by college athletes.

Engagement in the Academic Experience

As commercial interests in college sports continue to grow, there are expanded game schedules, increased travel, and longer practice hours. It is increasingly difficult to ignore the effects of these changes on students who participate in college athletics. In the NCAA’s Growth, Opportunities, Aspirations, and Learning of Students in College (GOALS) study, which gathers data on the athlete experience, Brown (2011)

reported that athletes at FBS schools spend 43.3 h per week on sport-related activities, and men's and women's basketball players miss the most classes – 2.4 and 2.5 per week, respectively. Missed classes are largely the result of coaches' demands and television networks' dictation of schedules and times for games. This creates significant challenges for athletes as they strive to engage with college in the same ways that their nonathlete counterparts do. In this section, I review the related literature on the academic engagement, performance, and support of athletes on college campuses within a multibillion-dollar commercial industry. I give special attention to Division I athletes by both sport and gender.

Academic Clustering

Some athletes are restricted to certain academic majors – often majors held in low regard – because of time constraints that result from tremendous sport and coaching demands in a highly commercialized enterprise (Comeaux et al. 2016). The results of an NCAA survey completed by more than 20,000 athletes at 627 institutions representing all three divisional classifications revealed that, for one in five athletes, sport participation precluded selection of a desired major (Paskus 2006). Researchers and college sport reformers have theorized that many coaches and practitioners in academic support centers tend to steer Division I athletes into athlete-friendly majors or academic paths of least resistance in order to maintain their sport eligibility. Recently, the popular press and a small number of studies (Fountain and Finley 2009; Gurney and Southall 2013; Sanders and Hildenbrand 2010; Schneider et al. 2010) have given attention to academic major clustering among college athletes, which occurs when 25% or more of athletes on a team share the same major (Fountain and Finley 2009). Major clustering raises potential problems for athletes, including limited future opportunities because they are forced, at times, to major in undergraduate programs that do not align with their academic interests and career aspirations (Gurney and Southall 2013). Some of these studies have also examined the role of race and gender in this type of clustering.

Fountain and Finley (2009), for example, examined academic clustering and its impact on Division I football players by race. They found that White players in general were overrepresented in business programs, whereas non-White players were overrepresented in general studies and behavior sciences. Extending this research, Fountain and Finley (2011) explored how Bowl Championship Series football players' academic majors changed over a 10-year period. In their analysis of media guides, they discovered that football players, particularly non-White players, at the studied athletic program tended to cluster into fewer academic majors over time; Sanders and Hildenbrand (2010) had similar findings. Fountain and Finley (2011) concluded that “college athletics, particularly in the revenue sports, are highly competitive. These competitive behaviors drive decision-making in athletic departments and academic integrity often is one of the first casualties” (p. 39). Similarly, Schneider et al. (2010) examined academic clustering and major selection of NCAA football teams within the Big 12 Conference. They found that

nearly 37% of football players selected academic majors in either social science or communications.

Academic clustering is not limited to football or to men's team sports more broadly. Paule (2010) examined 211 Division I women's basketball programs and found that academic clustering into a single major existed at 45% of the studied programs. She reported that nine of the 14 players on the University of Connecticut women's basketball team (64%) were majoring in exploratory studies, compared to only 4.7% of the overall undergraduate student population at the same school. Indeed, with rampant commercialization surrounding athletics and the quest to win games and secure corporate sponsorships, it is not surprising that athletes are steered toward certain majors in order to maintain their athletic eligibility, such as those in the social sciences or communications – fields other than Science, Technology, Engineering, and Mathematics (STEM) (Comeaux et al. 2016; Schneider et al. 2010).

Academic Engagement and Performance

The NCAA has produced several empirical research studies on a range of topics, including the academic engagement and performance of athletes. For example, the Social Environments Study, conducted in 2012, in part examined the environments of current athletes, and specifically how these individuals engage with various campus stakeholders. Overall, the vast majority of survey findings were positive. Athletes across all divisional classifications reported feeling “extremely comfortable” with students who were not athletes (77% Men, 74% Women). More than 80% of athletes across divisional classifications reported that they felt “mostly” or “extremely” comfortable in their classes.

Some athletes reported encountering negative stereotypes about their intellectual abilities, however (NCAA 2012b). For example, highest among divisional classifications, 44% of Division I male athletes and 29% of female athletes reported that nonathlete students assumed they were not good students because they were athletes. Moreover, 23% of Division I male athletes and 11% of their female counterparts reported that professors assumed they were not good students because they were athletes.

In addition, the NCAA's ongoing GOALS study explores the experiences and well-being of current college athletes in a number of areas, including campus support, health and well-being, time management, and the academic, social, and athletics experience (NCAA 2015b). Previous versions of the study – conducted in 2006, 2010, and 2015 – were designed to provide large-scale, comprehensive data on issues associated with athletes to NCAA committees, policymakers, and member institutions. Survey responses across all study years were received from more than 21,000 athletes at nearly 600 schools across Division I, II, and III schools.

In the 2015 report, the NCAA noted that athletics continues to play an integral role in college choice across divisions, and athletes expressed satisfaction with their overall college experience (NCAA 2015b). The lowest satisfaction levels were

generally seen in revenue sports of football and basketball at the Division I level. Other 2015 findings revealed that Division I women athletes were most likely to express a preference for spending less time on athletics, and nearly two thirds of men and three quarters of women said they would have preferred to have more opportunities to visit home and family. A majority of athletes in this study reported feeling positive about their ability to keep up with their academic work during their sport's season (roughly 60% in Division I, 65% in Division II, 70% in Division III).

Regarding campus climate issues, most athletes in the 2015 GOALS study reported having a strong sense of belonging at their respective college or university, and that their coaches and teammates created a welcoming and inclusive team environment. Athletes of color, particularly women, were less likely to find the campus and team environments welcoming or inclusive, however. (I take up these issues in depth in the next section, which addresses campus racial climate.) The 2015 GOALS data revealed an increase since the 2010 study (approximately 30%) in the number of athletes across divisions who self-reported mental health issues such as anxiety and depression. Relatedly, roughly one third of athletes reported challenges to the demands and pressures of their sports. This finding was highest in Division I revenue sports such as football, and lowest in Division III schools (NCAA 2015b).

More recently, the NCAA (2018b) commissioned Gallup to conduct a study on the long-term effects of participating in intercollegiate athletics on former athletes. They interviewed 1,670 former NCAA athletes – ranging in age from 22 to 71, with a median age of 44 – about their college experiences and current well-being. The study included a comparison of former athlete interview responses to those of nearly 23,000 nonathlete students graduating from the same colleges and universities. Most of the findings revealed a positive picture of the college athlete experience during and after college. For example, the study indicated that 71% of former athletes were employed full time, compared to 68% of nonathlete students. As well, athlete graduates were just as likely to have earned their undergraduate degree within 4 years (68%), as compared to nonathlete students (66%) in this study. Former athletes reported having mentors who supported their academic and personal goals during college and professors who cared about them as people and helped to shape their excitement about learning. Overall, the Gallup study revealed that the college experience looks very similar for former athletes and their nonathlete student counterparts. Nonetheless, aggregate data reported from the Gallup study can conceal a considerable amount of information. Therefore, it would be instructive to disaggregate college athlete data by type of sport and gender to understand differences in the experiences across groups. As the 2015 GOALS study revealed, challenges to finding necessary energy because of the physical demands and time commitment of sports were highest among athletes in Division I revenue-generating sports. Moreover, women of color were less likely to have a strong sense of belonging on campus. These are important issues to explore further, if the well-being of athletes is to be secure in the commercialized intercollegiate athletics climate.

Revenue Versus Nonrevenue Sports. Shulman and Bowen (2001) used the College and Beyond database to explore athletes' experiences at 30 mostly selective

private colleges and universities in the United States. They discovered that students who participated in athletics tended to underperform academically across all divisional classifications, and this underperformance was more pronounced for those who played in the sports of football and basketball (which, at many Division I contexts, are associated with earning revenues). Athletes who participate in these revenue-earning sports – namely, Black athletes – are one of the most studied groups in this area. Scholars have found that Division I college athletes, largely those playing in revenue sports, become increasingly disengaged from their academics due to the commercialized nature of college athletics and the priorities of their coaches (Adler and Adler 1991; Eitzen 2016).

In a case study of Division I men's basketball players at one school over a 4-year period, Adler and Adler (1991) explored the nature of identities and roles during college. They found that male basketball players transitioned into college life with feelings of optimism about their desired academic goals. Within one or two semesters, however, they began to devalue the academic role because of sport requirements and demands that structurally inhibited their academic presence on campus. The authors revealed that the more the studied basketball players remained in school, the more they began to feel the commercialism or business nature of college athletics, making sport participation more of a full-time job than an avocation.

Uptegrove et al. (1999) examined the academic performance of Division I athletes in revenue sports compared to those in nonrevenue sports (e.g., softball, gymnastics, golf, and swimming) at 42 schools. Drawing from the 1987–1988 NCAA National Study of Intercollegiate Athletes, and employing OLS and logistic regression techniques, the authors found that revenue athletes were more likely than nonrevenue athletes to repeat classes and be placed on probation. Uptegrove and colleagues argued that these academic disparities were a function of institutional pressures and time management challenges due to sport participation. They concluded, “rather than simply attributing blame solely to the actors involved, our focus on institutional pressure places the responsibility on the university itself” (p. 735).

Maloney and McCormick (1993) drew from 1985 to 1988 data on course grades of undergraduate students from Clemson University and discovered that athletes in nonrevenue sports performed similarly to their nonathlete peers. Athletes competing in the revenue sports of football and men's basketball performed less well academically than their peers. The authors also found that grades for revenue athletes were lower during the sport's season than they were out of season, suggesting that sport demands contributed to these academic educational outcomes.

These structural impediments make it more challenging – and perhaps less likely – for athletes, particularly those playing in revenue sports, to fully engage in meaningful educational activities or to fully integrate into the larger campus community. As such, a number of studies have suggested that differences in academic performance are influenced by college environmental characteristics, such as educationally purposeful engagement activities (e.g., Comeaux 2005; Gayles and Hu 2009; Umbach et al. 2006). Such activities can include, but are not limited to, meaningful interactions with faculty and collaboration with nonathlete peers on problem-solving tasks (see Comeaux 2010; Comeaux and Harrison 2011).

Gayles and Hu (2009), for example, used a dataset from the Basic Academic Skills Study to examine the extent to which Division I athlete engagement in educationally purposeful activities influenced a set of desired outcome variables. They found that, on average, athletes' interactions with students other than their teammates had positive impacts on personal self-concept, learning, and communication skills. Compared to nonrevenue athletes, revenue athletes had lower level of interaction with students other than their teammates. In short, the commercial emphasis on college athletics may be at odds with certain educationally purposeful activities, as athletes have too many other demands on their time.

Despite the previous work in this area, additional research is necessary to further understand the type and quality of educational activities in a range of academic settings that lead to positive gains for both revenue and nonrevenue athletes. Some types of educational activities have greater influence for some sports than others (Gayles and Hu 2009). While accounting for a highly commercialized athletic enterprise, case studies and large-scale quantitative studies on how college impact athletes – with data disaggregated by type of sport, and other background characteristics (e.g., first-generation status, family income, athletic scholarship status) – would advance this line of work. There is also a tendency in studies of Division I revenue and nonrevenue athletes to highlight the challenges they encounter, or to document why these same athletes fail academically. It would be valuable, using an anti-deficit approach, to examine factors that contribute to the academic success of these athletes (see Cooper and Hawkins 2016).

Gender Differences. Several studies have explored variations in the academic performance of Division I male and female college athletes. Much of this work has attempted to relate these variations to precollege and college environmental factors. Female athletes, for example, are more likely to graduate from high school in the top 25% of their class, and they tend to outperform their male counterparts on standardized tests (Kane et al. 2008). In addition, Dilley-Knoles et al. (2010), in study of 379 male and female collegiate athletes, examined the extent to which overall college grade-point averages (GPA) differed for athletes by type of sport and gender. They found that female athletes had considerably higher overall GPAs than their male counterparts. Research has shown that female athletes routinely outperform their male counterparts academically in college (Comeaux and Harrison 2011). These gender differences might be related to male athletes' overconsumption of the athlete role, which can make it difficult to meet the demands of the student role (Jayakumar and Comeaux 2016).

Meyer (1990) examined the attitudes and feelings of Division I female athletes regarding their roles as students and as athletes. Through semistructured interviews with scholarship female athletes, Meyer found that the majority of female athletes in basketball and volleyball expressed idealistic feelings about their academic obligations and goals in the first year of college, and that their academic interests improved over time. The author concluded that a more positive environment existed among female athletes compared to their male counterparts. Female athletes were more likely to encourage each other academically, take active roles in course selection and program development, and decline special considerations from professors and

administrators. These findings contrast with Adler and Adler's (1991) study, which reported male athletes in the sport of basketball were more inclined to lose interest in their academic endeavors over time.

Other studies have looked at differences by gender on purposeful engagement activities, including involvement in campus organizations and interactions with faculty. Comeaux et al. (2006), using data from the Cooperative Institutional Research Program, found minimal differences between Division I male and female athletes in forms of contact with faculty members during college. Faculty who provided letters of recommendation, encouragement for graduate school, and help in achieving professional goals made fairly strong contributions to both male and female athletes' academic success. Likewise, in a survey of Division I athletes, Marx et al. (2008) found that male and female athletes varied in their socialization experiences. Male athletes in particular were more likely to distance themselves from the student role than were their female counterparts.

Given that we know different types of engagement activities play a significant role in the learning and personal development of students who participate in athletics (e.g., Comeaux et al. 2006; Gayles and Hu 2009), future research should employ different methods to examine ideal conditions for enhancing the academic success of male and female athletes. Large-scale quantitative studies using secondary data sources might not be able to operationalize a broad range of campus conditions; rather, in-depth interviews and other qualitative methods might be a viable way to unpack how athletes negotiate these ideal conditions, and the extent to which the institutional context, such as campus climate, might impact their interaction patterns. Further, while controlling for race/ethnicity, gender, and type of sport, it would be instructive to examine engagement variables on a broad range of outcomes in the post-college years to better understand their unique benefits to college athletes.

Academic Support for College Athletes

In 1991, the NCAA implemented Bylaw 16.3.1.1, which mandated that member colleges and universities provide general academic counseling and tutoring services to all Division I athletes. In addition to these services, practitioners in academic support centers for athletes offer specialized programs such as faculty – student mentoring and projects specific to study skills, time management, and academic scheduling (Broughton and Neyer 2001; Comeaux 2010), with the goal of enabling athletes to develop skills for academic, athletic, and personal growth and success. Nevertheless, athletes, particularly in football and men's basketball, continue to show less academic success than their nonathlete counterparts (Harper 2018; Shropshire and Williams 2017).

One of the most glaring reasons for inequitable outcomes is that practitioners in academic support centers typically rely on anecdotal information rather than empirical data to inform decisions about the needs of athletes (Comeaux 2013a). In a survey of 127 advisors and counselors in academic support centers for athletes at Division I colleges and universities, fewer than 3% had assessment plans to measure

impact on learning outcomes for athletes (Comeaux 2015b). Without data-driven practices and tools, it is almost impossible to offer feedback or identify strengths and performance gaps among athletes and, as Benson (2000) noted, practitioners are more apt to develop deficit-oriented views of athletes. Although they may care deeply about the academic well-being of their athletes, they are more likely, for example, to ascribe differences in academic performance by race/ethnicity, gender, and type of sport to cultural stereotypes or alleged internal deficiencies linked to the athletes themselves (e.g., low cognitive ability or a lack of motivation). In short, underperformance is perceived as a problem with the individual rather than an organizational learning problem, and practitioners with this orientation may cast the academic underperformance of athletes as inevitable, beyond their ability to resolve.

A small group of studies has documented the importance of research to careful, informed practice. For example, Comeaux (2010) explored the complex negotiations of first-year Division I football players' role identities in the context of a faculty–athlete mentor program. Using focus groups and pre- and post-test questionnaires, he found that the formal faculty–athlete mentoring program had a positive influence on academic and future goals of first-year athletes, despite potential role conflicts. In particular, the studied athlete participants reported having more balanced academic and athletic identities over the course of their first year. Some were even more optimistic about their future trajectories, reporting a willingness to discuss their career aspirations with their faculty mentors while receiving substantive mentor feedback. Comeaux (2010) concluded that “faculty–student mentoring programs are the kinds of educationally purposeful activities that contribute directly to desired educational outcomes” (p. 270), lending support to previous research (Comeaux 2005; Gayles and Hu 2009; Umbach et al. 2006).

More recently, in an edited volume, Comeaux (2015c) documented a range of viewpoints on and models of data-driven practices in support centers for athletes. This text offered several chapters highlighting empirical considerations, and in some cases theoretical perspectives, on college athletes and academic success. Chapters focused on anti-deficit and data-informed approaches to improving the collective well-being of Division I college athletes, including those at HBCUs. For example, in a selective review of data-driven studies, Cooper (2015) identified five effective strategies to enhance athletes' success at HBCUs: (a) early intervention programs, (b) purposefully designed study halls, (c) institution-wide academic support programs, (d) public recognition of athletes' academic accomplishments, and (e) nurturing familial campus environments.

As well, Comeaux's (2015c) volume highlighted ways to support and prepare college athletes for quality career transitions, the importance of summer bridge programs and culturally relevant pedagogy for college athletes, and the role of the physical location of athletic facilities and academic support service centers in the experience for college athletes. One study explored the impact of a 4-week intensive writing course in a summer bridge program on seven Division I athletes with low academic profiles (Browning 2015). Through interviews and participant observation, Browning found that the intervention connected athlete participants with

support personnel on the students' own terms and in a way that valued their voices. Moreover, practitioners helped to advance the writing skills athletes needed to succeed in the academic domain.

In another study, Bernhard and Bell (2015) examined the physical locations of athletic facilities and academic support centers for athletes at 125 Division I FBS schools to understand their structural impact on the quality of the athlete experience. Through semistructured interviews with seven academic support personnel at select schools, the authors discovered that participants believed centrally located academic support centers enhanced the quality of experiences for athletes, including opportunities to interact with their nonathlete peers. Moreover, the findings revealed that new and renovated athletic facilities and support centers tended to be located on the periphery of the central campus. As such, Bernhard and Bell concluded that "the competition for top recruits means it is not just having ample space for students and staff, but about how prospective students and their families perceive the look and feel of the space" (p. 137). In all, this volume provided a rich portrait of data-driven practices designed to assist practitioners and others who work closely with college athletes.

Beyond the studies described above, research on practices in academic support centers for athletes is limited. Little scholarship has sought to assess the effectiveness of the ways that practitioners by race/ethnicity and gender and other athletic stakeholders engage athletes of color academically (Comeaux 2015c). Research on the role of individual practitioners in organizational learning associated with college athletes is imperative, including the extent to which they use empirical data to inform their decision-making. This work will help to ensure that students who participate in athletics are receiving the types of support they need in the most effective ways possible. Relatedly, we must document empirically grounded practices that address the overall well-being of college athletes in different academic settings and institutional types, again with particular attention to race/ethnicity, gender, and type of sport.

The Effects of Campus Racial Climate on Athlete Experiences

To develop policies and programs that enhance the overall well-being of all students, it is essential to understand the campus racial climate of the university. A positive or healthy campus racial climate in part features an institution's commitment to racial diversity and, likewise, comfortable, inclusive, diverse environments for optimal student learning and personal development (Hurtado et al. 1998). Numerous studies have demonstrated that quality cross-racial interactions, both inside and outside the classroom, are positively associated with students' learning outcomes, including college satisfaction (Astin 1993; Chang 1999), leadership skills and cultural awareness (antonio 2001), critical thinking skills (Gurin 1999), and higher levels of positive academic and social self-concept (Gurin et al. 2002). Other studies have shown a positive relationship between cross-racial interaction and civic interest

(Gurin et al. 2002), cognitive development (Astin 1993), and pluralistic orientation (Jayakumar 2008).

It is important to explore campus climate issues affecting college athletes specifically, in part because their college experiences differ from those of the general student population (Comeaux and Harrison 2011; Watt and Moore 2001). Moreover, the racial imbalance between Division I athletes in revenue sports – who are often people of color – and their peers, coaches, and campus stakeholders – who are often White – necessitates careful, critical inquiry (Gayles et al. 2018). Yet, to date, only a few empirical studies have done so. Brown et al. (2003), for example, surveyed White athletes during their first semester at 24 predominantly White colleges and universities, and found a significant relationship between their contact with Black teammates and racial attitudes. The relationship varied by sport: White athletes who played team sports and had a higher percentage of Black teammates reported more positive attitudes toward Blacks in general, as compared to White athletes who played individual sports.

More recently, building on the work of Jayakumar (2008), Comeaux (2013b) examined the extent to which cross-racial interaction influenced post-college pluralistic orientation and leadership skills for Division I White athlete graduates, and the degree to which engagement effects were conditional on their precollege neighborhoods. Comeaux surveyed 310 White athlete college graduates representing 16 Division I FBS conferences. The findings suggest that cross-racial interaction during college has continuing benefits on pluralistic orientation and leadership skills for White athletes from racially diverse neighborhoods as well as long-term effects on leadership skills for White athletes from segregated precollege neighborhoods. In short, there may be unique benefits associated with a racially diverse student body (Allport 1954), but positive effects are contingent upon the specific nature of interactions (Chang et al. 2006).

Beyond understanding the cross-racial experiences of college athletes, it is important to comprehensively deduce elements of the broad campus climate that can shape the quality of these experiences. To explore these issues in the context of college athletics, my approach in discussing these issues in this chapter originates from the empirical framework developed by Hurtado et al. (1998), which describes four interrelated elements of the campus racial climate: *compositional diversity*,⁴ or the level of racial diversity in a student body; *psychological climate*, or perceptions and attitudes between groups; *behavioral climate*, or the quantity and quality of intergroup relations; and the institution's *historical legacy* of exclusion of racial/ethnic groups that perpetuates inequity across racial lines. Milem et al. (2004) included a fifth dimension, *organizational/structural*, which “represents the organizational and structural aspects of colleges and the ways in which benefits for some groups become embedded into these organizational and structural processes” (Milem et al. 2005, p. 18).

⁴Hurtado et al. (1998) used “structural diversity” to describe a dimension of campus climate. I use “compositional diversity,” consistent with Milem et al. (2004).

In the remainder of this section, I explore research on the racialized experiences of Division I athletes at historically White institutions. I assert that, beyond understanding the experiences of athletes, it is important to understand related research on the elements of the broad campus racial climate that can shape the quality of their experiences. In particular, I focus on compositional diversity, organizational, structural, and psychological climate, specifically as they relate to college athletics.

Compositional Diversity

It is well documented that increasing compositional diversity on college campuses is an important step toward providing students with more opportunities for interracial interactions and improving the climate (e.g., Antonio 2001; Chang et al. 2006). Hurtado et al. (1998) asserted that when campuses lack diverse environments, members of the dominant or majority student group will likely shape various forms of interaction and limit their own chances of benefiting from interactions with students of different races. They also reported that when campuses lack compositional diversity, underrepresented student groups tend to be viewed as tokens. The relevance of these findings to athletes is evident when we consider the demographics of college athletics.

According to the NCAA (2010), White athletes make up a disproportionate number of participants in certain team sports: lacrosse for men (90.2%) and women (90%); field hockey (86.5%); baseball (83.4%); swimming/diving for men (83.7%) and women (85.8%); rowing for men (82.9%) and women (81.7%); and water polo for men (79.5%) and women (77%). These students have fewer opportunities in the athletic realm to exchange views with students of other races, which is especially troubling when you realize they often devote more than 40 h weekly to sport-related activities (Wolverton 2008).

When campuses lack diversity, the majority student group shapes interactions, and underrepresented student groups tend to be viewed as tokens (Hurtado et al. 1998). On sports teams, a lack of racial diversity can heighten racial tension among teammates (and across teams), lending support to the aforementioned work of Brown et al. (2003). Thus, increasing the racial diversity of athletic participants can enhance opportunities for intergroup contact and, importantly, for desirable outcomes.

Organizational/Structural Dimension

Coaches are central figures in the lives of athletes, shaping their academic, social, and athletic priorities (Jayakumar and Comeaux 2016). In the 2016–2017 season, however, Black men made up roughly half of college football players at Division I FBS schools, yet they made up just 11% of head coaches in this sport (Johnson 2017). And, according to Lynch (2013), “only 312 of 1,018 of college football assistant coaches are Black, and only 31 of 255 offensive and defensive coordinators

are African-American” (para. 4). FBS schools have historically hired a disproportionate number of White coaches, denying access and opportunities to deserving Black coaches (Agyemang and DeLorme 2010; Sagas and Cunningham 2005). Given these demographics, we can surmise that the college experiences of non-White football athletes at FBS schools are influenced to a significant degree by White males (see Lapchick et al. 2012). When racial/ethnic minority football coaches are not appropriately represented at these schools, it may give non-White athletes the impression that the campus climate is not supportive or inclusive of these racial/ethnic groups, and also limits white athletes’ abilities to benefit from having a racial/ethnic minority coaching role model.

Psychological Climate

Students from different racial/ethnic backgrounds tend to view intergroup relations on campus and instances of racism differently (Hurtado et al. 1998). Those who perceive a hostile and discriminatory racial climate are less likely to feel connected to the institution (Locks et al. 2008). Black athletes, in particular, may perceive the climate as quite hostile (Benson 2000; Bruening et al. 2005; Comeaux 2012, 2018; Simons et al. 2007; Singer 2005). Through document analysis and interviews, Bruening et al. (2005) examined the collective experiences of 12 Division I African American female athletes at a large Midwestern University. The researchers employed an ideological standpoint developed by Collins (1990) to understand the effects of intersectionality on the “silencing” of African American female athletes. They discovered that the mass media, coaches, athletic administrators, and other athletes played a role in virtually ignoring their experiences and concerns. As such, the concept of intersectionality revealed how challenges encountered by African American female athletes might differ in some cases from other women and their Black male counterparts.

Singer (2005), using critical race theory as an analytical lens, examined four Division I, African American male football players at predominantly White institutions to understand their views of racism and the potential impact that racism might have on the quality of their college experience. Through focus groups and in-depth interviews, Singer discovered that these African American participants believed they were treated differently than their White counterparts in scheduling of classes, random drug tests, and consequences for poor behavior off the field that could be detrimental to the team.

These long-standing negative perceptions are not held only by faculty, coaches, and advisors. Sailes (1993), in a survey of 869 graduate and undergraduate students, found that White college student participants believed that Black athletes were not academically prepared to attend college, were not as intelligent, and did not receive high grades as compared to White athletes. These findings are consistent with the literature on the unappealing “dumb jock” image, which suggests Black athletes have limited intellectual abilities, lack motivation, and do not perform well academically (Edwards 1984b; Simons et al. 2007).

More recently, Comeaux (2012) explored 122 athletes' perceptions of discriminatory acts by professors and other students at a Division I university. Through a qualitative survey, the majority of respondents reported positive or neutral experiences with other campus community members, but a small number described instances where professors and other students questioned their intellectual abilities, academic motivation, or treatment by the university. Drawing from the work of Pierce et al. (1978), Comeaux (2012) employed the term *athlete microaggressions* to characterize these demeaning and negative messages. In brief, it appears that for athletes generally – and Black male and female athletes more specifically – the campus environment can be unwelcoming, unsupportive, alienating, and even racially hostile. These findings highlight how Black athletes – already vulnerable as a result of the commercialization of intercollegiate sports – are at times left under-protected in a hostile campus racial climate.

Implications for Research

While some insights have been gained about the nature and influence of campus racial climate for athletes, there remains a dearth of research in this area. Climate studies provide useful baseline data on experiences of and views about college athletes, but a concerted effort to conduct campus climate studies on athletes (and athletics generally) – including developing and administering large-scale campus climate surveys – is necessary for unpacking persistent, systemic disadvantages and for measuring and building on potential strengths. For example, few empirical studies (e.g., Brown et al. 2003; Comeaux 2013b) have examined the behavioral dimension of racial climate or the nature of cross-racial interaction among athletes; we must undertake this work with a diversity of theoretical perspectives and methodological techniques.

Future efforts should examine a wider spectrum of stakeholders, including coaches, administrators, and international athletes. Future studies, using critical race theory as an interpretive framework, should also consider athletes of various racial/ethnic groups such as Latinos and Asian and Pacific Islanders (see Kukahiko and Chang 2017; Oseguera et al. 2018). Critical race theory will help explain and operationalize the role of race and racism in discourses on racialized bodies as well as to understand their experiences in different institutional contexts. Questions should include: Do athletes of color feel a sense of belonging at historically white institutions? Do athletes of color have more positive campus experiences with the presence of more administrators and coaches of color? To what extent does racism play a role in the experiences of college athletes? Is there a level of anti-Blackness toward Black players and coaches? Do stakeholders, including athletes, believe their campus genuinely values racial/ethnic diversity? Future studies should also employ critical theoretical perspectives that resist oppressive social constructions to explore the experiences of gay, bisexual, lesbian, and transgender college athletes (particularly students of color). A multidimensional understanding of the experiences of

athletes and athletic stakeholders can offer a unique perspective on campus diversity that helps to prepare all students for life and work in a pluralistic society.

Few, if any, athletic departments hire personnel or independent researchers to assess the racial climates of their teams, departments, and broader campus communities, but this is an important first step in any intervention strategy designed to improve the campus experiences of athletes. Drawing from the framework developed by Hurtado et al. (1998), departments can use focus groups and/or targeted interviews with various campus stakeholders (including athletes) to identify strengths and problem areas and to increase their own and others' awareness about specific campus conditions that affect athletes.

New Directions for Future Research

Over the past couple of decades, empirical studies on college athlete experiences have steadily increased, but this area of inquiry as a whole remains underdeveloped. Many of the aforementioned studies focused on a narrow range of issues or on only one dimension of the college athlete experience. Too often, they failed to reference the potential influence of the institutional climate, the organizational culture of athletic departments, or NCAA and member institution policies in the lives of college athletes – particularly when it comes to negotiating the dual roles of student and athlete in a highly commercialized enterprise (Comeaux 2017; Jayakumar and Comeaux 2016). While the work done so far has advanced our understanding of some facets of the big-time college and university athlete experience, we are left with an incomplete picture and a lack of interconnectedness across the literature. In this section, I summarize the work that remains.

Large-Scale Data Sources

This review raised questions and concerns about the experiences of Division I athletes in the context of NCAA and member institution pressures – particularly the commercialization of intercollegiate sports. These questions are grounded in theoretical and conceptual frameworks and a body of empirical research, and they open new lines of inquiry and allow for new questions to be examined. As well, in light of the considerable amount of data the NCAA collects from member institutions (as outlined in a previous section), large-scale data would provide a unique opportunity to comprehensively study the college athlete experience. It would provide the necessary flexibility to disaggregate by race/ethnicity, gender, and type of sport and to generalize to the larger athlete population. Data from the National Study of Student Engagement (NSSE) and the Cooperative Institutional Research Program (CIRP) would also be useful for examining the experiences of college students, including those who participate in athletics. An important feature of any future large-scale data collection efforts might also be to ensure they are longitudinal in nature and allow for nested-design studies (so that the impact of structure and

systems can also be examined). Any longitudinal studies of athletes should be ambitious, following these individuals for a substantial period of time both during and after their participation in college athletics.

This is not to suggest that single-institutional and other small-scale studies do not have the potential to inform researchers and policymakers and to provide useful and valuable information at the individual and institutional levels. However, large-scale data sources, with a range of contextual and student characteristic variables, can allow researchers to address more complex problems and acute concerns associated with the college athlete experience. Quantitative studies undoubtedly could be enhanced by the use of complementary qualitative studies to elucidate organizational issues related to the athletic enterprise and the athlete specifically.

An Academic Capitalism Approach

Researchers and educators (e.g., Bowen and Levin 2003; Eitzen 2016; Gerdy 2006; Jayakumar and Comeaux 2016) agree that improving the quality of campus experiences for college athletes should be a top educational priority. The multifaceted approaches to fundamental research questions and the language employed to frame research questions about college athletes will largely be contingent upon our own frames of reference or “schemata.” For instance, a basic assumption of the academic capitalist model outlined by Sack (2009) and described at the start of this chapter is that commercialism is important to the athletic enterprise because it creates more participation opportunities for men and women college athletes and provides them with much-needed academic resources. Rather than focusing squarely on the academic performance of athletes, academic capitalists raise research questions about the role of the athletic enterprise in shaping consumer behavior, and the relationship of athletics and college or university brand building (Bruening and Lee 2007; Sierra et al. 2010). For instance, to what extent do successful athletic programs across all divisional classifications impact the quality and quantity of future applicants to the college or university or to what extent do successful athletic programs impact donor giving to universities and colleges, both directly to athletics and also to other parts of the institutional mission? From an academic capitalist perspective, it is important for schools to draw external constituents and to understand their value for athletics in order to generate revenue streams.

Additionally, practitioners in academic support centers tend to rely on anecdotal information rather than empirical data when they make decisions about the needs and futures of college athletes (Comeaux 2013a). Given the assumption that there is an investment in academic support for athletes, do schools with larger operating budgets tend to have more success at using evidence-based practices to engage or reengage students who participate in athletics? Such empirical research has the potential to make a strong contribution to the literature on the complex relationship between athletics, commercialism, and effective evidence-based strategies to support the academic success of athletes in higher education.

The significant investment in and impact of new, large state-of-the-art collegiate athletic facilities, and the economic impact of conference realignment, would fit under academic capitalism assumptions (Greenberg 2004; Hoffer and Pincin 2015; Suggs 2005). As such, it would be instructive for future research to examine financial data across institutions, institutional types, and athletic departments of varying sizes to understand whether financing new academic and athletic facilities for athletic departments is a sound investment, while considering both the tangible and intangible costs and benefits. Proponents of academic capitalism might also consider examining the financial impact of conference realignment on athletic department revenue, expenditures, and institutional subsidy. This research would provide university decision makers with more insight and depth about the current financial state of their athletic programs, as well as the opportunity to make sound financial decisions.

An Intellectual Elitism Approach

Intellectual elitists raise questions about excessive expenditures, lower admissions for athletes, and overemphases on revenue generation, as well as about whether intercollegiate athletics complement or threaten the mission and values of higher education. Several studies have documented the role that athletics play in shaping the identities of students who participate (Adler and Adler 1991; Harrison et al. 2009; Jayakumar and Comeaux 2016). Much of this work has primarily captured the role conflicts of athletes in Division I football and men's basketball. It would be wise to consider whether these role combinations influence, positively or negatively, the desired outcomes of athletes across divisional classifications, other sport types, and gender.

Other scholarly research should explore intellectual elitism assumptions related to the effects of conference realignment on the academic and personal goals of athletes by race, gender, and type of sport. This work would help us to better understand whether the quest for revenue in athletics through conference realignment makes it more challenging for athletes to negotiate the often-competing roles of both student and athlete, particularly for women and students of color. Relatedly, we can and must build on work related to special admit athletes (Barker 2012; Bowen and Levin 2003; Phillips 2008). Empirical studies are needed to address the extent to which special admissions programs are driven by commercial interests and the rate at which special admit athletes by race, gender, and sport (particularly revenue versus nonrevenue) matriculate and eventually graduate. In light of recent nationwide undergraduate admission scandals involving athletic programs (see Jaschik 2019), it would be instructive to understand the special admissions process, which can allow students to gain entrance even if they do not meet the minimum academic and/or athletic talent requirements of a university. In this way, we can begin to understand whether the current business-like practices of athletics may be undermining academic integrity and harming the college or university reputation.

Further, we lack empirical documentation of cases where athletic scholarships were not renewed for reasons other than academic ineligibility or athlete behavior. Case studies with data disaggregated by race, gender, and type of sport would shed light on these topics, including highlighting the experience of vulnerable groups. In all, such suggested studies would advance our understanding of the relationship between the commercialization of athletics and university values as well as their commitment to high standards of academic excellence and integrity.

An Athletes' Rights Approach

There has been little extant empirical research on the athletes' rights model. Athletes' rights advocates view college sport as a highly commercialized business and argue that athletes are in an exploitive structural arrangement. This arrangement means that they are not sufficiently protected or fairly compensated – educationally, medically, or financially – for their athletic labor. The athletes' rights model raises questions about the fair treatment and well-being of athletes within the context of NCAA and member institution policies and priorities. For instance, as Zimbalist and Sack (2013) noted, “The NCAA has claimed that its restrictions on income from the use of athletes' images, likenesses and names are necessary to promote balance in competitive outcomes and financial solvency for athletic programs” (p. 7).

Additional empirical research should explore the validity of competitive balance and financial solvency arguments (see Schwarz and Rascher 2017). As well, it would be worthwhile to continue to examine NCAA and member institution policies and rules – for example, amateurism, 4–4 transfer, Title IX, social media, concussion management, and 1-year renewal scholarships – to advance our understanding of fairness issues and their impact on the well-being, health, and academic progress of Division I men and women athletes.

Future longitudinal, large-scale studies should track college athletes throughout their athletic careers, providing more definitive knowledge about their complicated and cumulative campus experiences. It would be especially instructive to document, through both large-scale surveys and in-depth interviews, the views of primarily White athletic stakeholders – e.g., coaches, athletic directors, conference commissioners, and sponsors – about compensating college athletes under the guise of amateurism, particularly those in the revenue-generating sports of football and men's basketball. For example, is there a kind of racial resentment or anti-Blackness toward the most highly publicized and disproportionately Black players? Future studies should consider critical theory as a framework to understand this phenomenon and to explore how athletic departments (and universities) are proficient at producing and reproducing whiteness. Researchers can and should be interdisciplinary in nature, cutting across the various disciplines that contribute to a robust understanding of the college athlete experience, rather than operate in silos with narrow scopes. Drawing upon critical whiteness studies (e.g., Cabrera 2014; Leonardo 2009), for example, would enable researchers and scholars to interrogate

how white athletic stakeholders often rely upon the reproduction of whiteness and white privilege.

Conclusion

Recent empirical work demonstrates that college athletes' experiences may be impaired by the commercialism of college sports. Too often, priorities such as winning games and generating revenue streams can supersede their physical well-being, academic obligations, and career goals. For reasons of social justice – broadly defined in this context as “improving the learning of all pupils and enhancing their life chances” (Mitescu et al. 2009, p. 18) – athletic stakeholders must do more to improve the quality of the educational experience for all college athletes. The consolidation of knowledge about college athletes' experiences in this chapter offers a solid foundation for future work. By pursuing the avenues of inquiry identified above, we can help ensure that college athletes, who are among the most vulnerable institutional actors on campus, receive the quality educational experience they deserve.

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Reimagining the Study of Campus Sexual Assault

5

Jessica C. Harris, Krystle P. Cobian, and Nadeeka Karunaratne

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Abstract

To work toward the effective eradication of campus sexual assault (CSA), it is imperative that scholars, practitioners, and policymakers gain a better understanding of what is known, via empirical research, about CSA and thus what may remain unknown. The purpose of this chapter is to demonstrate and critique *what* is currently known, through research, about CSA. To demonstrate the current scholarly narrative of CSA, we conducted a systematic review of 383 articles, drawn from 14 peer-reviewed journals that publish research on postsecondary students and on sexual assault in postsecondary contexts. While the main question explored through this chapter revolves around *what* is known about CSA, we also interrogate *who* is centered in research on CSA, and *how*, *when*, and *where*

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scholars conduct CSA research. Acknowledging the gaps in current research informs future research, and subsequently future practice and policy, that may more effectively work toward the eradication of CSA.

Keywords

Bystander intervention · Campus safety · Campus sexual assault · Campus sexual violence · College students · Equity · Gender-based violence · Perpetrators of sexual assault · Rape myth acceptance · Sexism · Sexual assault prevention · Sexual assault response · Systematic review · Title IX

Introduction

Over the past decade, the US federal government, postsecondary policymakers, leaders of higher education institutions, and individual college students and staff have paid increasing attention to campus sexual assault (CSA), or any sexual contact that occurs without one's consent on a college campus and its surrounding community (e.g., Barboza et al. 2015; U.S. Department of Education 2011; U.S. Department of Justice 2018; Wiersma-Mosley and DiLoreto 2018).¹ Much of this increased attention may be attributed to the Obama Administration's April 2011 Dear Colleague Letter (DCL), issued by The U.S. Department of Education Office for Civil Rights (OCR). Through the DCL, the federal government addressed over 7000 not-for-profit higher education institutions in the USA and reinterpreted Title IX of the Education Amendments of 1972, which states that sex discrimination is prohibited by educational institutions and programs that receive federal funding (Education Amendments Act). The 2011 OCR reinterpretation clarified that "sexual harassment of students, which includes acts of sexual violence, is a form of sex discrimination prohibited by Title IX" (U.S. Department of Education 2011, para. 1). The OCR also explained how institutions must comply with Title IX and the handling of reports of campus sexual violence.

Shortly after the release of the DCL, "campus sexual violence...gained the highest level of governmental attention" (Jones 2015, p. 4). In March 2013, President Obama signed the Violence Against Women Reauthorization Act of 2013, which clarified the rights of survivors of CSA and detailed "the role of law enforcement, the types of crime mandated for reporting, and stipulates the need for violence prevention programming" (Clery Center 2019, np). In April 2014, the White House Task Force to Protect Students from Sexual Assault released its first report. In the report, the OCR promised 14 future documents from the federal government, all of

¹While sexual assault refers to any unwanted sexual contact, sexual violence is an umbrella term that refers to sexual assault, stalking, and intimate partner violence. Throughout this chapter, we use the terms sexual assault and sexual violence in intentional and different manners, often narrowing our focus toward sexual assault.

which would center on best practices, compliance, and research for campus sexual violence.

In response to the DCL and subsequent documents, institutional leaders attempted to comply with the governmental guidelines. For instance, the position of Title IX Coordinator was created or shifted at several institutions in an attempt to comply with the DCL guidelines that stated each institution must have a designated, trained, and neutral Title IX Coordinator that is available for victims (U.S. Department of Education 2011; Wiersma-Mosley and DiLoreto 2018). Higher education and student affairs organizations also turned their attention to compliance, including prevention and response. Citing the DCL for “refocusing higher education’s attention on the problem of sexual violence,” NASPA – Student Affairs Administrators in Higher Education (NASPA) offered a Sexual Assault Prevention and Response Conference. NASPA also founded Culture of Respect in 2013, which aims to aid institutions with ending CSA. ACPA – College Student Educators International (ACPA) offers various forms of Compliance U, which are modules that detail Title IX policies and procedures. ACPA also created a Presidential Task Force on Sexual Violence in Higher Education and released *Beyond Compliance: Addressing Sexual Assault in Higher Education* (Barboza et al. 2015).

More recently, in the fall of 2018, U.S. Secretary of Education Besty DeVos and the Department of Education released a set of proposed regulations that will roll back Obama era guidelines on Title IX. The new regulations institute a narrower view of sexual harassment, hold schools less accountable for responding to CSA – particularly those occurring off campus, shift reporting requirements, and change the evidentiary standard (U.S. Department of Education 2018). The Trump administration continues to shift policies and societal discourse on CSA; time will tell how colleges and universities adopt and are affected by the new Title IX regulations set forth by DeVos.

Through the shifting policy changes, increased compliance rhetoric and governmental guidance, and heightened institutional efforts, sexual assault remains prevalent across college campuses (see Cantor et al. 2015; Jessup-Anger et al. 2018). Furthermore, the Obama Administration’s 2014 list of 55 higher education institutions under investigation for Title IX violations has, as of March 2019, grown to approximately 228 institutions, suggesting that efforts to improve institutional response to CSA have been somewhat unsuccessful (*The Chronicle of Higher Education* 2019). In short, increased federal, institutional, and individual efforts to better prevent and respond to CSA continue to fall short. One of the reasons that stakeholders’ efforts may be insufficient rests in what is known, through research, about CSA.

Higher education institutions and organizations encourage scholars and practitioners to conduct and use research to inform postsecondary policies, practices, and programs (ACPA and NASPA 2015; Harper 2017). Federal agencies explicitly name the importance of moving research to practice to inform the eradication of CSA. The 2014 White House Task Force report, *Not Alone*, cites research as a way to find new solutions to CSA and to “measurably improve our thinking about sexual assault” (p. 16). OCR, The Centers for Disease Control and Prevention (2014), also

suggested that more research is needed to develop and evaluate prevention programming for CSA. Although scholarship that centers CSA is a significant component of exploring and finding ways to effectively address and eradicate CSA through campus policies, practices, and procedures, there exist major gaps in the scholarship on CSA. The gaps in scholarship, which informs the work of policymakers and practitioners, may be why some practices (not to be confused with practitioners), specifically CSA prevention and response, are ineffective or fall short.

Some scholars have identified these gaps while reviewing literature that centers specific subtopics of CSA, including prevalence rates (Fedina et al. 2018), the effectiveness of sexual assault education programs (Anderson and Whiston 2005; Brecklin and Forde 2001), the effectiveness of prevention programs (Breitenbecher 2000; Katz and Moore 2013), and the connection between students' alcohol use and sexual assault (Abbey 2002; Abbey et al. 2004). Scholars' targeted reviews of literature on CSA highlight cracks, both in content and methods, in what is currently known about specific topics. For example, in reviewing research on the prevalence of CSA, Fedina and colleagues (2018) found that scholars rarely account for the intersection of students' race and gender when focusing on prevalence and that scholars' constructs of "sexual assault" varied by study design, thus creating variability and difference of prevalence rates between studies. While these targeted reviews are informative and helpful in understanding what is known about specific topics that concern CSA, many do not describe a comprehensive picture of what is known across the larger body of CSA literature.

Other scholars have taken on a more comprehensive review of literature on CSA (e.g., Harris and Linder 2017; Linder et al. 2017; McMahon et al. 2019). For example, Harris and Linder (2017) reviewed 100 articles that focused on campus sexual violence, finding that the literature could be grouped into several topic areas, including prevention, alcohol, gender, minimizing and reporting sexual violence, and policy. While Harris and Linder began to explore the content of both what is known and what is not known, their analysis is limiting. The authors only reviewed 100 articles published after the year 2000, and their method for pulling these articles was not systematic, or conducted in an organized and rigorous manner (Cronin et al. 2008).

Linder and colleagues (2017) built on this previous work (Harris and Linder 2017) and conducted a content analysis of 540 articles that focused on campus sexual violence. Through their analysis, the researchers found that "the majority of research focused on homogenous groups of participants, predominantly white, cisgender, heterosexual students and was conducted using a quantitative methodology" (p. 9). Linder and colleagues explored who, how, and what scholars studied and where scholarship was published, yet a detailed narrative of the research topics was not covered in their review. For example, while the researchers found that scholars often studied victim risk factors, the authors did not explore *what* the literature on victim risk factors suggested. In sum, while previous reviews of literature are useful in identifying several gaps in CSA research, these reviews do not often provide a comprehensive review and critique of the literature.

To work toward the effective eradication of CSA, it is imperative that scholars, practitioners, and policymakers gain a better understanding of what is known, via empirical research, about CSA and thus what may remain unknown. The purpose of this chapter is to demonstrate and critique *what* is currently known, through empirical research, about CSA. While our main research question revolves around what is known about CSA, we also interrogate *who* is centered in research on CSA, and *how*, *when*, and *where* scholars conduct CSA research. Acknowledging the gaps in current research informs future research, and subsequently future practice and policy, that may more effectively work toward the eradication of CSA.

To demonstrate the current scholarly narrative of CSA, we conducted a systematic review of 383 articles, drawn from 14 peer-reviewed journals that publish research on sexual assault in postsecondary context. Below, we explore in detail our approach to the systematic review of articles and explain how we arrived at the seven scholarly themes represented in the literature. Next, we explore in depth each of the seven themes, including *who* is centered throughout the scholarly theme and *how*, *when*, and *where* scholars conduct research on that individual theme. We conclude the chapter by summarizing what, given the findings from the systematic review, the field knows about CSA and what remains unknown and underexplored. The gaps identified in the current research lead us to offer tangible implications for future research on CSA that works toward the eradication of violence on campus.

Approach to the Systematic Review

We conducted a systematic review of 383 articles published across 14 peer-reviewed journals (Table 1). A systematic review encouraged us to “use explicit and rigorous criteria to identify, critically evaluate and synthesize all the literature on a particular topic” (Cronin et al. 2008, p. 39). In deciding on journals to search for research on CSA, we first identified and included 11 journals “that publish most of the empirical research on postsecondary education,” many of which are considered leading journals in the field (Harper 2013, p. 13; see also Harris and Patton 2019). We then included three additional journals, because they publish the majority of empirical research on sexual violence and, at times, CSA.

After deciding on the 14 journals to include in our analysis, the first author used online electronic retrieval sources, such as ERIC and ProjectMUSE, to locate featured articles within each journal that used the term “sexual assault” and/or “rape” and/or “sexual violence” at least once alongside the term “student” and/or “college student” and/or “campus” and/or “university” and/or “higher education.” In short, articles pulled for analysis centered on sexual assault *and* included college students in their study sample population or in the population of interest. The initial search for literature yielded over 1000 articles. The lead researcher decided to limit the analysis to research from the last 30 years: from August 1988 to August 2018. Additionally, hundreds of articles located through the initial search focused on intimate partner violence (IPV) or violence perpetrated by a partner or spouse (Centers for Disease Control and Prevention 2018). Because IPV can include sexual

Table 1 Journals included in systematic review

Journal title	Number of articles
<i>American Educational Research Journal</i>	0
<i>Community College Review</i>	0
<i>Research in Higher Education</i>	0
<i>The Journal of Higher Education</i>	0
<i>The Review of Higher Education</i>	1
<i>Community College Journal of Research and Practice</i>	2
<i>Journal of College and Character</i>	4
<i>NASPA Journal About Women in Higher Education</i>	6
<i>Journal of Student Affairs Research and Practice</i>	15
<i>Journal of College Student Development</i>	21
<i>Psychology of Women Quarterly</i>	37
<i>Journal of American College Health</i>	55
<i>Violence Against Women</i>	73
<i>Journal of Interpersonal Violence</i>	169
Total	383

assault and/or psychological and physical violence (Centers for Disease Control and Prevention 2018), the first author made a decision to not include articles that focused *only* on IPV. In other words, these articles did not always align with our focus on sexual assault or unwanted *sexual* contact.

Through the search process, the first author located and downloaded approximately 415 articles into one main folder entitled “Research on Campus Sexual Assault.” Next, the first author scanned each article in the main folder to understand the primary topic and argument of each article. Each article was then sorted into one or two topical subfolders. The topics for each subfolder, which later became themes, were created and continually revised as the first author scanned and sorted articles from the main folder into subfolders. About 15% of the articles covered more than one topic. The first author copied and pasted these articles into two or more subfolders. Throughout the sorting process, the first author kept an Excel sheet detailing the title and publication date for all articles, study authors, purpose of the research, methods, primary and secondary (if necessary) topic/theme, and any additional notes. During the sorting process, approximately 32 articles were deleted from the main folder of articles, because they did not pertain to college students, only focused on IPV, or did not meet another criterion for the review. From the sorting process, the lead researcher sorted 383 articles into seven subfolders; these subfolders became the themes observed across the literature on CSA (Table 2).

Finally, each chapter author was assigned one to three subfolders of literature to explore in more depth. This exploration included reading each article, memoing on the articles, taking notes on an Excel sheet like the one described above, and asking the following four questions of each article:

1. *What* do study findings relay or suggest about the subtheme?
2. *Who* is centered? Who is included in the sample population?

Table 2 Subfolders/themes

Themes	Number of articles
<i>Prevalence of victimization</i>	26
<i>Risk factors for perpetration and for assault</i>	77
<i>Alcohol use and campus sexual assault</i>	49
<i>Rape myth acceptance and perceptions of victims</i>	67
<i>Prevention and education</i>	109
<i>Students' responses to experiencing sexual assault</i>	89
<i>Organization, administration, and campus sexual assault</i>	21

3. **How** is the research conducted, including paradigms, methods, and frameworks used by the researchers?
4. **Where** does the research take place, including geographic regions and institutional type, but also, where is the research published?

The goal of the analysis was to demonstrate the story conveyed within each theme, as well as the stories that remain untold in the literature. The final stage of our review of literature involved looking across the themes to gain a better understanding of what is known about CSA and how this narrative might be expanded in future research.

The Scholarly Narrative of Campus Sexual Assault

Below, we explore the content and findings from the research on each topic, while also critiquing this scholarship in an effort to demonstrate what might be missing within each theme. Guided by this scholarly narrative of CSA, we conclude by offering broad implications for future research on CSA.

Prevalence of Victimization

Since the 1950s, researchers have consistently measured, using quantitative methods, the prevalence of campus sexual violence, but this research offers little consensus on the rates of CSA (Palmer and Perrotti 2016). Prevalence estimates of CSA, or the rate measuring experiences of sexual assault once a student arrives on campus, range from 5.4% to 12.5% for cisgender men students (Ameral et al. 2017; Campbell et al. 2017; Gardella et al. 2015; Herres et al. 2018) and from 6.7% to 37% for cisgender women students (Banyard et al. 2005; Cranney 2015; Flack et al. 2015; Gross et al. 2006; Tanzman 1992).

The drastic difference in prevalence rates between studies is influenced by how researchers define sexual assault. Survey measures, sample sizes, student demographic representations, time periods examined, and statistical methodology lead to a variance of prevalence rates (Fedina et al. 2018). For example, some scholars define

sexual assault with broad experiences, such as “sexual contact, violence, and/or harassment” (Campbell et al. 2017), while others used a narrower definition of sexual assault, such as “unwanted intercourse” (Cranney 2015). Furthermore, some scholars distinguished between attempted sexual assault and completed sexual assault in their findings (Cranney 2015; Fish et al. 2017; Flack et al. 2015; Herres et al. 2018; O’Sullivan et al. 1998; Patterson Silver Wolf et al. 2018), while others do not distinguish between attempted and completed assault when conceptualizing CSA (Banyard et al. 2005; Caamano-Isorna et al. 2018; Campbell et al. 2017; Conley et al. 2017; Edwards et al. 2015; Gross et al. 2006; McMahan and Stepleton 2018; McMahan et al. 2018b).

Moreover, the vast majority of the studies on CSA prevalence rates for undergraduate students were conducted at large public universities (Banyard et al. 2005; Brown et al. 2017; Caamano-Isorna et al. 2018; Conley et al. 2017; Findley et al. 2016; Gross et al. 2006; McMahan and Stepleton 2018; McMahan et al. 2018b) or small liberal arts colleges (Ameral et al. 2017; Flack et al. 2015; Herres et al. 2018). Subsequently, little is known about the prevalence of CSA at other institutional types, such as community colleges, small public institutions, and large private institutions.

Students’ identities. Scholars who have focused on identity and prevalence often focused on cisgender women students, finding that cisgender women students are more likely to be victimized than cisgender men students (Campbell et al. 2017; Conley et al. 2017; Griner et al. 2017; McMahan and Stepleton 2018; O’Sullivan et al. 1998; Ray et al. 2018). While foundational, this research may obscure the prevalence of CSA for students who do not identify as cisgender women. The unilateral focus on cisgender women may be even more perplexing when acknowledging that transgender students often report higher rates of CSA than cisgender men and women students (Griner et al. 2017). Even when research provides options for students to identify as cisgender, transgender, and gender nonconforming, students’ gender identities were often reported back or reanalyzed through a binary paradigm of sex (male/female), erasing many students’ identities and experiences (Herres et al. 2018, p. 7; see also McMahan et al. 2018b).

Scholars have also found that students with minoritized identities, including students with disabilities (Brown et al. 2017; Findley et al. 2016; Snyder 2015), Native American students (Fish et al. 2017; Patterson Silver Wolf et al. 2018), and queer and gender nonconforming students (Coulter and Rankin 2017; Edwards et al. 2015; Griner et al. 2017), report higher rates of sexual assault than their peers who do not hold these same minoritized identities. For example, students with disabilities reported higher rates of sexual assault victimization than students without disabilities (Brown et al. 2017; Snyder 2015). This important but limited research demonstrates how prevalence rates of CSA differ between students when scholars account for students’ identities.

Risk Factors for Perpetration and for Assault

This section provides an overview of the research on risk factors that are associated with increased risk for either perpetration of sexual assault or experiencing sexual

assault. We first review a small body of literature that explores risk factors for perpetration. Second, we review a large body of literature that identifies risk factors for victimization.

Risk factors for perpetration. Researchers have almost exclusively investigated men students as perpetrators of CSA (e.g., Abbey et al. 2003; Barbaro et al. 2018; Forbes et al. 2006; Voller and Long 2010). Of the 383 articles included in this review, only 4 articles focused on women as potential perpetrators of assault (Campbell et al. 2017; Forbes et al. 2004; Hummer et al. 2010; Hust et al. 2019) and 1 article focused on trans* and gender nonconforming students as perpetrators (Campbell et al. 2017). In this section, we discuss literature that addresses what risk factors, including prior victimization, affiliation with campus organizations, and individual traits and behaviors, increase the likelihood of (men) students' perpetrating CSA.

Prior victimization. Scholars have unilaterally used quantitative methods to explore prior victimization and perpetration, finding that college men with a history of child sexual abuse, prior victimization experiences of sexual assault, and/or physical abuse were more likely to perpetrate sexual assault in college (Campbell et al. 2017; Loh and Gidycz 2006; Voith et al. 2017). Yet, a lack of qualitative research that explores the connection between prior victimization and perpetration results in limited usefulness for understanding *why* this connection exists and how educators might develop interventions to reduce this link.

Affiliations with campus organizations. A connection also exists between men's athletic participation, their attitudes of hostile masculinity, and their engagement in sexual coercion (Forbes et al. 2006; Young et al. 2016). Student athletes' hostile masculinity was attributed to the hypermasculine athletic environment fostered by aggressive team sports, which includes "war-like, misogynistic, and sexually violent analogies" (Young et al. 2016, p. 798) and the objectification of women, promotion of homophobia, and admiration of violence (Forbes et al. 2006). Fraternity affiliation has also been associated with a greater adherence to traditional beliefs about gender roles and an increased likelihood of engaging in sexual aggression or perpetration (Loh et al. 2005; Seabrook et al. 2018). The Greek system continues to perpetuate exclusion, white supremacy, and toxic masculinity (Harris et al. 2019), yet the research that concerns fraternity affiliation as a risk of perpetration does not often account for the toxicity and dominant ideologies that perpetuate violence that are woven throughout Greek culture on many campuses.² While some researchers, such as Young and colleagues (2016), acknowledge the connection between hypermasculine environments and student attitudes, they often lack an analysis of dominant patriarchal ideologies and focus instead on individual beliefs.

Individual traits and behaviors. Studies have linked men students who perpetrate CSA to their individual traits and behaviors such as impulsivity (Wilhite and Fromme 2017), empathy (Stephens and George 2009), depression (Nguyen and

²Guided by the works of Lindsay Pérez Huber (2010), we capitalize "Asian," "Black," and other minoritized groups, including "People of Color," as a form of linguistic empowerment. We do not capitalize "white" to counter hegemonic grammatical norms and to "reject the grammatical representation of power capitalization brings to the term 'white'" (Pérez Huber 2010, p. 93).

Parkhill 2014), sexual aggression (Nunes et al. 2013; Warkentin and Gidycz 2007), anxious attachment (Barbaro et al. 2018; Nguyen and Parkhill 2014), and increased alcohol consumption (Abbey et al. 2003; Wilhite and Fromme 2017). One of the largest bodies of literature connects men students' rape myth acceptance (RMA) and negative beliefs about gender to their likelihood to perpetrate sexual assault (see below section on RMA). Some researchers have explored the impact of prior perpetration on the likelihood of engaging in sexual assault in college, indicating a positive correlation between the two factors (Campbell et al. 2017). The body of literature contained in this subsection is necessary, but almost always falls short because scholars rarely connect perpetrators' individual traits and behaviors to structures of power and privilege, which is central to better understanding and eradicating CSA (Harris and Linder 2017). For example, how might sexist environments and societal messaging contribute to perpetrators' sexual aggression or anxious attachment?

Risk factors for victimization. In the below subsections, we explore risk factors for sexual assault victimization. The majority of these studies position women as the victims of CSA (e.g., Franklin 2015; Gidycz et al. 2008; Kingree and Thompson 2017), leading to victim blaming ideologies that imply there is something inherent (gender) about the victim or their behavior that causes them to be assaulted. Together with the studies focused on men as perpetrators outlined in the above section, this body of literature perpetuates the myth that only cisgender men assault only cisgender women. Additionally, the research on risk and protective factors for victimization is almost exclusively quantitative in nature – within the approximately 75 articles reviewed for this section, only 2 used qualitative inquiry (Sweeney 2011; Yeater et al. 2011), resulting in findings that may be limited in identifying why specific factors increase or decrease risk for victimization.

Prior victimization. Prior victimization, including child sexual abuse, increased the risk of experiencing sexual assault for college women (e.g., Campbell et al. 2017; Conley et al. 2017; Culatta et al. 2017; Daigle et al. 2008; Hawn et al. 2018; Himelein 1995; Katz et al. 2010; Kingree and Thompson 2017; McCauley et al. 2010; Messman-Moore et al. 2009; Ray et al. 2018; Reese-Weber and Smith 2011; Waldron et al. 2015). While many studies did not empirically measure the cause of this increased risk, some researchers hypothesized the difference was due to psychological consequences of victimization, such as depressive symptoms and post-traumatic stress disorder (Culatta et al. 2017; Daigle et al. 2008; Himelein 1995; Waldron et al. 2015), increased self-blame that may result in decreased sexual refusal assertiveness (Daigle et al. 2008; Himelein 1995; Katz et al. 2010), impact on self-esteem and feelings of power (Reese-Weber and Smith 2011), and an increased use of alcohol (McCauley et al. 2010).

Some researchers reported higher risk appraisal from women who were previously victimized (Melkonian et al. 2017; Untied et al. 2013), while others found that prior victimization did not correlate with heightened perceptions of risk (e.g., Mitchell et al. 2017; Yeater et al. 2011, 2018). However, type of victimization may impact risk appraisal, as women who experienced substance-related victimization indicated less risk than those who had reported experiencing forcible victimization

or did not report any victimization (Eshelman et al. 2015). The few studies that explore victimization for men suggests that victimization prior to attending college increased some men students' vulnerability to sexual assault in adulthood (Conley et al. 2017; Voith et al. 2017). Additionally, men students had similar rates of revictimization as women students; 33.5% of men and 40.6% of women experienced revictimization in college (Conley et al. 2017).

Greek membership. Cisgender women students' membership in a sorority often results in greater alcohol use, increased risk-taking behavior, delayed assessments of risk, increased contact with fraternity men (Franklin 2015), greater number of sexual partners (Kingree and Thompson 2017), and attendance at coed Greek social events with alcohol (Minow and Einolf 2009). All of these aforementioned factors predicted increased risk of sexual assault (Combs-Lane and Smith 2002; Franklin 2015; Kingree and Thompson 2017; Minow and Einolf 2009). However, because white students are heavily represented in most studies exploring Greek affiliation, this existing research does not address the victimization experiences of a racially diverse student population. For example, white students represented 83% of the sample population in Combs-Lane and Smith's (2002) study on victimization risk factors and 85% of the sample population in Franklin's (2015) research on sorority affiliation and victimization risk.

The above scholarship suggests that the presence of Greek life on campus may influence students' risk of experiencing CSA. Greek life is one of many institutional factors that influence CSA, yet scholars have been slow to explore other institutional factors, beyond Greek life, that may influence CSA. In fact, only one study in our analysis investigated the impact of differing institutional factors on rates of assault (Wiersma-Mosley et al. 2017), finding that public institutions with higher tuition, greater liquor violations, and larger numbers of fraternity men and athletes reported higher numbers of rapes in their Clery reports (Wiersma-Mosley et al. 2017). The lack of focus on institutional context is intriguing, because the scholarship included in our analysis claims to focus on *campus* sexual assault but often falls short in contextualizing data within campus environments.

Individual traits and behaviors. The body of literature that explores individual traits and behaviors as risk factors for sexual assault victimization can be organized by psychological and behavioral factors for risk. Regarding psychological factors, women with symptoms of depression (Culatta et al. 2017; Messman-Moore et al. 2008; Waldron et al. 2015) and post-traumatic stress disorder (Messman-Moore et al. 2009) were more at risk for sexual assault than women who did not report these factors. Women students' self-criticism, or self-blame, was also correlated with increased risk of victimization (Katz et al. 2010; Messman-Moore et al. 2008).

Many studies focus on behavioral risk factors for victimization, primarily exploring sexual behaviors but also academic performance (Gardella et al. 2015). One of the few studies exploring victimization risk for men stated that openness, a personality factor that indicates a person is open-minded, was a significant predictor of college men experiencing sexual assault (Conley et al. 2017). While researchers found that students with lower grade point averages (GPAs) were more likely to have

experienced victimization, the causation of this relationship remains unexplored (Gardella et al. 2015). Engaging in sexting (Dir et al. 2018), early sexual intercourse (Gidycz et al. 2008), dressing “provocatively” (Synovitz and Byrne 1998), and having multiple sexual partners (Corbin et al. 2001; Gidycz et al. 2008; Synovitz and Byrne 1998) also correspond with sexual assault victimization for cisgender women students. In addition, “riskier” sexual behaviors, such as a younger age of first sexual intercourse and a lower usage of condoms during sex, influenced greater victimization rates for women students (Carlson and Duckworth 2019; Combs-Lane and Smith 2002; Messman-Moore et al. 2008, 2009; Ray et al. 2018). Finally, women who were more sexually “conservative,” as defined by having fewer consensual sexual experiences, were less likely to be victimized in college (Himelein 1995).

Only a handful of studies specifically focused on the victimization experiences of minoritized groups, such as students with disabilities (Brown et al. 2017; Snyder 2015), Students of Color (Crawford et al. 2016), as well as sexual minority (Ray et al. 2018) and transgender students (Griner et al. 2017). For example, women students with attention deficit hyperactivity disorder (ADHD) reported higher rates of sexual violence than women students without ADHD (Snyder 2015), as did sexual minority women students compared to heterosexual students and sexual minority men students (Ray et al. 2018).

Temporal factors. Some scholars explored the temporal risk of victimization, focusing on the concept of the “red zone,” which refers to the first few weeks of the first semester at college (Flack et al. 2008). One study found that first-year women were at higher risk for sexual assault than second-year women, especially in the fall semester (Kimble et al. 2008). In another study, second-year women reported a significantly higher rate of sexual assault in the first semester than first-year women or during other times of the school year (Flack et al. 2008). Researchers have also demonstrated how fraternity men actively sought out first-year women because of their perceived naiveté (Sweeney 2011), suggesting the importance of focusing on peer culture alongside temporal factors.

Alcohol Use and Campus Sexual Assault

While focusing on alcohol and CSA, scholars often center how alcohol impacts risks of perpetrating assault or how alcohol increases the risk of becoming a victim of CSA. To study alcohol use and CSA, quantitative studies often used participant samples primarily composed of white, cisgender, and heterosexual students enrolled at 4-year public or private universities. For example, white students represented 77% of the sample in one study on alcohol use and CSA (Palmer et al. 2010), while another study contained 83% of white cisgender women in the overall study sample (Clinton-Sherrod et al. 2011). Fewer studies included, and at times accounted for, students with diverse racial and ethnic identities (Abbey et al. 2002; Caamano-Isorna et al. 2018; Gilmore et al. 2016; Yeater et al. 2018). It is important to point out that while we summarize much of the literature that connects alcohol use and CSA in this

section, almost all other themes generated from our analysis map back, at some point, to students' use of alcohol.

Alcohol and perpetration. Scholars have examined the connection between alcohol use of both the victim and perpetrator in an attempt to understand perpetration of CSA (e.g., Abbey et al. 2002, 2003; Sweeney 2011; Testa and Livingston 1999; Untied et al. 2013; Wilhite and Fromme 2017). This scholarship often finds a connection between heavier drinking and the likelihood of being a perpetrator (Untied et al. 2013; Wilhite and Fromme 2017), the level of perpetrator aggression and alcohol consumption (Testa and Livingston 1999), and perpetrators' frequency of alcohol consumption at the time of the assault and severity of assault (Abbey et al. 2003).

Alcohol and victimization. Research suggests that a high percentage, nearly half, of all CSAs involved alcohol consumption by either men students, women students, or both men and women students (Abbey 1991; Abbey et al. 1996; Lawyer et al. 2010). Scholars have connected this alcohol use to sexual victimization, often exploring the differences in alcohol use between men and women (e.g., Abbey 2002; Brown et al. 2009; Caamano-Isorna et al. 2018; Cowley 2014; Gidycz et al. 2007; Krebs et al. 2009; McCauley et al. 2010; Messman-Moore et al. 2008; Sweeney 2011) and positioning women as the victims of incapacitated assault and men as the perpetrators of assault. While limited, some research suggests that alcohol use and its connection to CSA may be different for Women of Color students and white women students (Gilmore et al. 2016; Nguyen et al. 2010). For instance, college women of European ancestry reported more frequent heavy episodic drinking than native English-speaking students of Asian/Pacific Islander ancestry, and this heavier drinking was associated with more severe assault (i.e., both a greater frequency and greater severity of CSA) since college (Gilmore et al. 2016).

Several studies also point to alcohol use as a consequence of victimization (Gidycz et al. 2007; McCauley et al. 2010; Messman-Moore et al. 2008; Ross et al. 2011). For example, increased alcohol use is connected to women students coping after victimization and is both a predictor and consequence of alcohol involved sexual assault (Messman-Moore et al. 2015). Using alcohol to cope may also differ by ethnic identity. For example, Asian American women students who experienced incapacitated rape reported more heavy-drinking and drinking problems compared to white women who had experienced incapacitated rape (Nguyen et al. 2010). While these racialized and ethnic differences are intriguing, it remains relatively unknown why the differences around alcohol use exist for students with different racial identities. Furthermore, this research often compares white women students and Asian American women students (Lee et al. 2005; Nguyen et al. 2010), which may re/position whiteness as the norm, or filter, through which Asian American women students' experiences are understood and interpreted (Stanley 2007).

Few scholars have qualitatively explored the ways students' individual alcohol use and CSA are a manifestation of an institutional or cultural environment (Cowley 2014; Smith and Berger 2010; Sweeney 2011; Testa and Livingston 1999). For example, Cowley (2014) suggests that the individual physiological effects of alcohol

are connected to societal ideologies about alcohol, gender norms, sex scripts, and rape myths, which all work together to normalize male dominance and CSA against women students. Sweeney (2011) found that the organization of gender and sexuality within the party scene, which included alcohol, made first-year women particularly appealing and more available to upper-class men. These few studies suggest that the connection between individual alcohol intake and CSA, which the literature explores at length, is connected to institutional culture and oppressive social systems (e.g., sexism and gender norms).

Rape Myth Acceptance and Perceptions of Victims

Rape myths are stereotypical beliefs and attitudes about sexual assault that are often false, but perceived as truth, and are used to deny and justify treatment of victims and perpetrators (Lonsway and Fitzgerald 1994). RMA refers to individuals' level of belief in, or acceptance of, rape myths (Lonsway and Fitzgerald 1994). Scholars have dedicated a significant amount of research to RMA, which often "influence how victims and perpetrators of rape are viewed and how individuals understand their own experiences as victim or perpetrator" (Littleton and Dodd 2016, p. 1726; see also Custers and McNallie 2017; Lee et al. 2005; Paul et al. 2014). Women victims of CSA often use their understandings of rape myths to justify perpetrators' violent behaviors and guide how they respond, or do not respond, to assault (Deming et al. 2013). For students who receive a disclosure of sexual assault, their belief in rape myths may predict their attribution of victim responsibility and influence their (in)effectiveness in supporting victims of assault (Paul et al. 2014).

RMA and students' identities and characteristics. Students' beliefs surrounding rape myths differ by students' gender identity. Men students are consistently more supportive of rape myths than women students (e.g., Canan et al. 2018; Currier and Carlson 2009; Hayes et al. 2016; McMahan 2010; Vonderhaar and Carmody 2014; Worthen 2017). Men involved in, or interested in becoming involved in, campus Greek life often hold higher RMAs than men and women not involved or interested in Greek life and/or women involved in Greek life (Canan et al. 2018; McMahan 2010; Navarro and Tewksbury 2017; Seabrook et al. 2018).

RMA is also positively associated with male sexual aggression (Burgess 2007) and male student's intentions to sexually coerce others (Hust et al. 2019). Men with higher levels of RMA are also less likely to intervene in sexually coercive scenarios (Hust et al. 2019). Finally, as college men's moral development decreases, their RMA increases (Tatum and Foubert 2009). While it is clear that men may hold higher RMA than women students, the environments, contexts, and mechanisms in which men relearn, and that support RMA, remains underexplored. For instance, due to the quantitative nature of the aforementioned research, the patriarchal cultures throughout Greek life (Harris et al. 2019), and how they perpetuate rape myths, remain somewhat uninterrogated and disrupted.

Students' belief in rape myths may also differ by their racial identities (Canan et al. 2018; Lee et al. 2005; Littleton and Dodd 2016; Vonderhaar and Carmody

2014). Previous qualitative research suggests that, due to the presence of sexual scripts and stereotypes, African American women students are more likely to reject rape myths, such as perceptions of women as vulnerable victims, than white women students (Littleton and Dodd 2016). Yet, some quantitative research suggests that, when compared to white students, Asian students are more likely to believe that women are responsible for preventing rape, that women cause rape, and that the majority of rape is stranger rape, or perpetrated by someone the victim does not know (Lee et al. 2005). Other quantitative research also suggests that RMA is lower (Canan et al. 2018; Lee et al. 2005) or similar (Carmody and Washington 2001; Hayes et al. 2016) for white students compared to “non-white” students. Yet, the results of this quantitative research should be interpreted with caution, because the majority of the study samples are comprised of white students. Furthermore, while Littleton and Dodd (2016) explore why students’ RMA may differ by their racial identity, little other research interrogates the differences in beliefs in rape myths.

RMA is often higher for students who are younger (Currier and Carlson 2009; Navarro and Tewksbury 2017; Vonderhaar and Carmody 2014), religious (Ensz and Jankowski 2017; Navarro and Tewksbury 2017), student athletes (McMahon 2010), heterosexual (Worthen 2017), have lower GPAs (Navarro and Tewksbury 2017), display heavy drinking behaviors (Hayes et al. 2016; Navarro and Tewksbury 2017), demonstrate gender-blind ideologies that justify the subordination of women (Stoll et al. 2017), and do not know someone who has been sexually assaulted (McMahon 2010; Navarro and Tewksbury 2017; Worthen 2017). RMA has also been linked to students’ history of sexual victimization, although this research is inconclusive; some scholars found that rape victims displayed lower RMA (Vonderhaar and Carmody 2014), while others explored how previous victimization contributed to higher levels of RMA (Haugen et al. 2019), and some scholars found no link between prior victimization and RMA (Carmody and Washington 2001). Researchers have consistently shed light on the individual characteristics that impact student RMA, yet institutional and societal factors must be accounted for in future research on RMA.

Programs to mitigate RMA. Some institutional programs have been found to decrease students’ RMA and attitudes toward rape victims, including academic courses centered on issues of violence against women (Currier and Carlson 2009), a video-based prevention program with a segment on RMA (Johansson-Love and Geer 2003; O’Donohue et al. 2003), and acquaintance rape prevention programs (Gidycz et al. 2001). While these programs may reduce RMA in some students, they do not necessarily reduce rates of victimization (see Gidycz et al. 2001).

Perceptions of victims and victim blaming. RMA has been found to be a strong predictor of how students will perceive rape and rape victims (Angelone et al. 2018; Ayala et al. 2018; Basow and Minieri 2011; Mason et al. 2004; McDaniel and Rodriguez 2017). For example, the higher students scored on an RMA scale, the more likely they were to blame victims for experiencing sexual assault (Mason et al. 2004). Given that previous research (above section) suggests men demonstrate higher levels of RMA, and RMA is associated with perceptions of rape victims, it may come as little surprise that scholars consistently find that men often assign more

blame to female victims of assault and less blame to male perpetrators (Angelone et al. 2018; Basow and Minieri 2011; Donovan 2007; Munsch and Willer 2012).

While students' level of victim blaming differs by gender, attribution of blame is also nuanced by students' and victims' racial identities (Donovan 2007; George and Martinez 2002; Lewis et al. 2019; Neville et al. 2004). Students, across racial identities, often attribute more blame to Women of Color students for their assault than white women students (Lewis et al. 2019), particularly when raped by a white man (Donovan 2007). Others have found that students' attribute similar blame to white women and black women students when they are raped by perpetrators of a different race (i.e., interracial); George and Martinez 2002). Furthermore, less responsibility is often attributed to perpetrators who rape interracially (Donovan 2007; George and Martinez 2002). Students' racist attitudes (George and Martinez 2002) and sexist attitudes (Angelone et al. 2012, 2018) are also associated with victim blaming. Moreover, some black women who are victims/survivors of assault hold higher levels of victim blaming when they acknowledge the racist and sexist stereotypes that construct their bodies as sexually promiscuous (Neville et al. 2004). While this final study accounts for the influence of racist and sexist stereotypes, research on the racialized differences in students' victim blaming does not often account for these and other sociohistorical factors.

Scholars have also connected students' levels of victim blaming to the situations in which assault occurs. Students' interpretations of these situations, and assignment of blame, are often filtered through rape myths (Deming et al. 2013; Lee et al. 2005; Littleton and Dodd 2016). Students are more apt to attribute blame to victims when alcohol was involved in the assault (Maurer 2016), when the victim does not physically or verbally resist assault (Angelone et al. 2015), and when victims are assaulted within a "context of unclear and ineffective sexual assault law" (Miller et al. 2012, p. 1032).

Students also hold perceptions of perpetrators, relating back to the role of the victim, according to situation. Students may attribute more blame to male perpetrators of assault if the perpetrator was a boyfriend, rather than a stranger, to the victim (Maurer 2016) or if the perpetrator is a woman and the victim is a man (Ayala et al. 2018). Moreover, when an "obese" perpetrator assaults an "obese" victim, students view the perpetrator as more credible than if the victim was not obese (Yamawaki et al. 2018). Finally, perpetrators' motivations for assault influence students' perceptions of victims (Mitchell et al. 2009). When a perpetrator is motivated by violence, not sex, then less blame is attributed to the victim (Mitchell et al. 2009). While the sexual assault scenario is known to impact students' blaming of victims, the ways in which institutional type or context influence differences in victim blaming may build on these individual level findings.

Reactions to victims. Students form less positive perceptions of women rape victims, and may avoid the victim, if they know those close to the victim have reacted negatively or stigmatized the victim (Brown 2018). Fortunately, scholars have explored how peers often react in generally supportive manners to friends' disclosures of rape (Dunn et al. 1999). Women students tend to respond more positively to disclosures of rape than men students (Brown 2018; Hockett et al. 2015;

Iles et al. 2018; Paul et al. 2014), particularly when women who are disclosed to have been victims of sexual assault (Osman 2015; Paul et al. 2014). However, women students who have been on campus longer, and heard a disclosure that included one or more rape myths, were more likely to react to victims in a stigmatizing manner (Iles et al. 2018).

Peers also respond differently to victims when rape is perpetrated by a stranger as opposed to an acquaintance (Franklin and Garza 2018; Tetreault and Barnett 1987). Peers often attribute increased culpability and engage in decreased referral to resources when victims are assaulted by an acquaintance compared to those assaulted by a stranger (Franklin and Garza 2018). These attributions are further nuanced by gender; women students are more likely to attribute blame to victims of acquaintance rape, while men students attribute more blame to victims of stranger rape (Tetreault and Barnett 1987). Much of the research that centers reactions to victims reflects the perceptions or reactions of students who are disclosed to (i.e., those students who are not the victim; Brown 2018; Franklin and Garza 2018; Iles et al. 2018; Paul et al. 2014). Yet, this research often uses vignettes that reflect and perpetuate common rape myths, such as “real” rape must involve force or be perpetrated by a stranger (Hockett et al. 2015). Therefore, the research may not adequately assess or capture students’ blame attributions, because many vignettes do not reflect a full range of more realistic sexual assault scenarios.

Prevention and Education

Researchers have extensively explored CSA prevention and education programming, focusing primarily on bystander intervention (i.e., actions individuals can use to intervene in situations that may lead to sexual assault), and prevention programs targeted at men students to reduce their potential perpetration of violence. Over half of the articles we reviewed for this section involved program evaluations of educational programming, prevention initiatives, and risk reduction programs at one or more higher education institutions. *Educational programs* aim to educate students generally on issues of sexual assault. *Prevention programs* focus on reducing the prevalence of sexual assault by engaging potential bystanders or perpetrators and often results in bystander intervention education and programs targeted at men students. In contrast, *risk reduction education* emphasizes the actions potential victims can take to minimize their risk of victimization. Below we explore the literature that explores these three themes within sexual assault prevention and education literature.

Educational programming. Scholars have explored a variety of educational programs aimed to educate students about sexual assault, including academic courses (Currier and Carlson 2009; Hollander 2014; Jozkowski 2015), online education (Donovan et al. 2012; Zapp et al. 2018), theater performances (Ahrens et al. 2011; Christensen 2015; Iverson 2006; McMahon et al. 2014b, 2018a), and workshops (e.g., Gidycz et al. 2001, 2006, 2015; Moynihan et al. 2015; Stephens and George 2009). These programs often focus on increasing students’ knowledge on

acquaintance and date rape (Gidycz et al. 2011; Lonsway and Kothari 2000; Pinzone-Glover et al. 1998) and consent (Ortiz and Shafer 2018; Thomas et al. 2016).

Some of education programs have shown a decrease in RMA (Currier and Carlson 2009), an increase in empathy and support for victims (Zapp et al. 2018), and greater understanding of issues of sexual assault (Jozkowski 2015). However, “an understanding of such issues may not immediately translate into reductions in sexual assault” (Jozkowski 2015, p. 871). In fact, scholars rarely measure if education programs lead to decreased rates of CSA, and one of the few studies that did measure rates of assault post-educational intervention found no change, or reduction, in prevalence of assault (Gidycz et al. 2001), and positive outcomes from programs may require students to participate in more than one educational program (Lonsway and Kothari 2000). Additionally, some educational programs have been found to be ineffective at reducing revictimization for students with prior experiences of assault (Rothman and Silverman 2007). While this research centers on programs that may reduce CSA, it rarely, if ever, explores the connection between educational programs and help-seeking behaviors for students who have experienced sexual assault. In other words, it focuses on education for prevention, but not for response, which is equally as important to addressing CSA.

Prevention initiatives – bystander intervention. Scholars often study bystander intervention programming, which are educational initiatives that promote students’ intervention in situations with potential for sexual assault (Bennett et al. 2017; Cares et al. 2015; Katz et al. 2017; McMahan et al. 2014b; Moynihan et al. 2015). Students can employ multiple types of bystander behaviors to intervene in situations that may lead to CSA (McMahan et al. 2015; Palmer et al. 2018), including creating distance between the potential perpetrator and victim, directly addressing the individuals involved in the situation, distracting the individuals involved in the situation, and asking other people for help in intervening (Moschella et al. 2018). Student participants in multiple studies indicated they had witnessed at least one scenario with a potential for sexual assault victimization in the past, indicating the need to encourage students to intervene in the situations (Hoxmeier et al. 2018; Witte et al. 2006; Yule and Grych 2017). Researcher have also explored bystander intervention that aims to address students’ alcohol consumption (Fleming and Wiersma-Mosley 2015; Hoxmeier et al. 2018; Morean et al. 2018). While much of the literature explored students’ intentions to intervene, intentions to engage in bystander intervention may not always predict students’ actualized behaviors of intervention (Murphy Austin et al. 2015).

Impact of identity in bystander intervention. Students’ identities predict their behaviors and willingness to intervene as bystanders. Women students are more likely to intervene than men students in scenarios that may lead to sexual assault (Brown et al. 2014; Hoxmeier et al. 2017a; McMahan 2010; Moschella et al. 2018; Moynihan et al. 2015; Yule and Grych 2017). Women are likely to intervene whether they knew the potential perpetrator or not, but men are more likely to help if they do not know the perpetrator (Bennett et al. 2017). Some scholars have explored how students’ racial identities influence students’ intent to intervene in scenarios that may

lead to sexual assault (Hoxmeier et al. 2017a; Katz et al. 2017). For instance, white women participants may hold less intent and personal responsibility to intervene when the potential victim is a black woman compared to a potential victim of an unknown race (Katz et al. 2017). In a study comparing black and white students' bystander behaviors, black students reported more intentions to intervene than white students (Brown et al. 2014). While necessary to study race and bystander intervention, many scholars who focus on race and bystander intervention group Students of Color together as a monolithic group in statistical analysis (Bennett et al. 2014) or focus on only black and white students (Brown et al. 2014; Katz et al. 2017).

Attitudes and behaviors in bystander intervention. Scholars have also explored how students' willingness to intervene differs by their attitudes and the context of assault. Students are more likely to intervene in a potential assault if they deem the situation as more severe and if they know the victim (Bennett et al. 2017; McMahon 2010; Palmer et al. 2018), or if they are the host, rather than a guest, of a party in which a potential assault may occur (Silver and Jakeman 2016). Students are also more likely to intervene with potential victims than with potential perpetrators and if the victim is not drinking as opposed to intoxicated (Hoxmeier et al. 2018). Men who were drinking reported less likelihood to intervene when they knew the potential perpetrator than when the perpetrator was unknown (Fleming and Wiersma-Mosley 2015).

Additional barriers to students intervening in potential sexual assault include beliefs that the situation was not their responsibility and that they were unsure how to respond or lacked skills to respond (Bennett et al. 2014; Hoxmeier et al. 2017b; Yule and Grych 2017), "reluctance to stop someone from having a 'good time'" (DeMaria et al. 2018, p. 468), and possible stress that may come from witnessing victimization and intervening (Witte et al. 2006). In contrast, factors that promoted students' likeliness to intervene included a sense of responsibility (Bennett et al. 2014), perceptions that students' institutions were responsive to reports of sexual violence (Jouriles et al. 2017), and the belief that peers would support the intervention (Banyard et al. 2018; Brown et al. 2014; Murphy Austin et al. 2015).

Bystander intervention program evaluation. Bystander intervention workshops have demonstrated increases in participants' self-reported ability and intent to intervene (Ahrens et al. 2011; Coker et al. 2015; Moynihan et al. 2011; Zapp et al. 2018). Program evaluations of bystander intervention campaigns, which are marketing efforts that promote bystander engagement, indicated that these led to students holding increased awareness of their role in reducing sexual assault, willingness to intervene, and likelihood of taking action to intervene (Potter 2012; Potter et al. 2009). Furthermore, campaigns are helpful as part of a larger prevention strategy – students who participated in trainings in addition to viewing campaign materials demonstrated behavior change as opposed to simply increased awareness (Moynihan et al. 2015; Potter et al. 2009). Yet, few scholars collect longitudinal data on bystander intervention programs and do not often conduct assessments more than 1 year post-intervention. McMahon et al. (2018a) collected data over a period of 18 months, the longest longitudinal time period we observed for any study included

in our analysis. Longitudinal evaluation data is necessary to measure the true effectiveness of prevention programs throughout students' enrollment in higher education, as programs are typically only offered one time and at the start of students' college careers.

Prevention programs for men. Scholars have evaluated national and local prevention programs that target men on campus, demonstrating how men's sexual violence education programs have various impacts, including an increase in empathy for victims and ratings of self-efficacy to successfully prevent themselves from engaging in sexually abusive behavior (O'Donohue et al. 2003; Stephens and George 2009), gains in new awareness of gender and understanding of LGBT issues (Barone et al. 2007), challenges to participants' understanding of sexual assault and sexism (Barone et al. 2007), decrease in RMA (Langhinrichsen-Rohling et al. 2011; Stephens and George 2009), decrease in attraction to sexual aggression (Stephens and George 2009), less exposure to sexually explicit media (Gidycz et al. 2011), a decrease in intentions to rape (Stephens and George 2009), and an increased willingness to intervene and engagement in bystander behaviors (Barone et al. 2007; Langhinrichsen-Rohling et al. 2011). Prevention programs for men are often more effective when they involve a male peer facilitator in small, interactive, single-sex groups (Earle 2009), issues of social justice and power (Christensen 2015), and educational videos (Johansson-Love and Geer 2003; O'Donohue et al. 2003). Yet high-risk men, or men who have self-reported engaging in sexually aggressive behavior in the past, may be unaffected by educational interventions, while low-risk men may demonstrate larger positive effects (Stephens and George 2009).

Upon reviewing articles about prevention programs for men students, we observed that a great deal of this research focused on the effectiveness of one specific prevention program: The Men's Program. The Men's Program is a workshop targeted at educating college men on sexual assault, created by John Foubert (<https://cultureofrespect.org/program/mens-program/>). Evaluations of the Program suggest that college men involved in the program report positive changes in beliefs about sexual assault (Foubert and La Voy 2000); decreased RMA, increased empathy, a decline in likelihood to rape (Foubert 2000; Foubert and Newberry 2006); an increase in willingness to intervene as a bystander (Foubert et al. 2006); an increase in bystander intervention (Foubert et al. 2010a, b); modification of their behavior; and a decrease in sexually coercive behavior (Foubert et al. 2007, 2010a, b). While scholars have demonstrated the positive impacts of the program, the majority of men in the Program, and in research on the Program, were white men who were involved in a fraternity and/or college athletics (Foubert and Newberry 2006).

In fact, a great deal of literature on men and prevention programming, regardless of program, centers on white men who are athletes (e.g., Foubert and Cowell 2004; Foubert and Perry 2007; Kroshus et al. 2018) or involved in Greek life (Foubert 2000; Foubert and Cowell 2004; Foubert and La Voy 2000; Foubert and Newberry 2006; Foubert et al. 2007; Foubert and Perry 2007; Ortiz and Shafer 2018). The majority of these studies make broad claims about the effectiveness of prevention programs, yet study samples are often limited to white fraternity men and athletes. Additional research is needed to understand the efficacy of prevention programs for

men students, both white men and Men of Color, who are not affiliated with athletics or fraternities, particularly because not all institutions have (sizable) athletic programs or Greek life. Furthermore, while researchers often demonstrate an increase in student athletes' knowledge about sexual assault, including information about resources, reporting processes, and reduction in RMA, studies rarely measure the decrease in prevalence of sexual assault (Morean et al. 2018). In short, while a focus on addressing potential perpetrators in prevention work is a key to eradicating CSA (Campbell et al. 2017), there remains little research and evaluation, and therefore understanding, on the effectiveness of perpetration reduction programs (Stephens and George 2009).

Risk reduction programs for women. Risk reduction programs attempt to reduce sexual assault victimization rates by promoting behavior change in potential victims and often place responsibility for sexual assault on potential women victims (e.g., Iverson 2006). Placing responsibility for preventing CSA on women further promotes victim blaming when CSA does occur for women. The evidence on the effectiveness of risk reduction educational programs is inconclusive: many scholars have demonstrated how risk reduction programs are ineffective in reducing CSA rates (Breitenbecher and Scarce 1999; Gidycz et al. 2015; Mouilso et al. 2011; Senn et al. 2017), while other research links women's participation in a risk reduction program with a lower risk of assault (Menning and Holtzman 2015; Mouilso et al. 2011). Some women participants of risk reduction programs indicate increased knowledge of sexual assault (Breitenbecher and Scarce 1999), use of more sexually assertive and self-protective behaviors (Gidycz et al. 2015; Senn et al. 2017), a decrease in RMA and victim blaming beliefs (Gidycz et al. 2015; Senn et al. 2017), and a reduction in distress and PTSD symptoms (Mouilso et al. 2011). However, the participant sample in all of the aforementioned studies were overwhelmingly (73–95%) white and heterosexual (92–99%, when given), and all studies focus on women students' risk reduction.

Self-defense programs. While self-defense programs have been a form of risk reduction education for decades (Hollander 2014), there is little empirical evidence that links self-defense education with a decrease in victimization rates (Gidycz et al. 2006). Only two studies in our review of literature demonstrated a reduction in participants' experiencing sexual assault after participating in a self-defense program (Hollander 2014; Orchowski et al. 2008). Scholars have also found that self-defense programs can promote feelings of self-efficacy (Brecklin and Middendorf 2014; Orchowski et al. 2008), confidence in participants' ability to resist assault (Hollander 2014), use of protective strategies (Gidycz et al. 2006; Orchowski et al. 2008), and positive traits such as independence and self-confidence (Brecklin 2004). Additionally, participants in self-defense programs may experience less self-blame following a post-training assault (Gidycz et al. 2006), feel less scared (Brecklin and Ullman 2005), and be less likely to believe rape myths (Brecklin 2004). In contrast, Gidycz and colleagues (2006) demonstrated no increase in use of assertive communication or feelings of self-efficacy for participants of a self-defense program, and Brecklin and Ullman (2005) demonstrated that women who experienced sexual assault after taking a self-defense training felt more responsible for their assault.

Furthermore, many self-defense programs focus primarily on strangers as perpetrators of sexual assault (Easton et al. 1997); this emphasis may make these programs ineffective at addressing acquaintance and date rape.

Students' Responses to Experiencing Sexual Assault

Scholars have also explored students' responses to experiencing sexual assault, focusing on the ways these survivors choose to disclose, report, or seek help after their assault. Scholars have also explored students' psychological and behavioral changes after experiencing CSA.

Disclosure and reporting. Scholars have examined both when and to whom students disclose and report their sexual assault. *Disclosure* refers to “the act of discussing an experience of sexual assault with someone, regardless of whether it is officially recorded,” while *reporting* often refers “to the act of discussing sexual assault with the police, or another formal agency, to formally record the experience” (Orchowski and Gidycz 2012, pp. 265–266). Approximately 60–80% of students disclose to peers after experiencing sexual assault (Fisher et al. 2003; Nikulina et al. 2019; Orchowski and Gidycz 2012). Less than 20% of women students disclose to family members (Fisher et al. 2003; Orchowski and Gidycz 2012), but women students may be more likely to disclose to their parents when they perceive these parents to discuss sex frankly and positively (Smith and Cook 2008). Regarding disclosures to faculty, 42% of men and women professors from two universities reported receiving a sexual assault disclosure from a student, with disclosures being received more often by faculty who teach sensitive topics (e.g., courses on crime, victims, assault, gender, and/or sexuality; Richards et al. 2013). Scholars have also found that when victims disclose, and their confidant attempts to control their decisions, victims may encounter higher symptoms of posttraumatic stress, depression, and anxiety (Orchowski et al. 2013).

From our review of the literature thus far, it may come as little surprise that the majority of literature on disclosure and reporting used samples composed primarily of white women students, and sometimes white men and women students (e.g., Fisher et al. 2003; James and Lee 2015; Orchowski and Gidycz 2012; Wolitzky-Taylor et al. 2011). While rarely accounted for in research, students' racial identity may influence who they disclose to and if they disclose. In a sample that consisted of majority (87%) black women students, women were more likely to disclose their assault to friends or family, but rarely disclosed or reported to formal outlets such as campus police (Lindquist et al. 2016). Research also suggests that white students may be more likely than black students to disclose experiences with CSA (Palmer and St. Vil 2018). While an important finding, *why* white students are more likely to disclose their assault remains relatively unexamined.

Overall, students' rates of reporting to university officials (e.g., campus security, faculty, administrators) or to law enforcement remains low; approximately 4% of women students report CSA to campus officials (Fisher et al. 2003). Rates of reporting to the police are even lower, with one study finding that only one

individual in a sample of 244 women reported their assault to law enforcement (Miller et al. 2011) and another study citing 2% of women students report to the police (Fisher et al. 2003; Thompson et al. 2007). Wolitzky-Taylor and colleagues (2011) found similar rates of reporting for college women (2.7%) when the assault involved drugs or alcohol, compared to 11.5% of women who reported to authorities when the assault did not involve drugs or alcohol. While victimization rates of CSA may be higher for sexual minority students, differences in reporting for sexual minority students compared to heterosexual students were not found (Eisenberg et al. 2017). Yet, more research is needed to explore the similarities and differences in reporting, including rates, to whom, and why, between and within minoritized student groups. It is important to interrogate the nuances in decision-making for different students, and within different institutional types, so that institutions may more effectively respond to and support students who have experienced CSA.

Barriers to students' reporting their assault and factors that influence students' decisions to report include shame, guilt, and embarrassment (Lindquist et al. 2016; Sable et al. 2006; Thompson et al. 2007), particularly for men victims when compared to women victims (Sable et al. 2006). Hesitancy to report also stems from the perpetrator being a friend of the survivor (Spencer et al. 2017), not wanting anyone to know or not wanting to talk about the assault (Lindquist et al. 2016; Thompson et al. 2007). Scholars have also explored predictors for students to report assault and found that a desire for justice (Moore and Baker 2016) and positive perceptions of the police (James and Lee 2015) contribute to a higher likelihood of reporting. A growing body of literature on disclosure and reporting often captures the thought processes and behaviors of the individual survivor, but little remains known about institutional, community, and legal efforts to foster campus cultures that address factors that may increase reporting (let alone prevalence) and disclosure of CSA.

Resource seeking. In addition to disclosure and reporting, researchers have examined students' resource-seeking behaviors for when survivors seek out mental health, medical, legal, or support services either on campus or in the local community. Overwhelmingly, many students do not seek resources (Ameral et al. 2017; Eisenberg et al. 2017; Fleming et al. 2018; Ogletree 1993). For example, in one study, only 28% of women reported seeking resources after CSA (Ogletree 1993). However, among that group, three out of four women sought out support from a friend rather than a campus or community resource. A myriad of factors might contribute to a student's decision to seek help after CSA (Eisenberg et al. 2017; Fleming et al. 2018). Students who report higher levels of PTSD symptoms and students who perceived that they were in control of their decisions to use resources were more likely to use campus resources (Fleming et al. 2018). While rates of sexual assault may be 2.5 to over 5 times higher among bisexual and queer women students compared to their heterosexual counterparts, LGBQ students reported accessing resources at similar rates as heterosexual students (Eisenberg et al. 2017).

Outcomes for victims/survivors. Several scholars have explored the various consequences, changes in behaviors, and mental health outcomes for victims of CSA

(Banyard et al. 2017; Carey et al. 2018; Chang et al. 2019; Donat and Bondurant 2003; Stephens and Wilke 2016). Compared to non-victims, victims of sexual assault reported lower academic achievement or efficacy (Banyard et al. 2017; Fish et al. 2017), higher college-related stress, lower institutional commitment (Banyard et al. 2017), increased self-harm behaviors (Chang et al. 2019), increased levels of anxiety and depression (Carey et al. 2018), greater disordered eating (Stephens and Wilke 2016), and a higher vigilance toward men's behaviors (Donat and Bondurant 2003). PTSD can also be an outcome of sexual assault (Griffin and Read 2012; Lindquist et al. 2016; Littleton and Henderson 2009; Spohn et al. 2017), but PTSD symptoms may differ between white women and Women of Color (Neville et al. 2004; Nikulina et al. 2019). For example, a strong sense of ethnic identity for Women of Color may serve as a protective factor against PTSD (Nikulina et al. 2019).

Scholars have also explored how self-blame, or accepting one's own role in the occurrence of an experience, influences outcomes of CSA. Survivors' self-blame influences their psychological distress (Breitenbecher 2006), avoidance coping (Littleton and Breilkopf 2006), increased risk of revictimization (Katz et al. 2010), and negative self-cognition (Miller et al. 2010). Increased risk of revictimization is a consistently explored outcome of CSA (Culatta et al. 2017; Daigle et al. 2008; Katz et al. 2010; Littleton et al. 2009; Messman-Moore et al. 2009; Miller et al. 2011; Orchowski and Gidycz 2012; Yeater and O'Donohue 2002; Zinzow et al. 2011), with one study finding that almost 50% of repeat re-victimization (rape) occurred within 1 month after the first sexual assault (Daigle et al. 2008). Yet, Daigle et al. (2008) explicitly stated in their limitations section that they were not able to determine if the same perpetrator perpetrated repeat incidents of sexual assault. Therefore, scholars must interrogate if re-victimizations are perpetrated by the same individual as previous assaults. Research also suggests that student survivors were more likely to display passive behaviors in future incidents of sexual aggression (Tirabassi et al. 2017; Yeater et al. 2011). More research must focus on why re-victimization rates are so high and what institutions are currently doing to address re-victimization.

Finally, how victims label their experiences with assault may influence outcomes of assault (e.g., Cleere and Lynn 2013; Clements and Ogle 2009; Donde et al. 2018; Kahn et al. 2003; Kelley and Gidycz 2015; Littleton et al. 2009). Students do not often acknowledge their assault or label it as such (Cleere and Lynn 2013), which may lead to poorer psychological functioning (Clements and Ogle 2009) and unreported symptoms of PTSD (Littleton et al. 2009). Yet, Littleton and Henderson (2009) found little difference in being able to predict PTSD between victims who acknowledged their assault and victims who did not acknowledge their assault. Victims are more likely to acknowledge their assault, and label it as such, when they perceive greater force used by the perpetrator (Donde et al. 2018) and when the perpetrator was not an intimate partner (Kahn et al. 2003). Furthermore, blame and responsibility may be two unique constructs, because women frequently placed responsibility for the assault on their perpetrators, but placed blame on themselves (Donde 2017). Students conceptualizations of blame and responsibility, as well as

other concepts such as consent, must be further explored with in-depth qualitative methods in an attempt to explore the dis/connect between students' understandings and institutional understandings of these concepts.

Organization, Administration, and Campus Sexual Assault

This final body of research captures how institutional leaders have made changes to institutional reporting processes, institutional support services for survivors, campus climate assessments, and policies and practice relating to CSA (e.g., Gregory and Janosik 2003; Krivoshey et al. 2013; Moylan et al. 2018; Palmer and Alda 2016; Potter et al. 2016; Richards 2019; Vaillancourt and Romero Marin 2018; Wood et al. 2017). Despite these changes, there is some evidence that prevalence of sexual assault has not decreased over the years (e.g., Banyard et al. 2005).

Reporting. Many institutional leaders aim to improve services that exists for victims of CSA, including avenues for reporting and other on-campus resources (Dunlap et al. 2018; Karjane et al. 2002; Halstead et al. 2017; Sutherland et al. 2017). Some institutional leaders have attempted to reduce barriers to reporting (see above section on individual response) by providing an anonymous reporting option for students (Karjane et al. 2002), developing and widely publicizing CSA-specific disciplinary processes (Richards 2019), and instituting new models of interviewing to be used by investigators in the adjudication process (Vaillancourt and Romero Marin 2018). Despite some institutions employing one new practice or procedure for reporting CSA, some higher education institutions may continue to provide students with limited options for reporting in various manners, such as third-party reporting, confidential reporting, or anonymous reporting. One study examined reporting options listed in online sexual assault policies for colleges and universities in the state of Ohio and found that only 20% provided a third-party reporting option, and only 13% discussed an anonymous reporting option (Krivoshey et al. 2013). In the last few years, reported rates of reporting sexual violence have increased (U.S. Department of Justice 2018); however, it remains unknown if these reports were made because of the implementation of new processes and procedures or because of other external factors, such as the increased social support of survivors of assault and the #MeToo Movement.

Support services. Federal guidelines also encouraged shifts in institutional resources offered to victims of CSA (U.S. Department of Justice 2018). Yet, resources for victims remain somewhat stable at some institutions (Richards 2019). In 2002, 58% of US higher education institutions reported providing on-campus counseling and off-campus resources for victims of sexual violence (Richards 2019). Thirteen years later, in 2015, this number had grown only slightly; 61% of US institutions reported providing these same services (Richards 2019). Institutional type and institutional characteristics may predict what services, if any, are offered at institutions (Stotzer and MacCartney 2016; Sutherland et al. 2017). Women students at public institutions are three times more likely to indicate the availability of CSA screening on campus compared to women at private institutions (Sutherland et al. 2017),

and residential campuses may provide better access or awareness around reporting procedures for their students (Stotzer and MacCartney 2016).

Scholars have also assessed the quality of CSA services (Halstead et al. 2017), finding that some may fall short in addressing CSA specifically due to a broad focus on abuse or intimate partner violence (Halstead et al. 2017). Some online resources may miss the mark, because they highlight formal reporting options more than they do confidential and anonymous reporting (Dunlap et al. 2018). Still, institutions have found success in using low-tech advertising posters to convey information about sexual assault forensic and medical examination and increase students' accuracy of knowledge about these services (Konradi 2003) and in infusing education on institutional sexual misconduct policies into academic courses (Potter et al. 2016). For resources to be more effective in the future, some student survivors, healthcare providers, and advocates believe that institutions must take a number of steps; these include fostering a culture of care on campus; creating a "one-stop shop" of services for survivors; and promoting control, agency, and confidentiality for survivors (Munro-Kramer et al. 2017).

Campus climate surveys. Several researchers have begun to study the validity of campus climate surveys designed specifically for CSA and their impact on tangible campus change (Krebs et al. 2017; Moylan et al. 2018; Wood et al. 2017). In an analysis of 10 national CSA surveys (Wood et al. 2017), most surveys ask questions about reporting decisions after the assault, assess the quality of institutional response to CSA, and rarely ask about perpetration/being a perpetrator of CSA. Others have also found that many surveys center survivors by assessing victimization rates and decenter perpetrators/perpetration by not assessing perpetration rates (Moylan et al. 2018). Further, while many campuses collect data on campus climate and CSA, institutions do not always gain detailed information about the stories behind this quantitative data, nor do they use the data to actively educate the campus community or complicate rape myths (McMahon et al. 2018c). Similar to how we discussed research around prevalence rates in the first section of our findings, accurately capturing CSA is complex when students, staff, faculty, administrators, and community experts' definitions of sexual assault often vary (Mayhew et al. 2011).

Policy and practice. Research suggests that campus leaders and administrators remain wary of the role and impact of federal policies concerning CSA on campus (Gregory and Janosik 2003; Moylan 2017). In a study examining perspectives of student conduct professionals, only 2% believed that Clery Act reporting contributed to the reduction of crime on their campuses (Gregory and Janosik 2003), citing that change was likely due to campus programs, notices, and other activities rather than statistics derived from Clery Act reporting. Moreover, some university victim advocates perceive that the heightened focus on compliance resulted in decisions that may harm victims and that compliance centers Title IX coordinators, attorneys, and other senior administrators while overshadowing the expertise of victim advocates (Moylan 2017). Students who are survivors may also identify and name the inadequacies of institutional policies and procedures (Linder and Myers 2018), but other research suggests that federal grants that help institute federal policies and procedures at individual campuses may provide survivors with safe

outlets and additional options for reporting and support services (Palmer and Alda 2016). More scholarship must focus on policies and procedures from the student perspective while also accounting for how larger structures, such as the historical legacy of institutions and the shifting Title IX guidance, influence these perspectives. Finally, the U.S. Department of Education is currently generating and implementing new Title IX guidelines, which some fear “will discourage students from reporting assaults, create uncertainty for schools on how to follow the law, and make campuses less safe” (National Women’s Law Center 2017, para. 1). It is imperative, perhaps now more than ever, that scholars (continue) to explore organization, administration, and CSA.

Conclusion and Implications

Through a systematic review of 383 articles published in 14 peer-reviewed journals, we found several common themes and patterns across the literature. In this final section, we summarize what is known about CSA, and subsequently what remains unknown and underexplored about CSA. Findings from the systematic review of the literature guide multiple implications for future research, which aim to inform more expansive future practices, policies, and possibilities that effectively eradicate CSA.

First, regarding *what* is studied, scholars often focus on seven main topics or themes that pertain to CSA, including *Prevalence of Victimization, Risk Factors for Perpetration and for Assault, Alcohol Use and CSA, Rape Myth Acceptance, Prevention and Education, Students’ Responses to Experiencing Sexual Assault, and Organization, Administration, and CSA*. While foundational, this research may constrain what is known, and what continues to be centered, in the literature. In fact, when attempting to generate implications from this finding, we struggled to think outside of these categories because of the somewhat narrow paradigm of CSA they mutually construct. In the future, we encourage scholars to explore the possibilities and promises of other topics, which may or may not overlap with what is currently found in the literature. For example, scholars might explore sex education within the K-12 education system and how this education dis/connects to students’ college experiences with CSA. Scholars should also center how student organizations and communities beyond athletics and Greek life might contribute to a culture of assault on campus. Social media and technology have become a large part of college students’ lives; scholars should explore how social media and other forms of technology might influence reporting, healing, and prevention for victims/survivors.

One of the most glaring gaps in the research was the minimal focus on perpetrators and perpetration. By not examining the role of perpetrators, scholars risk re/creating the narrative that victims are to blame for their assault. In other words, the minimal focus on perpetrators erases the role of the perpetrator/actor/agent in sexual assault. Moreover, this literature centers the symptom (survivors/victims) while eschewing a focus on (one aspect of) the disease (perpetration/perpetrators). A lack of focusing on perpetrators makes it difficult, if not impossible, for practitioners to effectively address this disease/perpetration. Scholars should also use language

that positions perpetrators as active, not passive, in CSA. Instead of writing, “men students were sexually assaulted,” one should write “men students sexually assaulted men students.” Our research, and language used within this research, must center the perpetrators of CSA while also maintaining an intentional, and at times empowering, focus on victims/survivors.

Second, regarding *who* is studied, literature throughout each theme often centers white cisgender heterosexual women as the victims/survivors of CSA. Cisgender men students are often framed as the perpetrators of assault. This framing recreates a gender binary, as well as a victim-perpetrator narrative that crafts white cisgender heterosexual women as the only victims of assault and, although not often the focus, cisgender men as the perpetrators of assault, eclipsing the experiences of victims and perpetrators that exist outside of this narrow racialized and gendered picture of CSA.

In the future, scholars must not rely on or recreate an oppressive gender binary that only allows for a focus on “women” and “men” students. In quantitative research, and in demographic forms for all studies, multiple gender identities, including a “write in” option, must be provided for participants. While researchers must include trans* and gender nonconforming students in their study samples, and analyze and report these experiences out, entire research projects must be dedicated to exploring the experiences of trans* and gender nonconforming students experiences with CSA. Moreover, scholars must begin to explore the intersections of students’ identities. The continuing focus on one single identity, or the same identities, does little to expand knowledge of an increasingly diverse college student population that “are not content with identifying themselves in simple, one-dimensional ways” (Patton 2011, p. 258).

While some studies did account for black women students’ experiences (Brown et al. 2014; Katz et al. 2017; Lindquist et al. 2016), Asian American women students (Gilmore et al. 2016; Nguyen et al. 2010), and Women of Color as one monolithic group (Bennett et al. 2014; Crawford et al. 2016), this research also risks essentializing these same groups. Essentialism is the notion that there exists one group experience in which all women can be categorized (Grillo 1995). Because few studies center Students of Color, and students with minoritized identities broadly, scholarship does not allow for a nuanced or complex understanding of these students’ various experiences. Moving forward, scholars must study CSA in manners that highlight minoritized populations and that disrupt essentialized notions of these minoritized experiences. One way to push against essentialism is to account for students’ multiple identities throughout the research process and intentionally explore how multiple and various identities influence differing experiences and perspectives.

Several studies compared white women to black women or to Women of Color (e.g., Brown et al. 2014; Gilmore et al. 2016; Katz et al. 2017; Palmer and St. Vil 2018). Comparisons between groups, particularly between groups that have privilege and groups that are oppressed, risk upholding power dynamics. Stanley (2007) explained further, “Although there are legitimate reasons for race-comparative studies, we very rarely look at their shortcomings and, more important, the ways these studies display yet another form of master narrative: White as normative and

good” (p.15). Comparing white students to Students of Color, or cisgender students to trans* and gender nonconforming students, heterosexual students to students who identify as LGBQ, re/normalizes the understanding that oppressed groups’ experiences can only be understood in relation to privileged, normalized, and “good” groups (Stanley 2007).

Scholars must focus on the narratives of students with minoritized identities with the understanding that their stories alone are valid and worthy of exploring. For example, future research should explore the narratives of Women of Color students who have experienced CSA. Within this research, it is important that scholars focus on how participants’ racial and other social identities influence both similarities and differences within and among participants’ experiences. For example, how might black cisgender women’s experiences with reporting differ from Indian cisgender women’s or black trans* women’s experiences with reporting? A more nuanced approach to research with minoritized students will challenge essentialism (Grillo 1995) and push against the normalization of whiteness often upheld through comparative research (Stanley 2007).

Third, regarding *where* the research takes place, scholars almost always explored CSA from an individual level perspective. Throughout the seven themes, scholars explored students’ traits, behaviors, outcomes, and perceptions, but they rarely positioned these micro-level aspects within institutional contexts. Although the scholarship we gathered and analyzed *did* claim an exploration into *campus* sexual assault, the campus and surrounding contexts were rarely explored. For example, we only found one study that investigated the impact of institutional factors on rates of sexual assault (Wiersma-Mosley et al. 2017), leaving school size, institutional policies, residential life infrastructure, and availability of social events underexplored in most research.

How campus cultures contribute to campus sexual assault remains underexplored. This issue is problematic because the environment of an institution may interact with, if not shift the effect of students’ individual level experiences and behaviors (Hurtado et al. 2012). For example, students’ alcohol use and risk for victimization may differ at institutions with different drinking policies, party cultures, and social organizations. Institutions with hostile climates may influence students’ behaviors and decision to disclose their assaults. In not centering the campus context, a significant piece of addressing and eradicating CSA is missing.

The dearth in research that positions *campus* sexual assault within a *campus* context may be explained by our observation that the majority of CSA research is concentrated in Psychology, and, at times, in Sociology and Violence Studies. Furthermore, authors of the research we analyzed, who were often psychologists and sociologists, seemingly used college students as a convenience sample for their research, suggesting that the victim of sexual assault, and not the college environment, was the focus of their study. Using college students as a convenience sample for CSA may be why CSA research is not concentrated within higher education journals or contextualized by an understanding of campus climate. However, the thought also arises that (leaders of) some higher education journals may not be concerned with including research on CSA in their respective publications.

Also regarding *where* the research takes place, scholarship on CSA is nearly devoid of interrogating sociohistorical contexts. Positioning students' individual level experiences within macro-level contexts draws out how these experiences, as well as the institutions in which the experiences occur, are influenced by a long history of laws, policies, media, and rhetoric (and more) that relate to sexual assault. For example, the history of Title IX, the Clery Act, and the Violence Against Women Reauthorization Act must be explored and connected to institutional contexts and individual stories. It is also important to interrogate how policies, procedures, and cultures re/create power dynamics that may lead to CSA. For example, scholars must explore how (the history of) fraternity culture, athletic culture, and many other subcultures yet to be explored through research maintain power and dominance over/on campus. While some scholars accounted for these cultures in their research (e.g., Forbes et al. 2006; Loh et al. 2005; Seabrook et al. 2018; Young et al. 2016), how power and privilege were re/created within and by these spaces, and how this power and privilege influenced CSA, is missing from many scholars' analyses. In accounting for sociohistorical influences of assault, scholars' analyses expose how power and privilege is always already intertwined with CSA. Examining this historical reality alongside contemporary data may guide a better understanding of how sexual assault is often more about privilege, patriarchy, and power, and less (if at all) about alcohol, athletes, and campus parties.

Finally, regarding *how* research was conducted, an overwhelming majority of the articles we reviewed used quantitative approaches to study CSA. While important, quantitative research rarely demonstrates *why* students experience specific outcomes or perceptions. For instance, multiple scholars found that increased risk of re-victimization is an outcome of experiencing CSA (Culatta et al. 2017; Daigle et al. 2008; Katz et al. 2010; Littleton et al. 2009; Messman-Moore et al. 2009; Miller et al. 2011; Orchowski and Gidycz 2012; Yeater and O'Donohue 2002; Zinzow et al. 2011). While this finding is repeatedly supported by quantitative research, scholars have fallen short in exploring *why* an increased risk exists for students who have experienced CSA.

To build on quantitative findings, but also, to explore new phenomena, scholars must apply qualitative approaches to the study of CSA. A qualitative approach encourages researchers to focus on "understanding how people interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences" (Merriam 2009, p. 5). While one commonly used method of qualitative data collection is the individual interview, we encourage scholars to, again, think outside of the paradigms we have constructed for ourselves. Scholars must use historical methods (archival research), ethnographic methods (observations and document analysis), longitudinal research designs, walking interviews, and photo-voice, all of which were rarely used in the existing literature but would contribute to and contextualize future research and practice. For example, through ethnographic methods (including observations, document analysis, and interviews), scholars might better explore and understand the culture of an institution and how this culture influences CSA. Using walking interviews and photo-voice, students are provided with agency to *show* the researcher their perspectives of campus and CSA. While

these differing methods offer something new for CSA scholarship, they also support the actualization of several implications offered above, such as the need to study institutional culture.

Researchers must use frameworks and concepts that reach beyond an account of individual experience toward institutional and sociohistorical contexts. The Multi-contextual Model for Diverse Learning Environments (Hurtado et al. 2012) is one of several frameworks that scholars might use to interrogate institutional contexts and cultures. This model helps to illuminate how macro-level forces influence institutional contexts that shape students' collegiate experiences and outcomes. Intersectionality (Crenshaw 1989, 1991) might be used to examine how multiple systems of domination intersect to structure different dimensions of campus environments and influence students' identity specific experiences with CSA. An intersectional approach also aims to challenge essentialism (Grillo 1995). Additionally, in the future, critical quantitative methodologies should be used to continue to focus on large, generalizable samples of students, but also position results within power relations and systems of domination. Critical quantitative research encourages scholars to have "an ontological reckoning" with their data and challenges them to consider "historical, social, political, and economic power relations" (Garcia et al. 2018, p.149).

In conclusion, scholars often focus on the same subtopics that concern CSA, and they approach the study of these subtopics in similar manners. The current body of scholarship re/creates a narrow paradigm through which educators, scholars, and policymakers understand and address CSA. In an attempt to address and eradicate CSA, scholars must continue to think outside of, if not begin, to deconstruct this often-narrow paradigm. In the future, scholars must reimagine and reframe the *who*, *what*, *where*, *when*, and *how* questions surrounding CSA research. If we do not expand CSA research in critical, intersectional, and other manners detailed above, scholars risk remaining complicit in the maintenance of sexual assault in higher education.

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Institutional Barriers, Strategies, and Benefits to Increasing the Representation of Women and Men of Color in the Professoriate

Looking Beyond the Pipeline

Kimberly A. Griffin

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Abstract

Women and men of color represent growing populations of the undergraduate and graduate student populations nationwide; however, in many cases, this growth has not translated to greater faculty representation. Despite student demands, stated commitments to diversity, and investments from national organizations and federal agencies, the demographic characteristics of the professoriate look remarkably similar to the faculty of 50 years ago. Many strategies to increase faculty diversity focus on increasing representation in graduate education, skill development, and preparation for entry into faculty careers. While these needs and strategies are important to acknowledge, this chapter primarily addresses how institutions promote and hinder advances in faculty diversity. Specifically, extant literature is organized into a conceptual framework (the Institutional Model for Faculty Diversity) detailing how institutional structures, policies, and interactions with faculty colleagues and students shape access, recruitment, and retention in the professoriate, focusing on the experiences of women and men of color. A failure to address these challenges has negative implications for teaching, learning, and knowledge generation; consequently, this review also presents research documenting how women and men of color uniquely contribute to the mission and goals of US higher education.

Keywords

Faculty · Women · Underrepresented racial and ethnic minorities · Identity · Racism · Intersectionality · Sexism · Equity and inclusion · Faculty hiring · Institutional reward systems · Faculty persistence and retention · Campus climate · Organizational change for diversity and inclusion · Career development · Mentoring

What many institutions have struggled with privately became a public and national issue in the Fall of 2015, when students at campus after campus demanded that institutional leaders pay attention to the racism Black students and students of color face. The protests at the University of Missouri (Mizzou) drew national attention when its football team refused to play, acting in solidarity with students who demanded justice, increased equity, and the resignation of the institution's president. Student activists confronted the Mizzou's then president during a Homecoming parade, formed and lived in a tent city at the center of campus, and stood alongside graduate student Jonathan Butler, who vowed not to eat until the president resigned. Presidents and provosts at campuses across the country witnessed their students engage in similar acts of resistance in support of the Mizzou students and articulated their own concerns about the environments minoritized¹ students have to navigate at historically white institutions.

¹“Minority” speaks to numerical representation. The term “minoritized” acknowledges how social constructs like race, gender, ethnicity, religion, and sexual identity influence power dynamics and exposure to oppression. For more, please see <https://www.theodysseyonline.com/minority-vs-minoritize>

While protests at schools like Princeton University, Yale University, Brown University, Ithaca College, and Claremont McKenna College drew national attention, demonstrations were more widespread, and students at over 60 campuses presented institutional leaders with lists of demands, calling for renewed attention and focus on campus diversity and marginalization (see the demands at <https://www.thedemands.org>). Each list of demands was unique, providing a glimpse into the differences and similarities between how students experience racism and marginalization at their respective campuses. Interestingly, the most consistent request across these lists was a demand to significantly increase faculty diversity, insisting campuses institute policies and programs that recruit and retain more women and men of color in the professoriate, providing students with the role models and support they need as they strive for success in sometimes hostile environments.

Colleges and universities have long struggled to address the diversity of their faculties, hiring and retaining women and people of color² at rates far below their representation in the US population and undergraduate student body. As scholars, leaders, and policymakers have tried to understand why increasing the representation of women and men of color in the academy has been so challenging, they have often turned to explanations that focus on the “pipeline,” or the limited gains in the number of women and men of color entering and completing graduate programs (Cannady et al. 2014; Cress and Hart 2009; Gasman et al. 2011; Kulis et al. 2002; Smith et al. 2004; Tuitt et al. 2009). As a consequence of this pipeline framing, faculty diversity strategies have largely focused on increasing the number of individuals entering and completing graduate school, focusing on skill development and preparation for faculty careers.

There is certainly some merit in these strategies. There is much work to be done to encourage more talented women and men of color to pursue graduate education. It is also important to address how limited exposure to research and low levels of self-efficacy interfere with students’ progress and discourage women and men of color from pursuing and completing graduate degrees. However, at the same time, there are deeper conversations colleges and universities must have about their role in perpetuating the lack of diversity in the academy. Specifically, campuses must question how they are attracting, hiring, and retaining recent doctoral graduates and faculty from minoritized groups generally, and women and men of color, in particular (Cannady et al. 2014; Cress and Hart 2009; Gibbs and Griffin 2013; Kulis et al. 2002; Trower and Chait 2002). Further, institutions must acknowledge how administrators, faculty, policies, and structures create and maintain (un)welcoming campus environments. Institutional leaders must understand and address how sexism and racism are embedded in academic structures, systems, departments, colleges, and programs in a comprehensive way to truly understand why they have failed to or

²In the context of this work, people of color refers to individuals who identify as one or more of the following: American Indian/Alaska Native/Native American, Asian American, Black or African American, Hispanic or Latina/o/x, Pacific Islander or Native Hawaiian, or Multiracial.

have made minimal progress towards increasing the number of women and men of color on their faculties.

This chapter offers guidance to scholars, faculty, practitioners, and institutional leaders, presenting insights into the complexities associated with increasing faculty diversity. I have completed an extensive review of the literature, searching Academic Search Ultimate, Education Source, ERIC, PsychINFO, and Google Scholar to identify over 200 peer-reviewed journal articles and foundation reports documenting the representation of women and men of color in the academy, exploring faculty experiences and outcomes at predominantly white 4-year institutions, and presenting the efficacy of programs and policies to promote faculty diversity and inclusion. There have been several thoughtful and thorough reviews of the literature documenting the challenges women (e.g., Blickenstaff 2005; Cress and Hart 2009; Lee 2012; Winkler 2000) and individuals from racially minoritized groups (e.g., Aguirre 2000; Laden and Hagedorn 2000; Tuit et al. 2007; Turner et al. 2008) experience as they seek to gain access to and persist in the academy. This chapter adds to this body of work, synthesizing new and emerging research on how various aspects of historically white 4-year college and university environments limit the success of women and men of color in the academy, sabotaging efforts to increase diversity. While seminal works by leading scholars are incorporated into this review of literature, I focused on reading and synthesizing research published after 2000; over half of works cited were published in or after 2008.

This chapter also offers a path forward for institutions that want to engage in intentional and long-term action to increase the representation of women and men of color in the professorate. In addition to reviewing the literature on the barriers and challenges, I also completed an extensive review of journal articles and reports documenting the structure and outcomes of interventions designed to mitigate institutional barriers and promote faculty diversity. The findings of this research are presented and form the foundation of a proposed framework for understanding and addressing institutional barriers that prevent campuses from recruiting and retaining women and men of color and making progress towards faculty diversity goals. The chapter closes with a reflection on the unique contributions women and men of color make to 4-year institutions, highlighting what higher education and the next generation of students will lose if we do not act, as well as critiques of the extant literature base and areas for future study.

Conceptual Considerations

As scholars, leaders, and policymakers engage in conversations about how to increase the number and representation of women and men of color in the academy, it is critical to be mindful of how these discussions are framed. Thus, before exploring the factors and forces that mitigate institutional efforts to promote faculty diversity and engaging the extant literature on the experiences and outcomes of women and men of color in the academy, it is important to clarify my conceptual orientation to this topic. There are two conceptual frameworks grounding my

approach to this work and review of the literature: equity-mindedness and intersectionality. In this section, I describe these concepts by presenting how they have been applied and leveraged in the discourse on faculty diversity, how they guide my own work, and how they frame my understanding of why representational disparities persist and what should be done to address them.

From Diversity to Equity

National conversations about diversifying faculty tend to focus on the desired outcome: increasing the number of faculty from traditionally underrepresented backgrounds. Given that diversity, most simply stated, is the presence of heterogeneity and difference (Griffin 2017), progress and success have often been equated with substantial increases in the number of women or people of color employed at an institution. A focus on numerical outcomes and increases in representation are consistent with a diversity-focused perspective, which emphasizes preparation and access (Malcom-Piqueux et al. 2017), in this case to faculty positions. When guided by a diversity-focused perspective, institutional leaders may develop initiatives that aim to increase the number of women and people of color entering and completing graduate education or emphasize faculty hiring to increase the representation of women and men of color in the academy. A diversity-focused perspective also often situates both problems and potential solutions within the communities that are underrepresented or not persisting in the academy (Bauman et al. 2005; Malcom-Piqueux et al. 2017; Stewart 2017). Institutional leaders and administrators may develop interventions to “fix” what is perceived as wrong with graduate students and faculty, pushing them to conform to characteristics that are most valuable in the academic hiring and promotion process. In other words, when operating from a diversity-focused perspective, we would increase the representation of women and men of color in the academy with programs that help them develop CVs and cover letters that grab the attention of search committee members, spend more time on activities that are recognized as valuable within academic review processes, and teach in ways that translate to higher scores on student evaluations.

It is important to trouble this conversation and critically consider how we are thinking about the interventions we implement. A narrow focus on diversity and numerical representation, particularly through hiring or increasing the number of individuals from minoritized backgrounds with PhDs, may translate to short-term surges and shifts in faculty demographics. However, these initiatives often miss important dynamics that perpetuate inequality in the academy. Further, while professional development-based strategies have some value and can offer important resources, they are often deficit-oriented, blaming individual graduate students and faculty members for their lack of presence in the professoriate, and rely on their willingness to conform to existing structures and systems to see meaningful gains in faculty diversity (Malcom-Piqueux et al. 2017).

Long-term change in the composition of the professoriate requires a different approach, directly addressing the racism and sexism minoritized faculty face in the

academy (Harper 2012). An equity-minded perspective shifts attention from individuals to organizations, addressing how institutions perpetuate inequality, inhibit their own ability to increase faculty diversity, and sustain barriers that prevent minoritized individuals from gaining access to beneficial resources (Pena et al. 2006; Stewart 2017). Rather than assuming there is a deficiency in the work or motivation of women or men of color trying to enter the academy, equity-mindedness attributes persistent underrepresentation of women and men of color on organizational actors, policies, and structures (Malcom-Piqueux et al. 2017), such as faculty bias in hiring, tenure, and promotion policies that do not fully account for the contributions minoritized faculty make to the academy, and the stress and strain of challenging climates and environments. In addition, when new programs are developed that offer minoritized faculty resources or support, equity-minded perspectives remind leaders to assess whether all have equal access to and benefit from these resources (Stewart 2017).

In this chapter, I employ an equity-based perspective that focuses on how academia generally, as well as specific campuses, creates conditions that foster and perpetuate the underrepresentation and demographic disparities we observe in the US professoriate. I examine and present literature that focuses on the individual level challenges women and men of color face as they engage with their students and colleagues, as well as how those barriers are institutionalized and entrenched in organizational structures. I also highlight the racism and sexism embedded in workload imbalances and what is recognized as “valuable” or “prestigious” academic work, demonstrating how marginalization is maintained by structures and systems over time.

Intersectionality

As scholars, leaders, and practitioners make the shift from a diversity-focused to an equity-focused frame, it is also important to reconsider how identity is being conceptualized and operationalized. In many cases, minoritized identities are treated as singular and mutually exclusive. For example, individuals are either women, or people of color, or they have a disability, or are a member of the LGB community. This tendency to compartmentalize identities can be easily observed in the ways the challenges women and people of color face in the academy have been discussed. Higher education scholars, policymakers, and leaders have long underscored their shared experiences in studies, reports, and briefs. For example, in 1983, Menges and Exum wrote *The Barriers to the Progress of Women and Minority Faculty*. Johnsrud and Des Jarlais’s (1994) manuscript similarly explored *Barriers to Tenure for Women and Minorities*. These foundational studies offer critical insights into the similar barriers both women and people of color face as they aim to navigate the academic spaces including the tenure and promotion process. Similarly, the National Science Foundation report, *Women, Minorities, and Persons with Disabilities in Science and Engineering* (2019), found inequitable outcomes in representation, workforce attainment, and degree completion across all three groups.

We often aim to address the needs and experiences of women *and* minorities, treating them as individual, mutually exclusive groups that share something in common. In other words, while unintentional, the “and” is often treated like an “or” (Bowleg 2012). According to Kimberle Crenshaw, “The tendency to treat race and gender as mutually exclusive categories of experience and analysis” creates “a problematic consequence” (1989, p. 140), missing how membership in multiple identity groups shapes how people are perceived and treated. A white woman could assume that her needs and concerns would be addressed by the programs and policies focused on women, and men of color may choose to participate in interventions or assume their stories are captured in research on people of color. But where do women of color fit? Their membership in both groups creates a distinct experience in the academy; they are exposed to racism in ways white women are not and encounter sexism men of color do not (Aguirre 2000; Museus and Griffin 2011; Turner 2002b). The needs and experiences of women of color are often missed in feminist discourses, which center the needs of white women, and anti-racist discourses, which center the needs of men of color (Crenshaw 1989). Thus, programs and policies focusing on women and people of color may leave women of color professors feeling like they have to choose which identity to prioritize, knowing they may not be fully seen in either category. This can leave women of color with questions about where they belong, who understands their stories, and who is centering and amplifying their unique narratives.

This then begs the question: how do we locate and treat the experiences of those who occupy multiple minoritized identity groups at the same time? Intersectionality can be a valuable tool in this endeavor, and is a framework that allows institutional leaders, scholars, and practitioners in and outside of higher education to explore “the process through which multiple social identities converge and ultimately shape individual and group experiences” (Museus and Griffin 2011, p. 7). Rather than isolate the influence of each of our separate identities, intersectionality suggests that there is a unique experience created at the intersection of our multiple identities (Collins 2015; Crenshaw 1991; Museus and Griffin 2011). Intersectionality discourages the notion of a hierarchy of oppression and goes beyond additive notions of identity (Berger and Guidroz 2010; Harris and Patton Davis 2019). For example, an intersectional framing would not argue that women of color are “double minorities” or twice as oppressed as white men. Rather, intersectionality highlights how those with a shared identity may be exposed to distinct and additional forms of marginalization based on the other identities they embody (e.g., race, ethnicity, sexual identity, physical ability) (Bowleg 2008; Crenshaw 1991). Thus, it is more accurate to say that women of color experience additional forms of marginalization as compared to white women because of their exposure to racism; and women of color are oppressed in ways different from men of color because of their encounters with sexism. A person’s positionality based on their identities cannot be quantified with easy math; rather, having multiple minoritized identities amplifies marginalization as individuals experience different forms of identity-based oppression at the same time.

While useful and increasingly applied in higher education research and practice, intersectionality is conceptually complex, misunderstood, and often misapplied (Collins 2015; Harris and Patton Davis 2019). Intersectionality can be conflated with other frameworks that explore identity salience and acknowledge that every person has membership in multiple identity groups that shape their perspectives and daily lived experiences. Multiple identity frameworks offer important insights, yet are distinct from intersectional work (Harris and Patton Davis 2019; Jones and Abes 2013). Intersectionality insists that we go beyond acknowledging how multiple identities shift in salience based on context, addressing how power and oppression are ascribed to our identities and how they come together to create a unique experience of marginalization or privilege (Collins 2015; Harris and Patton Davis 2019).

Intersectionality goes beyond the study of race and gender,³ and there are infinite ways in which a person can embody marginalized and privileged identities (Bowleg 2012). Similarly, there are infinite ways intersectionality can be used and applied to study diversity in the professoriate. I acknowledge that sexual identity, physical ability, religious identity, citizenship status, and other dimensions of identity can intersect with each other as well as a professor's race and gender, having an important influence on a faculty member's experiences and professional success. However, the intersections of certain identities may emerge as more salient in particular settings due to their likelihood of exposing individuals to a unique form of marginalization and oppression (Crenshaw 1991). Given this work's focus on the oppression faced by women and people of color, I will focus on the distinct experience of women of color in the academy.

Both an equity-based perspective and intersectionality guided this work and how I approached and presented the extant research related to efforts to increase faculty diversity. An emphasis on equity led me to focus on contextual factors and forces impacting the lives and experiences of minoritized faculty, balancing an analysis of individual and structural ways identity-based marginalization shapes experiences, access to opportunity, and satisfaction. Rather than assuming that individuals must conform to challenging environments to succeed, I assume that environments must change, removing barriers and becoming more inclusive towards minoritized scholars. Intersectionality further leads me to assume that while minoritized faculty generally may experience challenges in the academy, embodying multiple oppressed identities exposes women of color to unique and often amplified forms of marginalization. I intentionally use the phrases "women and men of color" and "white women and people of color" to locate women of color in our discourse. I also include literature that calls attention to the unique ways racism and sexism converge in the

³Although this work examines sexism and focuses on how it impacts women generally and women of color specifically, it is critical to acknowledge that gender is a social construct and a growing population identifies beyond the man/woman or male/female binary. I did not review any literature that addressed the experiences, outcomes, or structural oppression of transwomen or individuals who identify outside of the traditional gender binary, and acknowledge that the barriers they face and how they experience the academy likely are very different.

lives of Black, Latina/x, and Native American women whenever possible, drawing out distinctions in their experiences and outcomes.

Faculty Diversity: A Complex Demographic Landscape

Data tell a complex and uneven story about the representation of women and men of color in the professorate. The number of women and men of color in the faculty has increased over the past several decades. In 1987, women were 32% of all faculty (part and full-time) teaching in postsecondary institutions. Their representation has slowly, but steadily, grown. By 2016, 49.3% of all individuals teaching on college and university campuses were identified as women (NCES 2017a). The number and percentage of Asian American, Black, Latinx, and Native American, and Multiracial scholars⁴ in the US professoriate has also increased over time (Finkelstein et al. 2016). In 1993, people of color were 12.5% of all faculty; by 2013, this number had increased to 19.1% (Finkelstein et al. 2016). By 2016, 23% of all faculty, part- and full-time, were people of color (NCES 2017b).

While these gains may appear promising, it is important to acknowledge that growth in faculty diversity has not been consistent across all institutional types, disciplines, and appointment types. First, composition varies across institutional type, skewing overall representation and perceptions of the size and scope of diversity gains. For example, while Black scholars are 5.7% of all full-time faculty (Espinoza et al. 2019), a large proportion teach at Historically Black Colleges and Universities (HBCUs) (Trower and Chait 2002), and Black faculty are more concentrated in positions with less power and stability (e.g., lecturers, assistant professors, part-time faculty) at less prestigious institutions (Jackson 2008). Underrepresented minority⁵ faculty more generally make up a larger proportion of faculty at 2-year (15%) as compared to 4-year (9.5%) institutions. The reverse is true for Asian American faculty; they represent 4.2% of faculty at 2-year campuses and 11.3% at 4-year campuses (Espinoza et al. 2019). The gender balance of the faculty also varies across institutional types. In 2013, the overall ratio of men to women in full-time faculty positions was 1.7–1 for tenured faculty, and 1.1–1 for faculty in tenure-track positions. However, the disparities in representation were greater, particularly between the number of tenured men and women, at private, 4-year, and research institutions. Women outnumber men at 2-year institutions, and women are more well represented than men on the tenure-track at Master’s comprehensive institutions (Finkelstein et al. 2016).

In addition to disparities across institutional types, there are often differences in faculty representation within institutions by academic discipline. Much attention has been paid to the small numbers of women and men of color in science, technology,

⁴Referred to collectively as “people of color” or “scholars of color.”

⁵Underrepresented minority usually includes Black/African Americans, Latina/o/x, and Native Americans/American Indians.

math, and engineering (STEM) fields. While there is still much work to do, women and men of color are more well represented in humanities and social sciences faculty roles than in STEM. An analysis of Integrated Postsecondary Education Data System (IPEDS) data tracking faculty representation across six academic departments (3 STEM, 3 non-STEM) suggests that the underrepresentation of Black, Latinx, and female faculty overall is at least partially driven by their small numbers in science (Li and Koedel 2017). Almost half of all full-time faculty are women; however, women are just over a third (37.8%) of faculty in STEM (Hamrick 2019). The representation of Black, Latinx, and American Indian STEM professors has increased to 8.9%, but is still far lower than their representation in the US population (Hamrick 2019). These disparities are exacerbated when we examine data focusing specifically on Black, Latina/x, and Native American women. Although they are 12.5% of the US population, Black, Latina/x, and Native American women comprise only 2.3% of tenured/tenure-track and 5.1% of non-tenure-track faculty in science and engineering (Ginther and Kahn 2012). As compared to underrepresented minority women, there are 10 times as many white women and 20 times as many white men scientists and engineers working in academia (Ginther and Kahn 2012).

Further, progress in faculty diversity has coincided with increases in the number of contingent, part-time, and non-tenure-track positions (Finkelstein et al. 2016; NCES 2017a, b). Notably, women and men of color are better represented in these positions than tenure-track roles. In 2016, 51% of all instructors and lecturers were women (NCES 2017a). Roughly three-quarters of all female faculty are in non-tenure-track or part-time roles, as compared to 65% of male faculty (Finkelstein et al. 2016). In 2013, over half of underrepresented minority faculty were employed in part-time positions, and they represented 14.2% of part-time faculty and 12.0% of all non-tenure-track faculty, as compared to 10.2% of all tenured faculty (Finkelstein et al. 2016). Similarly, the largest percentages of Black, Latinx, and Native American faculty are lecturers, instructors, or have no specified rank (Espinosa et al. 2019).

There are also distinctions in how women and men of color are distributed across academic rank within tenure and tenure-track faculty. Recent gains for women and men of color in doctoral degree completion have translated to a body of assistant professors (pre-tenure) that is more diverse than associate and full professors (Li and Koedel 2017); thus, much of the diversity we see in the professoriate is concentrated in the pre-tenure ranks. While one quarter of men in the professorate are tenured, 16% of women have obtained tenure and 9% of all female faculty have reached full professor. When examining racial and ethnic differences, white and Asian American faculty are better represented at the highest levels of the academic hierarchy than Black, Latinx, and Native American professors (Espinosa et al. 2019). For example, 80% of all full professors at 4-year institutions are white, and they are more heavily represented among full professors and those with tenure than at the associate and assistant professor levels. Alternatively, Black and Latinx faculty were more heavily represented among assistant professors (Espinosa et al. 2019). Women of color tend to be concentrated at the lowest levels of the academic hierarchy. For example, Black women have higher rates of educational attainment and representation in undergraduate and graduate education as compared to their male counterparts; however, Black

men are more likely to be tenured and serve in the top levels of the academic hierarchy (Gregory 2001).

There have been some visible and important gains in faculty diversity, especially in the representation of women. However, disparities persist, and measures of progress are inflated if faculty demographic data are not disaggregated by institution, discipline, and rank. Institutionally, the faculties with the largest concentrations of women and men of color appear to be those with special missions to serve communities of color and 2-year institutions. Despite the important work these campuses do to promote access and equity in higher education, these institutions are often perceived as less prestigious due to their open access missions and lower levels of research activity and have fewer resources to support faculty and students due to limited tuition revenues and government support. When examining the specific roles and rank of women and men of color at 4-year institutions generally, and research universities specifically, it is clear that they are more heavily represented among pre-tenured faculty, lecturers, and part-time instructional staff. While individuals in these roles perform important institutional functions and carry much of the teaching load at many campuses, faculty in these positions do not have access to the protections of tenure, are more likely to be on temporary contracts, and have the least power in the academic hierarchy (Finkelstein et al. 2016; Hart 2011). Thus, women and men of color appear to be most often present at institutions and in positions that are the least supported and most vulnerable, while the positions and institutions that have the most power, prestige, and resources remain largely white and male.

An Insufficient Solution: Understanding and Rethinking the Pipeline

The next generation of professors will be drawn from today's graduate students. Therefore, scholars and institutional leaders have often relied on the rate at which graduate education is diversifying to gauge the potential of changing the demographics of the professoriate. A pipeline metaphor is often invoked in these conversations. The pipeline represents a journey from one place to another, one timepoint to another, often raised more generally to explain why there are supply shortages in various careers (Ryan et al. 2007). Describing the progression towards a faculty career as a pipeline suggests a linear process, where potential candidates transition from undergraduate to graduate school, and then into a faculty career (Shaw and Stanton 2012). Educational leaders and administrators note the importance of "building the pipeline" or "increasing the flow," assuming that a more diverse group of students enrolled in and completing doctoral programs will translate directly to more diversity in the faculty (Kulis et al. 2002). At the same time, they acknowledge that pipelines are faulty, "leaking," and losing students along the path from undergraduate to and through graduate education, leaving fewer eligible women and men of color with PhDs to assume faculty roles (Kulis et al. 2002; Ryan et al. 2007).

Scholars, practitioners, faculty, and institutional leaders who engage in discourse about the continued low rates of faculty diversity often blame the pipeline as the source of the problem (Cannady et al. 2014; Gasman et al. 2011; Husbands Fealing and Myers 2012; Kayes 2006; Kulis et al. 2002; Smith 2000; Tuitt et al. 2007). In other words, many argue that faculty diversity goals are nearly impossible to reach because of the small numbers of women and men of color completing graduate degrees. As a consequence, higher education institutions and organizations have invested time and energy on efforts that “increase flow” or “prevent leaks,” largely by focusing on students and their performance. For example, the National Science Foundation (NSF), National Institutes of Health (NIH), and other agencies have invested significant resources in addressing the pipeline towards a faculty career, funding mentoring, research, and professional development programs that encourage more students to pursue science or aim to retain them in the field (Husbands Fealing and Myers 2012).

While the pipeline metaphor and argument are powerful and pervasive, scholars have increasingly critiqued the notion that a lack of faculty diversity is an issue of supply. National data suggest that there are more potential faculty candidates from minoritized groups than there have been in previous decades. Albeit slowly, the number of women and underrepresented minority men pursuing graduate work is growing, and minoritized scholars make up larger proportions of students in Master’s, doctoral, and professional degree programs than they once did. In 1980, women were 46.2% of all graduate students. They were over 51% of graduate students by 1990, and in 2008, 59% of all students enrolled in post-baccalaureate programs were women. Interestingly, Black, Latina/x, and Native American women were also more well represented in graduate programs than their male counterparts, and the gender gaps were wider than those observed between white men and women (Espinosa et al. 2019). Women were 71% of all Black, 63% of all Latinx, and 63% of all Native American graduate students (NCES 2010). Additionally, Black, Latinx, and Native American students gained ground in their representation among graduate school completers between 1996 and 2016, increasing from approximately 10% to 17% of all degree recipients (Espinosa et al. 2019).

Policymakers have largely focused on trends in doctoral degree completion, where there have been gains, as well. Women were over half (53.8%) of all doctoral degree recipients in 2013 (NSF 2014). The representation of Latinx, Native American, and Black PhD recipients increased from approximately 8% to over 13% between 1994 and 2014 (NSF 2015). There were also notable increases in the number of underrepresented minority men and women receiving PhDs in the life sciences, physical sciences, and engineering – fields where Black, Latinx, and Native American scholars are present in particularly low numbers. While these data suggest that graduate education still has a long way to go before its population mirrors the diversity in undergraduate education or the nation more generally, they also indicate that there are indeed more women and men of color in the pipeline, and diversity in the faculty applicant pool should be growing.

Increases in diversity among PhD recipients have outpaced progress towards faculty diversity goals, and multiple studies suggest that women, underrepresented

minorities, and women of color in particular are less likely to transition to faculty careers after completing their graduate training. For example, Gibbs Jr et al. (2016) used degree completion and employment data to examine the differences between the size of the underrepresented scientist population and the number of assistant professors of color in the sciences. The size of the potential applicant pool in 2013 (recent PhD graduates from underrepresented backgrounds) was nine times larger than it was in 1980, but the number of assistant professors from underrepresented backgrounds in medical school science departments only increased two and a half times over the same time period. Kulis et al.'s (2002) study of faculty in science or science-related fields similarly found that the share of the professoriate composed by women fell far short of their representation among doctoral students and was not just an issue of supply.

Lower rates of representation are connected to multiple factors. This review will certainly engage research that suggests individual and structural discrimination in the hiring process are partially to blame; however, it is also important to consider whether students are as interested in pursuing faculty careers as they once were. Graduate students from all backgrounds are increasingly reporting that they are not interested in faculty careers, and researchers have found that students' interests in pursuing academic research careers significantly decreases as they progress through their doctoral training (Fuhrmann et al. 2011; Sauermann and Roach 2012). According to Golde and Dore (2001), many graduate students across the arts, humanities, and sciences did not want to manage the ambiguities and challenges often associated with faculty life. Similarly, 91% of the graduate students that participated in Fuhrmann et al.'s (2011) study who lost interest in becoming academic principal investigators raised concerns about the lack of funding for research and heavy competition for a declining number of academic positions. Further, trainees expressed concerns about the length of the academic training process, which may include several years of postdoctoral work before securing a faculty position (Fuhrmann et al. 2011; MacLachlan 2006). Perhaps more relevant to science disciplines, the low salaries associated with postdoctoral training can discourage some from pursuing faculty careers, as they compare their financial resources and stability to peers who are at their age but have spent less time in school (Gibbs Jr and Griffin 2013; Stephan 2012).

While several of these factors may be consistent across various identity groups (e. g., students from all racial backgrounds may be similarly frustrated with low postdoctoral pay or the all-consuming nature of faculty work and life), declines in interest in academic careers are particularly notable for women and men of color. Women are more likely to leave the academy to pursue nonacademic careers, and if they enter the academy, they are more likely to choose non-tenure-track appointments or depart before being reviewed for tenure and promotion (August and Waltman 2004; Marschke et al. 2007; Mason and Goulden 2002). Research on biomedical scientists and their career interests showed that underrepresented minorities and women, and underrepresented minority women in particular, had the lowest levels of interest in faculty careers at research universities at the end of their graduate training (Gibbs et al. 2014). Gibbs and colleagues conducted a quantitative study,

analyzing data collected from 1500 biomedical scientists who reflected on their career interests before graduate school, after graduate school, and currently. Women from underrepresented racial and ethnic minority groups reported higher interest than their peers in careers outside of research, and white and Asian women, underrepresented minority men, and underrepresented minority women all reported less interest in careers as research faculty than white and Asian men. Importantly, controlling for faculty support, research self-efficacy, and first-author publication rate did not fully account for differences across groups.

Research suggests women and men of color are more likely than their peers to leave the academy after completing their doctoral degrees for multiple reasons. First, graduate students face racism and sexism from faculty and peers in their graduate programs which could potentially influence their desire to pursue academic careers (e.g., Felder et al. 2014; Griffin et al. 2015; Robinson et al. 2016). As stated by Trower and Chait (2002),

... even if the pipeline were awash with women and minorities, a fundamental challenge would remain: the pipeline empties into territory women and faculty of color too often experience as uninviting, un-accommodating, and unappealing. For that reason, many otherwise qualified candidates forgo graduate school altogether, others withdraw midstream, and still others – doctorate in hand – opt for alternative careers. (p. 34)

Women, particularly in science, face multiple challenges, including a lack of role models and invested mentorship, chilly climates, and gendered stereotypes that leave many isolated and less interested in pursuing careers in the academy (Blickenstaff 2005; De Welde and Laursen 2011; Griffin et al. 2015). Similarly, graduate students of color face stereotypes, marginalization, and unwelcoming climates as they navigate graduate education (e.g., Carlone and Johnson 2007; Felder 2015; Felder and Barker 2013; Gasman et al. 2008; Gildersleeve et al. 2011). Williams et al.'s (2016) study of underrepresented minority scientists revealed that not having the opportunity to see or interact with other underrepresented scientists, particularly faculty, left trainees wondering whether they had the skills necessary to be successful in the field as faculty themselves. Similar themes were observed across interviews with 45 physicians from diverse backgrounds, and participants blamed a lack of faculty from underrepresented racial and ethnic minority backgrounds in academic medicine on an unwelcoming environment where their competence was regularly questioned. In addition to encounters with bias and stereotyping, they explained that a lack of role models who had chosen the academic path made them doubtful of their own potential success and less interested in pursuing academia (Price et al. 2005).

Scholars have also connected disinterest in faculty careers to a perceived lack of alignment between trainees' interests in work-life balance, the culture of the academy, and the nature of faculty life and work. Graduate students have generally reported dissatisfaction with high faculty workloads, which leave limited time for personal interests and commitments due largely to demands for scholarly productivity and success in securing external funding (Fuhrmann et al. 2011; Gibbs Jr and Griffin 2013; Griffin et al. 2015; Mason et al. 2009). While such general phenomena

exist across graduate students overall, these appear particularly distinct for women and men of color. For example, multiple scholars have found that factors related to caregiving and family responsibilities are central to women's decision making about pursuing faculty careers post PhD (Cannady et al. 2014; Mason and Goulden 2004a). Van Anders (2004) studied 458 graduate students at the University of Western Ontario and found that women were less likely to say yes and more likely to say no to faculty careers, not because of their interest in teaching or research, but due to their perspectives on parenthood and family mobility. Men and women were equally likely to plan to have children, but women were less likely to agree that having children was compatible with having a faculty career. Further, seeing an incompatibility between parenthood and academia was predictive of women's interest in faculty careers, but not their male colleagues. Men and women from underrepresented minority backgrounds reported similar concerns about balancing academic and family life, decreasing their interest in a potential faculty career (Haley et al. 2014; Jaeger et al. 2013). Participants shared their desire to be present for their families, leading some to express doubts about faculty opportunities that would displace them geographically or demand too much of their time (Jaeger et al. 2013).

A lack of alignment between potential candidates' interests and the values of the academy may also lead women and men of color to choose non-academic careers. Black, Latinx, and Native American students may be particularly invested in doing work that addresses persistent social problems, serves their communities, and diversifies higher education, but may not see faculty life and work as a way to reach these goals, given the emphasis placed on research and more abstract discoveries (Gibbs Jr and Griffin 2013; Johnson 2007). Women of color participating in Johnson's (2007) study described the ways in which science was decontextualized in academic spaces, focusing on micro-level phenomena that seemed disconnected from larger, and in their mind, more interesting, practical applications of science knowledge. This dissonance between personal values and those endorsed by and necessary for success in the field was discouraging and led to questions of belonging, fit, and ultimately identity as a scientist. Thus, we must consider whether we will have any success increasing faculty diversity if we do not address whether faculty positions are even appealing to minoritized scholars given their perceived disconnection from making an impact or addressing community needs.

As a field, we must acknowledge that these gaps between doctoral degree completion and entry into an academic career are more than leaks that need to be patched. The pipeline metaphor creates a certain image of the progression from graduate school to an academic career. A pipeline conjures a picture of a straight line from enrollment, through graduate school, ending at a faculty position (Shaw and Stanton 2012). However, a faculty career is not a given; career development is more of a branching pathway than straight line, where individuals must make decisions that could take them closer or further from academic research (Gibbs Jr and Griffin 2013; Husbands Fealing and Myers 2012). These choices are often made with intention and do not represent accidental "leaking" from a linear path. While becoming a professor is not necessarily the best or only the viable career choice for individuals completing doctoral degrees, an equity-based perspective redirects

our attention towards why women and men of color are more likely to choose non-academic careers, and insists that scholars examine how academic environments push minoritized trainees out of academe.

Understanding Institutional Barriers to Increasing Faculty Diversity

Consistent with this chapter's equity-based perspective, it is important to consider how the racism and sexism in the environments women and men of color are attempting to and ultimately enter serve as barriers, impacting their satisfaction, professional success, and desire to remain in the academy. Thus, this review addresses institutional factors and forces that influence institutions' abilities to attain and maintain faculty diversity, focusing specifically on 4-year historically white institutions. I specifically explore how institutional administrators, departmental leaders, campus policies, faculty colleagues, and students can inhibit institutional progress towards faculty diversity goals across three domains: the recruitment and hiring process, transitions into institutions and faculty roles, and institutional retention.

Barriers in Recruitment and Hiring

Scholars have engaged in research to better understand how hiring policies and practices continue to perpetuate and maintain the lack of representation of women and men of color in the academy (see Tuitt et al. 2007 for a comprehensive review). While increasing the "flow in the pipeline" is not a panacea, increased diversity in the applicant pool does translate to increased likelihood of hiring a woman or man of color in a faculty position (Bilimoria and Buch 2010; Glass and Minnotte 2010; Smith et al. 2004). Much of this work takes place through outreach to candidates, encouraging applications from a broad range of scholars to generate a pool that increases the likelihood of hiring a White woman and/or person of color.

Partially due to pervasive narratives about the pipeline and small numbers of viable candidates from underrepresented backgrounds, institutional leaders and members of search committees have described increasing diversity in the applicant pool as outside of their control (Gasman et al. 2011; Roos and Gatta 2009; Smith et al. 2004). Early work by Turner et al. (1999) revealed that institutional leaders perceived a lack of qualified candidates as the root of their difficulties attracting a diverse faculty and instituted few outreach policies to encourage applications to open positions. Roos and Gatta (2009) analyzed qualitative and quantitative data from a college of arts and sciences and from a public research university to explore access to faculty positions, as well as trends in mobility, rank, and earnings. Their analysis of personnel data, surveys, and interviews with senior women faculty showed that search committees often argue that high-quality women candidates are just too hard to find, and members rarely educate themselves on ways to engage in candidate

outreach. Similarly, Gasman et al. (2011) completed a comprehensive case study of efforts to increase diversity in the college of education at an elite institution. They examined hiring trends, considered outreach and recruitment policies, and interviewed faculty involved in searches as evaluators and candidates. The scholars found that search committee members often perceived the diversity in their applicant pools as outside of their control and knew little about strategic practices to engage potential candidates from diverse backgrounds.

Campus leaders generally and search committees specifically miss opportunities to institutionalize recruitment strategies into formal policy and practice. According to Turner et al. (1999), while three quarters of the institutions surveyed indicated that increasing the recruitment and retention of faculty of color was a high priority, very few had formal policies and programs in place to help their institutions reach these goals. Similarly, according to Gasman et al.'s (2011) case study, recruitment processes are often informal, with few established policies or formalized procedures focused on increasing diversity in the applicant and finalist pool beyond the campus affirmative action policy. Bilimoria and Buch's (2010) analysis of STEM departments across two institutions revealed that a passive approach is often taken to the search process, with the anticipation that candidates will locate the position and apply without much effort on behalf of the search committee. When institutions do require search committees to submit formal recruitment plans, the committees are often overly reliant on traditional outreach strategies, such as sharing positions on listservs and sending emails. When these strategies do not lead to increased diversity in the applicant pool, search committee members often blame candidates for not recognizing opportunities (Kayes 2006; Light 1994).

Further, some scholarship suggests search committee members may not put forth significant effort to recruit women and men of color as candidates, assuming that they will not accept a position if it is offered. Myths and narratives are often circulated suggesting that a small pool translates to high levels of competition for top candidates from underrepresented backgrounds, (Aguirre 2000; Lumpkin 2007; Smith 2000; Tuitt et al. 2007). Scholars of color in particular can be perceived as expensive to recruit and hire, and more likely to benefit from bidding wars across multiple institutions trying to hire them (Aguirre 2000; Lumpkin 2007; Smith 2000). Smith (2000) examined these assumptions in her research on high-quality candidates from underrepresented backgrounds. Smith interviewed 299 recipients of the Ford, Spencer, and Mellon Fellowships, and found that most of the assumptions about the competition for women and men of color faculty applicants were unfounded. Most participants did not receive a lot of attention in the search process, with 11% of the pool reporting they were recruited to apply to faculty positions. Black, Latinx, and Native American candidates are also often assumed to be regionally bound and difficult to move to areas that are more rural or far away from family (Gasman et al. 2011). Smith (2000) found that the participants in her study were open to different institutional types in regions across the country, and rarely limited their searches to urban areas or prestigious institutions alone.

Members of search committees can also be roadblocks in the process. While it is critical for institutional leaders to articulate a commitment to increasing faculty

diversity, much of the decision making takes place at a local level, and the faculty serving on search committees must commit to diversity goals to advance progress (Bilimoria and Buch 2010; Lumpkin 2007; Tierney and Sallee 2010). More senior colleagues, who are largely white and male, have been described as superficially supportive of increasing faculty diversity, but often resistant to changing how they engage in the hiring process or critical of the materials presented by women and men of color in the application pool. Tuitt et al. (2007) noted that “personal preferences and connections supersede espoused commitments to diversity” (p. 518) within search committees; the prestige assigned to where candidates went to school and who they worked with can often interfere with how women and men of color are perceived. Search committee members often hold implicit and explicit biases that lead them to diminish the skills and achievements of minoritized candidates and amplify the qualities of candidates that are white or Asian, male, or US citizens. Multiple studies in and outside of the academy have shown that women and men of color are often perceived as having less potential and being less skilled, and are subsequently less likely to be hired than white and Asian men, despite having very similar (or in some cases identical) backgrounds and professional experiences (e.g., Bendick and Nunes 2012; Carnes et al. 2012; Eaton et al. 2019; Isaac et al. 2009; Moss-Racusin et al. 2012; Segrest Purkiss et al. 2006). Bias can often manifest in assessments of the prestige and rigor of minoritized candidates’ work. For example, in their case study of efforts to increase faculty diversity in a college of education, Gasman et al. (2011) found that senior colleagues often turned conversations about diversity into discussions about maintaining quality, and scholars of color were not perceived as doing work that was prestigious enough for serious consideration.

Some of the critique and resistance senior scholars and search committee members exhibit may be a function of their tendency to seek candidates that mirror their own training, research interests, skills, and values, knowing that these candidates would be a fit in already established cultures and hierarchies (Bilimoria and Buch 2010; Kayes 2006; Light 1994; Tierney and Sallee 2010). According to Light (1994), “This tendency to search for minority candidates who mirror ourselves is easily the greatest – though hardly the only – obstacle we place in the path of recruiting a more diverse faculty” (p. 165). This bias excludes women and candidates of color who are pushing the norms of the field and challenging traditional conceptions of teaching and scholarship. Women and men of color are often missed in faculty searches when curricular needs are defined in traditional ways, and members of the search committee do not consider or place as much weight on the expertise minoritized scholars offer in emerging fields (Kayes 2006). For example, Tierney and Sallee (2010) warned of search committees’ tendencies to define open positions based on current curricular needs. This practice replicates the faculty that are already in the department rather than creating opportunities to develop depth and expertise in new or emerging fields in which women and scholars of color may be innovating or more well represented.

It is important to note that the effort to recruit a new faculty member is not complete when a candidate is offered a position. While less often articulated as a barrier in the extant literature on hiring, institutional leaders must be mindful of how

they encourage candidates to accept the positions that they ultimately offer. As candidates navigate a search process, they are interpreting signs and signals that they receive from the institution, assessing whether they would like to ultimately accept a position if offered (Tuitt et al. 2007). In their analysis of the search and hiring process at two campuses, Bilimoria and Buch (2010) found that women were more likely than men to reject offers when made, and Latinx faculty were more likely to reject than accept an offer. The researchers offered some hypotheses regarding why the offers were not accepted; however, there was little data collected to confirm or disprove these assumptions. Institutions that are not attentive to the needs of dual-career couples, particularly when they are recruiting to more rural regions of the country, may also be at a disadvantage when trying to get candidates to accept their offers (Tierney and Sallee 2010). While both men and women may be sensitive to the employment needs of their spouses and partners, dual-career hiring opportunities may be particularly important and salient for women scholars. Most women academics who are married have partners with advanced degrees; conversely, most men who are academics are not married to women with advanced degrees (Laursen et al. 2015; Mason and Goulden 2002).

There are multiple challenges and roadblocks to navigate as institutions aim to address the underrepresentation of women and men of color in the faculty through recruitment and hiring. They are perhaps best categorized as issues with the processes and issues with the people engaged in those processes. Processes have limited impact because of their informality, passivity, and lack of intentionality in recognizing the value and importance of what women and men of color add to the academy. The people engaged in the process as members of search committees carry their own biases and beliefs, leading them to make decisions that recreate the academy as it is rather than promote innovation towards what it could be. Increasing diversity in the professoriate requires increased hiring of women and men of color into open positions, and unless institutions address both people and processes, progress towards increasing equity in academe will continue to stagnate.

Barriers in Transition and Socialization

The challenges mitigating efforts to promote faculty diversity do not disappear once more women and men of color have been hired. As newly hired faculty enter their new institutions and try to become members of their academic communities, institutions must consider whether they are creating barriers to success or facilitating new faculty members' transitions. There are decades of discourse in the higher education literature about socialization into the academy and how one adopts the identity of faculty member and understands the norms of academic life (e.g., Austin 2002; Berberet 2008; Nyquist and Woodford 2000; Rice et al. 2000); however, the field less has often considered organizational socialization, or how newcomers to an organization move from being outsiders to insiders, adopting the norms and values of the organization (Bauer et al. 2007; Tierney and Bensimon 1996).

There are multiple ways in which we can understand the process of organizational socialization generally, and its implications for minoritized faculty and increasing diversity more specifically. Tierney and Bensimon's book, *Community and Socialization in Academe*, is perhaps one of the most widely known and cited texts addressing how new faculty come to understand their roles in the academy. The book documented narratives from over 300 interviews with faculty across a diverse set of institutions, chronicling their experiences and challenges learning the norms and values of the academy, codified in an often-challenging tenure and promotion process. Bauer et al. (2007) offered a slightly different conceptualization of organizational socialization, applied broadly in and outside of higher education. Bauer and colleagues argued that organizational socialization relies heavily on newcomer adjustment, which incorporates three dimensions: role clarity, self-efficacy, and social acceptance.

Role clarity captures an understanding of the tasks necessary to be successful in the job, as well as an understanding of the appropriate amount of time to allocate to each task. In the case of full-time tenure-track faculty, success is often akin to obtaining tenure and being promoted through the academic ranks (Tierney and Bensimon 1996). Self-efficacy is related to mastery of the tasks necessary to be successful and confidence in one's ability to complete these tasks. Finally, social acceptance is related to community connections and whether one feels like they are welcomed, liked, and accepted. In addition to performing better, those who are able to attain greater role clarity, self-efficacy, and social acceptance are more likely to have higher levels of job satisfaction, organizational commitment, and intentions to remain in their positions (Bauer et al. 2007).

While several scholars have used organizational socialization as a framework to understand the experiences of early career faculty as they learn to navigate their respective institutions, others that have not applied the frame and have come to similar conclusions about how role clarity, self-efficacy, and community membership relate to satisfaction, productivity, and successful navigation of professional reviews and tenure processes (e.g., Cole et al. 2017; Kelly and McCann 2014; Ponjuan et al. 2011). Much of the foundational research in this area does not explicitly address the unique experiences of minoritized scholars in the socialization process, but does provide valuable insights into the challenges early career faculty face as they transition from graduate school to faculty roles.

Much of the research in this area has placed emphasis on role clarity, or how new faculty understand their responsibilities and how the tenure process works, and self-efficacy, or developing confidence in their skills and abilities. Role clarity and self-efficacy often work hand in hand, and early career scholars generally struggle to understand the necessary dimensions of faculty life and feel confident in the skills necessary to fulfill these roles as they transition to faculty careers (Austin et al. 2007; Rice et al. 2000; Sorcinelli and Austin 2006). According to Austin and Sorcinelli's (2007) review of literature on the experiences of new faculty, graduate programs often leave new PhDs underprepared for the realities of the academy and the multidimensional nature of their work. While they were well trained to engage in research, most new professors knew little about how to be an advisor or mentor,

develop a curriculum, write and manage grants, or participate in public service and outreach. Further, while institutions publish their tenure and promotion criteria in an effort to create greater role clarity, many scholars perceive the pathway to success in the academy as hidden and wish the advancement process was more clear, fair, and included more opportunities for formative feedback (Austin and Rice 1998; Austin et al. 2007; Sorcinelli and Austin 2006). Twelve new faculty in higher education administration departments described unclear expectations about how to become an effective teacher and develop a curriculum and syllabus, as well as expectations about the volume of productivity necessary to make adequate progress towards tenure (Eddy and Gaston-Gayles 2008). Similarly, a diverse groups of over 300 faculty participating in focus groups explained that despite stated guidelines, the expectations of colleagues in their department and college often were in conflict with those in central administration, and they often received vague or contradictory advice on how to spend their time and develop a record that would result in a successful tenure review (Austin and Rice 1998).

While many of these challenges may be shared across identity, they manifest differently for women and men of color (Cole et al. 2017). According to research by Boice (1993), women and men of color reported role-related challenges that were unique and distinct from their white male colleagues. New faculty who were women felt pressure to perform and demonstrate their skills as teachers and researchers in ways men did not, and over time doubted their abilities as teachers and writers. Professors with minoritized racial and ethnic identities were most likely in the sample to perceive the need to prove their abilities and felt that they were expected to cope without help, support, or complaint. Similarly, a study of three women of color professors who left their institutions before going up for tenure revealed that they experienced challenges in role-clarity and self-efficacy. The women felt like they did not learn what they were supposed to during their doctoral programs, making their transitions to faculty life more difficult (Kelly and McCann 2014). They also found their mentoring relationships unhelpful and that mentors did not provide clarity about expectations or information regarding how to fulfill those expectations in ways that would make them successful in the tenure and promotion process. In addition to feeling that they were being unfairly judged by white male standards, Latinas participating in Medina and Luna's (2000) qualitative study shared that there was little support or guidance for their research, and they did not know how to get funding to support their work. Thus, while the needs to demonstrate skill and gain access to role clarity may be similar, women and men of color may face racism and sexism that limit access to support and lead to doubts about their abilities, challenging their development of self-efficacy.

Transitions can be challenging, even when they are welcomed and anticipated (Schlossberg 2011). While it is perhaps easiest to identify how transitioning to a new institution can be especially challenging for an early career scholar who is learning what it means to be a professor, they can also present issues for more experienced faculty who have to learn what their new context means for what role looks like, the quality of social connections and networks, and colleagues' expectations. Little research has directly addressed how institutions do or do not promote more

successful transitions for women and men of color, nor is there work that critically considers how challenges experienced during the organizational socialization process translate to long-term efforts to retain individuals from minoritized communities.

Barriers in Retention and Advancement

Researchers have perhaps most well documented the barriers and challenges women and men of color face as they aim to survive and thrive once in their faculty roles. Campuses often focus on hiring without addressing retention issues, leading to a revolving door of hires and departures (Gasman et al. 2011; Kayes 2006; Kelly et al. 2017; Tierney and Sallee 2010; Tuitt et al. 2007). For example, based on their analyses of 10 years of data collected from tenure-track faculty at a large, research universities, Marschke et al. (2007) concluded that gains in the representation of women stagnated due to the increased likelihood of women leaving the academy before they were promoted. Approximately two-thirds of men who left the institution did so after becoming full professors; over half of women who left the institution departed before receiving tenure. While women were hired at rates comparable to their representation within the pool of doctoral graduates, their elevated rates of departure meant that there was no change in their representation on the faculty. Using differential equations models, the authors concluded that women would not reach parity without significant gains in hiring *and* reductions in departures.

Job satisfaction is intimately related to institutional retention, often measured through intention to leave (e.g., August and Waltman 2004; Hagedorn 2004; Laden and Hagedorn 2000; Ropers-Huilman 2000; Rosser 2004). While there are certainly many factors and forces that can lead to faculty being dissatisfied with their work, a review of the literature documenting the experiences of women and men of color suggests that issues fall into four interrelated categories: campus and departmental climate; relationships and support; professional experiences and nature of faculty work; and experiences navigating merit, promotion, and tenure processes.

Campus and Departmental Climate

Many efforts to promote faculty diversity and the retention of women and men of color are undone by hostile or unwelcoming climates at the institution (campus climate) or in faculty members' respective departments (departmental climate) (Aguirre 2000; Kelly et al. 2017; Settles et al. 2007; Turner et al. 1999). Climate for diversity is broadly defined as attitudes, beliefs, behaviors, and perceptions of community members (including faculty, students, administrators, and staff) as they navigate issues of difference (Hurtado et al. 1998).

Findings across multiple studies confirm that women and men of color perceive the climate on campus and in their specific departments and disciplines as hostile and exclusionary. Maranto and Griffin (2011) noted that there is a broad literature confirming that women perceive the climates in their departments as less welcoming than men, reporting higher rates of exclusion and lack of belonging. They confirmed

this finding with their own analysis of data collected from faculty employed at a private midwestern university, which revealed that women across racial background and discipline perceived more exclusion and a chillier climate than their male colleagues. Multiple studies by Settles (Settles et al. 2006, 2007) focused specifically on women in science. These studies resulted in similar conclusions, and confirmed the negative relationship between sexist, hostile departmental climates and job satisfaction for women in STEM. Turner et al. (1999) completed a study focusing on the underrepresentation and institutional experiences of Black, Asian, Native American, and Latinx faculty across eight states. After they analyzed federal data (US Equal Employment Opportunity Commission, Department of Commerce, the Census Bureau), institutional surveys, and data from interviews and focus groups, they concluded that while the number of graduates from underrepresented backgrounds and market forces played a role in persistent underrepresentation of people of color in the academy, the biggest cause was a chilly, unwelcoming climate. Similarly, the 28 Black faculty participating in Griffin and colleagues' (2011) qualitative study on perceptions and responses to the climate also affirmed that the racism they faced because of their identity greatly influenced their experiences on their respective campuses, presenting challenges and negatively impacting their satisfaction.

Compositional diversity, or the representation of individuals from different racial and ethnic groups, is a key part of campus climate (Hurtado et al. 2008, 1998; Milem et al. 2005). Having a critical mass of individuals from marginalized groups is a necessary component to improving the climate. Women and men of color are often hired in token numbers, meaning that they are one of few, or the only, person with their identity in their department or program (Laden and Hagedorn 2000). The small numbers of faculty of color on many campuses and the clustering of women and men of color in certain departments means that minoritized faculty can experience stark underrepresentation and isolation that is intensified in departments that are less diverse. Maranto and Griffin (2011) described the importance of relational demography, or the percentage of women faculty in a department, to shaping the climate. The researchers found that women in departments that were predominantly male perceived more exclusion than those that were more gender balanced. Similarly, a longitudinal study of Black women as they navigated the tenure and promotion process revealed that participants felt isolated and marginalized as the only Black women in their departments and programs (Kelly and Winkle-Wagner 2017).

Climate also addresses the quality of interpersonal interactions and relationships between faculty and their colleagues (Hurtado et al. 1998; Griffin et al. 2011b). Sandler and Hall (1986) were early scholars who describe a "chilly" academic climate for women faculty, marked by professors and administrators who perceive women as less able scholars and leaders, use sexist language, and overlook or ignore women's contributions. In the years since, scholars have developed a robust body of literature examining the campus climate for women faculty, and revealed that women are more likely to perceive their interactions with students, colleagues, and administrators as aggressive, sexist, exclusionary, and unwelcoming (e.g., Croom 2017; Gardner 2012, 2013; Ropers-Huilman 2000; Settles et al. 2013). Similarly,

decades of research suggest that faculty of color have frequent experiences with stereotyping, microaggressions, and harassment (e.g., Croom 2017; Griffin et al. 2011b; Kelly et al. 2017; Menges and Exum 1983; Pittman 2012; Turner et al. 2008). Plata (1996) notes that many faculty of color are the target of ethnic jokes and teasing, which distract from work responsibilities and diminish likelihood of retention. Similarly, Eagan and Garvey (2015) found increased exposure to stress related to discrimination translated to lower rates of productivity for faculty of color. Sixteen interviews with faculty of color revealed that they regularly faced racist comments and jokes, as well as dismissive comments about the importance of social justice and equity (Martinez et al. 2017). Croom's research on Black womyn full professors documented multiple incidents throughout their careers, including insinuations that their promotion was dependent on a "sexual quid pro quo situation" (p. 573) rather than their merits as scholars.

While overt acts of racism and sexism still occur, in many cases, they manifest in more subtle ways (Laden and Hagedorn 2000). In many cases, racism is subtly "manifested in the everyday experiences described by [minoritized] faculty members in which they are devalued as individuals by stereotyped expectations and treated as second class citizens that must prove themselves in ways not expected from their white peers" (Johnsrud and Sadao 1998, p. 334). Some of the marginalization women and men of color face has been linked to the existence and misunderstanding of affirmative action policies by white and male colleagues. It is often assumed that women and men of color were hired only because of their marginalized identities and ability to help the institution reach diversity goals (Griffin et al. 2011b). Participants in Kelly and Winkle-Wagner's (2017) longitudinal study of Black women faculty noted that it was assumed that they were only successful or persisting because standards had been lowered for them. Similarly, 19 Black faculty participating in focus groups at a large, public research university felt that they had to work doubly hard to prove themselves when colleagues shared perceptions that they were only hired to fulfill diversity goals (Kelly et al. 2017).

While minoritized faculty are proud of all of their identities, they are frustrated to be perceived by their race or gender first, and their scholarly roles and abilities second (Griffin et al. 2011b; Laden and Hagedorn 2000; Turner 2002b; Turner et al. 1999). According to Laden and Hagedorn's (2000) review of the literature, the minoritized identities of faculty of color are often emphasized and commented on, as opposed to their scholarly work or contributions to the academic community. Further, given biases and assumptions about their academic abilities and stereotypes about who professors are and look like, women and men of color are often misrecognized and not assumed to be faculty. For example, women of color participating in Ford's (2011) study were often mistaken for graduate students or university staff. Similarly, a Black male faculty member in Griffin and colleagues' (2011b) study recounted when he was asked if he was at a colloquium to move the furniture, mistaken for a member of the facilities team rather than a professor.

Encounters with racism and sexism can be frustrating and hurtful, making scholars more dissatisfied with their experiences and leading to early departure from an institution or, more significantly, from academe (Croom 2017; Hesli and

Lee 2013; Jayakumar et al. 2009; Ropers-Huilman 2000; Trower and Chait 2002; Turner et al. 1999). Gardner (2012, 2013) analyzed interview data collected from 11 women faculty (their racial and ethnic identities were not reported) who left positions at a large research university, and learned that they experienced sexism in their work, particularly from senior male colleagues. They perceived the campus as a hostile environment and grew frustrated with the institution talking about the challenging climate for women, but not doing anything about it. Similarly, analyses of survey data collected by the Higher Education Research Institute (HERI) confirmed a strong relationship between negative perceptions of racial climate, satisfaction, and intentions to leave, particularly for Black and Latinx professors (Jayakumar et al. 2009). Given the connection between climate, satisfaction, and intentions to leave, as well as the increased rate at which women and men of color identify their campus environment as hostile or uncomfortable, institutions interested in increasing faculty equity and diversity would be well served by directly addressing their climates.

Relationships and Support

Collegiality, or positive relationships and camaraderie between colleagues, can have an influence on the retention of women and men of color in multiple ways. Having collegial relationships with peers was predictive of satisfaction for untenured women in August and Waltman's (2004) study of tenured and tenure-track women at a large research university. However, across multiple studies, faculty who identified as women and people of color were less likely to be satisfied with their co-workers and perceive that they were being treated unfairly, and left out of social interactions (Bilimoria et al. 2008; Seifert and Umbach 2008). For example, women scientists in a study by Fox (2010) reported feeling less included in their home departments than their male colleagues, and they were less likely than male faculty to speak with their colleagues about research. Similarly, Gardner (2012) surveyed 472 faculty at a large, public, land grant university and found that women felt more isolated and outside of their area's informal networks. McKay (1997) suggested that white men and women often ignore the presence of African American faculty in informal situations. Black faculty participating in Griffin and colleagues' (2011b) study also noted that their significant underrepresentation and solo status led them to feel a lack of fit in their departments and a lack of social connection.

The isolation many minoritized faculty experience is often rooted in experiences with racism, sexism, and identity-based marginalization. Consistent with the literature on campus and departmental climate, several studies show that women and men of color are treated based on stereotypes and regarded with suspicion. The auto-ethnographies that Stanley (2006) analyzed suggested that faculty of color feel both visible and invisible because of their racial identities in the presence of their white colleagues. They felt invisible in that they were left out of social networks and relationships, but, given stereotypes about the academic abilities and scholarship of people of color, they felt that their performance was highly visible and that they needed to prove their worth as scholars that should be trusted and respected. In an exploratory quantitative study of full-time faculty employed at a Minnesota medical

school, women from all racial and ethnic backgrounds reported more negative feelings about interactions with their peers than male participants. These women were more likely to indicate that they felt scrutinized and closely watched by their colleagues, and that they had to work harder to be perceived as legitimate scholars (Shollen et al. 2009). In a study by Thomas and Hollenshead (2001) comparing the perceptions of white women, white men, men of color, and women of color, women of color most often reported that their working environment was unfriendly, they faced high levels of scrutiny and low expectations, and that they were not respected by their colleagues.

In addition to exclusion from informal networks and a lack of interaction with colleagues, there is research suggesting women and men of color have less access to support through mentorship. While there is a body of research that suggests there are few differences across identity groups in terms of who does and does not have a mentor (Johnson 2016), there is also compelling evidence that suggests access to mentorship is not equitably allocated. Women of color participating in Thomas and Hollenshead's (2001) secondary analysis of qualitative and quantitative data collected at a large state university seldom reported they had mentors, and when they did, rarely connected with mentors who shared their racial or gender identities. Some researchers have found that women of color who are faculty and administrators develop extensive networks of support to promote their advancement; however, this support often comes in the forms of faith and spirituality, peers, friends, and family rather than meaningful professional mentoring relationships, particularly from those in their programs or units (Patitu and Hinton 2003; Thomas and Hollenshead 2001).

Literature on access to quality mentoring relationships has largely focused on the experiences of faculty of color. While some faculty of color describe powerful and supportive mentoring experiences, others describe relationships where mentors are unhelpful or give bad advice (Stanley 2006; Zambrana et al. 2015). While many underrepresented racial and ethnic minority faculty are assigned formal mentors through institutional programs, manifestations of racism through benign neglect, a lack of support, and devaluation of identity and community-based research agendas limit the efficacy of these relationships, leaving mentees frustrated and without access to key resources that could advance their careers in meaningful ways (Zambrana et al. 2015). Further, relationship quality can also be diminished when mentors are reluctant to recognize their mentees' identities, intentionally or unintentionally ignoring how they may impact junior faculty members' experiences in the academy (Zambrana et al. 2015). When identity is minimized, it can be difficult to build the trust necessary to reap the personal and professional benefits of mentoring relationships; mentees may feel like they cannot share an important aspect of themselves and their experiences, and mentors may give advice that is off the mark or miss the impact and implications of marginalizing experiences (Zambrana et al. 2015).

In addition to highlighting the impact of relationships within faculty members' departments and programs, scholars have addressed how family relationships and responsibilities, and the ways in which they are and are not considered, impact faculty retention. While men and women have the potential to become parents while

in the academy, decisions about whether and when to have children appear to have a more significant impact on women and their career decision making and progression (Finkel and Olswang 1996; Finkel et al. 1994; Mason and Goulden 2002, 2004a, b). Women often describe parenthood as joyful, and they appreciate the flexibility that a faculty career can offer (Ward and Wolf-Wendel 2004, 2005). However, research also suggests that women devote more time to caregiving and household tasks, potentially limiting their ability to engage with their work, particularly their research (Mason and Goulden 2002; Sallee et al. 2016; Shollen et al. 2009). Many women see workload issues as most likely to be a challenge in advancing to tenure; however, research also suggests women perceive the time they have to invest in parenting as a significant barrier (Finkel and Olswang 1996).

Mason and Goulden (2002, 2004a, b) and Ward and Wolf-Wendel (2004) wrote about women trying to have children and start families just as they are beginning the tenure-track, highlighting the unfortunate ways the biological clock and tenure clock co-occur. Mason and Goulden (2002, 2004a, b) argued that conversations about equity in the academy must include a discourse about whether faculty have equal access to desired outcomes in both their personal and professional lives. While Mason and Goulden (2004a, b) acknowledged that not all scholars want to be married or have children, their quantitative analyses of data from collected at the University of California, Berkeley and the Study of Doctorate Recipients (SDR) showed that tenure-track women are less likely to be married, less likely to have children, and are more likely to be divorced than their male colleagues on the tenure track and women who are in non-tenure-track teaching positions. Similarly, a quantitative study of women who were assistant professors on the tenure-track found that their decisions about whether and when to have children were significantly impacted by their careers. Over 40% had no children, 30% had decided to never have children, and 49% had decided to postpone having a child due to perceived work responsibilities and constraints (Finkel and Olswang 1996).

The relationship between having children and productivity is complicated, with some studies showing that faculty who are parents are in fact more productive than their colleagues who are not (Stack 2004). However, given patriarchal gender dynamics and expectations, women take on the majority of the responsibilities and time commitments associated with parenting, which can have negative implications for their ability to balance workload, stress, and career development. Interviews with 39 full-time, tenure-track women faculty revealed that having children added stress to already busy schedules (Ward and Wolf-Wendel 2005). In a study that aimed to disentangle the complicated relationship between productivity, gender, and parenting, Stack (2004) found that while having children over the age of 10 was unrelated to scholarly productivity, women with pre-school-aged children published less than others. Similarly, Misra et al.'s (2012) research on gender differences in faculty time allocation showed that individuals with children under 12 spent 30 more hours a week on caregiving than those without children, and that being a mother of a child under 12 had negative implications for research time. A study comparing the perspectives of women and men who are science faculty found that women were more likely to indicate that work interferes with family time and commitments

(Fox 2010). Although this literature offers important insights into how women who are mothers and primary caregivers experience challenges navigating the demands of academic work, there is little scholarship that directly considers whether and how these phenomena manifest differently for women and men of color.

Professional Experiences and the Nature of Faculty Work

Faculty worklife, or how professors spend their time and experience their professional roles, interests, and quality of life, is closely connected to their satisfaction, and ultimately decisions about whether or not to stay in the academy (Rosser 2004). While faculty responsibilities rarely fall into the discreet categories of teaching, research, and service, this common heuristic is used to organize the section below, documenting research on how women and men of color allocate their time to each area. In addition to understanding time allocated and workload across teaching, research, and service, I present scholarship that offers insight into how racism and sexism influence how academic work is done and judged.

Multiple scholars have utilized large quantitative datasets to examine whether women and men of color teach more courses and invest more time and energy in teaching. Overall, these studies suggest women teach more than their male colleagues, and that the time invested in teaching by scholars of color and their white peers is fairly comparable. Allen (1997) analyzed 1993 National Study of Post-secondary Faculty (NSOPF) data and found that women teach more than men overall, and that Native American men had the highest teaching loads; however, there were few differences between the teaching loads of Black, Latinx, and white faculty. Bellas and Toutkoushian (1999) also analyzed data from the 1993 NSOPF and came to similar conclusions; women spent significantly more time in teaching and less time in research than men. Winslow's (2010) analysis of data from the 1999 NSOPF revealed that women spend more time than men on teaching, and less time on research. Winslow acknowledged that some of these differences may reflect an affinity for working with students in the classroom or women's significant representation in positions where teaching is the primary activity (e.g., lecturers and instructors). However, there are also data that suggest these time allocations are not congruent with women's interests. For example, women participating in Winslow's study indicated that despite spending more time on teaching, they would prefer to spend more time on research.

Rather than quantifying differences in time spent teaching, scholars in the past two decades have focused more on articulating how the classroom experiences of women and men of color are distinct from and more marginalizing than those of their white and/or male colleagues. The extant scholarship largely supports Turner's (2003) assertion: "what is taught, how it is taught, and who teaches always affects classroom dynamics" (p. 116). Ropers-Huilman (2000) analyzed five texts that chronicle the lives of women faculty to gain a deeper understanding of their experiences in the academy and their satisfaction with their work. She found that women across all five texts cared about the quality of their learning experiences with students, but felt that they and their courses were judged based on factors unrelated to the quality of their curriculum and pedagogy. Challenges while teaching was the

strongest theme emerging from Stanley's (2006) analysis of 27 autoethnographies from faculty of color chronicling their experiences working at predominantly white institutions. While participants still expressed joy from their teaching experiences, they often struggled with how students engaged them.

One of the most common issues women and men of color face are assumptions about their levels of skill and competence. This is a particularly salient theme in research on faculty of color generally, and women of color specifically. Martinez et al. (2017) interviewed sixteen Asian American, African American, Latinx, and international faculty members employed at a variety of institutions and found that faculty experienced challenges in the classroom regardless of context. Students questioned their abilities and competency as faculty and often engaged in acts of resistance, particularly in courses that focused on diversity or social justice. Tuitt et al. (2009) combined their experiences and constructed a counternarrative capturing the experiences of faculty of color in the classroom, touching on many of these themes. The authors highlighted how their credibility was questioned and challenged, coupled with expectations that they would entertain the class and be funny and engaging. Women of color that participated in Kelly and McCann's (2014) longitudinal study also noted the challenges that arise when they teach classes that engage topics related to diversity and inclusion; students refused to engage, expressing discomfort in discussing these topics. In addition to making their teaching experiences more challenging, faculty across multiple studies expressed concerns about or experienced students' negative reactions to course content, translating to lower ratings on their teaching evaluations (Ford 2011; Kelly and McCann 2014; Martinez et al. 2017; Ropers-Huilman 2000; Stanley 2006).

Challenges in the classroom may be particularly salient for women of color, who simultaneously experience race- and gender-based oppression (Ford 2011; Pittman 2010; Turner et al. 2011). Ford (2011) conducted interviews with 21 Black, Latinx, and Asian American women teaching at a large research university in the Midwest, highlighting their interactions with white students. Participants shared examples of the multiple ways in which white students challenged their authority and questioned their competence in the classroom, resisted conversations about social justice and equity, and expected a higher level of caregiving and fewer boundaries. They also explained that it was difficult to disentangle the impact of their age, gender, and race, and recounted how their physical presentation (as a person of color, as smaller, as a woman) heightened the disrespect and disregard with which students engaged them. Pittman (2010) explained that the marginalization women of color experienced in the classroom was amplified as compared to white women and men of color, documenting the experiences of seventeen women of color faculty at a predominantly white research university in the Midwest. While they were rarely challenged by students of color, participants in Pittman's study noted that white males regularly questioned their competence, disrespected their expertise, and were physically intimidating.

While generally frustrating, these experiences are additionally problematic because women and men of color perceive students treating their white and male colleagues differently. Survey responses collected from academic chemists revealed

that women think graduate students take male faculty more seriously (Lewis and Richmond 2010). Multiple studies reported that women and men of color particularly dislike when students engage them in an informal tone or call them by their first names, while they refer to other colleagues (who are usually older, white, and male) as “Doctor” or “Professor” (Ford 2011; Patton and Catching 2009; Pittman 2010; Ropers-Huilman 2000). In response, minoritized scholars may take additional steps to be perceived as legitimate scholars in the classroom. Ford’s (2011) participants recounted their degrees and training to establish their legitimacy and were mindful of their clothes, hairstyles, and tones, wanting to be perceived as “professional.” Women of color in Pittman’s (2010) study also explained that they had their guard up around students, feeling that they could not be too friendly for fear of being perceived as less serious scholars or having more negative interactions.

Much like the observations of time allocations associated with teaching, there are some key differences across demographic groups in the amount of time faculty spend on research, translating to disparities in rates of productivity. Findings across quantitative analysis of faculty time allocation are fairly consistent. On average, men spend more time engaging in research-related activities than women, and white and Asian faculty spend more time on research than Black, Latinx, and Native American faculty (antonio 2002; Bellas and Toutkoushian 1999). Based on analyses of NSOPF data from 1993, Toutkoushian (1999) found that women spend an average of 4.7 h a week on research and men spend 7.6 h per week. Based on an analysis of almost 350 surveys from faculty at the University of Massachusetts Amherst, Misra et al. (2012) similarly concluded that women spent less time on research than men. After controlling for parenting, Stack (2004) found that gender differences in engagement in research and scholarship remained; women spent less time on research and published at lower rates.

When assessing a professor’s qualifications for promotion, faculty evaluators focus not only on how much has been published, but also what kind of work has been done and where it appears in print (Blackwell 1988). There can be questions regarding whether the work of women and men of color is “legitimate,” determined by colleagues’ assessments of levels of productivity and conformity to scholarly norms. According to 50 faculty across multiple institutions, “legitimate” scholars work constantly, are highly productive, and are primarily engaged in traditional research; legitimacy in these forms are most recognized by the institution as having value (Gonzales and Terosky 2016). Thus, to be successful and perceived as legitimate scholars, some minoritized faculty have noted the importance of publishing as much work as possible in top-tier journals to avoid questions and negative professional assessments (Griffin et al. 2013).

While not all women or faculty of color want to study issues directly related to marginalized communities, those who do contend that community-focused research is judged as less valuable and rigorous by the standards of a pervasive white, Western orientation (Johnsrud and Sadao 1998; Menges and Exum 1983; Stanley 2006; Turner and Myers 2000). Individuals with marginalized identities engaging in research addressing the needs and experiences of those in their own communities are assumed to be biased (Turner et al. 2011), and applied, problem-based research

that addresses the needs of marginalized communities is often viewed as less rigorous and unimportant (Thompson 2008). Thompson and Dey (1998) analyzed data collected from Black participants in the Higher Education Research Institute (HERI) Faculty Survey and found that having research interests connected to communities of color was a significant source of stress. Women participating in Gardner's (2012) mixed-methods study felt that their research was not perceived as "mainstream," and as such, not as valued. Narratives collected during a qualitative study of Black faculty employed at two large research universities similarly revealed that these professors felt that their work was often judged as less prestigious, rigorous, and valid than their colleagues' (Griffin et al. 2011a).

Finally, the vast service demands on women and men of color have been well documented (Bellas and Toutkoushian 1999; Thompson 2008; Turner et al. 1999). In a study about gender difference in work time and caregiving, Misra et al. (2012) found that while men and women both reported working approximately 60 h a week, men spent more time on research and women spent more time on mentoring. O'Meara et al.' (2017) study of time diaries from over 100 faculty at Big 10 institutions revealed that women associate and full professors spent more time than men advising students and supporting their work. Data also consistently show that racially and ethnically minoritized scholars engage in service more often than their white peers. According to Bellas and Toutkoushian (1999), Black and Latinx faculty spend more time engaged in service activities than their white peers. These findings were affirmed by Misra et al.'s (2012) research on faculty time allocation, which showed that faculty of color spent more time on service activities than their colleagues.

Much of the elevated rate of participation is based on institutional and community demands, as administrators and colleagues need and expect women and men of color to add diversity to campus committees and offer guidance on equitable and inclusive policy and practice. Turner et al. (1999) added that faculty of color are often asked to manage anything that is related to diversity. For faculty of color, this is often referred to as "cultural taxation," or the pressure to fulfill multiple demands related to an institution's diversity and inclusion needs (Padilla 1994; Tierney and Bensimon 1996; Turner 2003).

Cultural taxation often comes in the form of advising and mentoring students. Given their desire to connect with scholars that understand their own experiences of marginalization, students from underrepresented and marginalized backgrounds frequently reach out to faculty of color for advising, mentorship, and support (Dancy and Brown 2011; Griffin and Reddick 2011; Menges and Exum 1983; Patton 2009; Tierney and Bensimon 1996). Sharing a minoritized identity can also be an important location from which to build trust and deep connections based on shared experiences of marginalization (Johnson 2016), and students of color often seek support from individuals that understand what it is and means to embody their identity in the academy (Baker et al. 2014; Patton 2009). For example, in a paper recounting her mentoring relationship with Sharon Fries-Britt, Bridget Turner Kelly shared the importance she placed on connecting with and being mentored by her first

Black woman professor, feeling that she would be able to help her understand how to navigate work and life in the academy (Fries-Britt and Kelly 2005).

Cultural taxation was expanded to include women and scholars with other minoritized identities by Hirshfield and Joseph (2012), who wrote about the prevalence of “identity taxation” for women generally, and women of color in particular. Women are more often called upon to and actually provide emotional labor than their male peers, engaging in a form of care work that leaves students feeling heard, affirmed, and supported (Bellas 1999; Griffin et al. 2013; Griffin and Reddick 2011; Tierney and Bensimon 1996). Gonzales and Ayers (2018) wrote about the expectations community colleges place on faculty to engage in emotional labor to compensate for a lack of institutional infrastructure, resources, and services to support students. Institutions increasingly rely on and exploit faculty’s willingness to invest in emotional labor because of their love for their work or their students, but do not compensate faculty for this work (Gonzales and Ayers 2018). A similar phenomenon manifests at 4-year institutions, and women of color carry a particularly heavy burden in this regard. In many cases, students, faculty, and administrators not only expected women of color to do more, they also expected a deeper emotional investment and a level of care not expected of their male colleagues (Aguirre 2000). Latina professors that participated in Medina and Luna’s (2000) study shared that there were a lot of community demands to manage, and they carried heavy advising loads. Studies by Griffin and colleagues revealed gendered dimensions of mentoring among Black professors. While Black men and women described being sought out frequently by students and their colleagues to engage in different kinds of service, men noted the importance and their ability to say no, drawing clear boundaries to protect their time. Black women, however, explained that they were still learning to decline service requests, and were expected to engage with students in close, personal ways that required more time and emotional energy (Griffin et al. 2013; Griffin and Reddick 2011).

While how women and men of color engage in mentoring and advising of students and junior scholars is perhaps most well documented in the literature, it is also important to acknowledge the commitments women and men of color make to campus governance. As institutions aim to include more diverse identities and perspectives on committees, leaders may repeatedly tap women and men of color to serve, given their small numbers. Women and men of color may also be expected to develop institutional policy, develop diversity recruitment or retention plans, or craft responses to racist and/or sexist incidents on campus. In a survey of African American and white faculty at six institutions, Black faculty were more likely to be involved in committee work especially concerning issues related to communities of color, than their colleagues (Allen et al. 2000). Women of color may be perceived as “checking two boxes,” and asked to represent their race and/or their gender on a variety of committees (Turner 2002).

Professors’ feelings about engaging in this labor are complex. Baez (2000) addressed the distinctions professors make between participation in general service versus race-related service, which involves activities connected to their racial and ethnic identities, such as community outreach, mentoring students of color, or

participating on committees related to diversity and inclusion. Professors of color had greater difficulty saying no to race-related service activities due to their commitment to the issues these activities address, choosing to participate in community-oriented activities over more general service obligations. Faculty may see their decisions to engage in service as an affirmation of their purpose and motivation behind becoming professors and cultivating opportunities to support students and communities of color can be sustaining (Griffin 2013; Martinez et al. 2017; Reddick 2011).

However, participation in service activities is not always in alignment with how faculty want to spend their time. Women and men of color do not necessarily want to engage in service more than research, nor do all intend to center these forms of labor in their professional work. Olsen et al. (2006) conducted interviews and administered a career development questionnaire to 147 participants and found that women and men of color did not articulate a bias towards service and less commitment to research. Rather, they emphasized the importance of and their commitment to scholarship and research just as much as their colleagues. Participants in O'Meara et al.'s (2017) time diary study recorded how often they were asked to engage in additional work and service to the institution. On average, women reported 3.4 more asks per week than their male colleagues. Stanley (2006) found that faculty of color often have heavy service loads, whether they want them or not, and felt that it was challenging to draw boundaries and say no to the numerous requests they received. While faculty are often urged to say no to requests that feel too time-consuming and overwhelming, Winkler (2000) relayed there are often political consequences when service requests are declined. Also, some faculty felt used by institutions that relied on their labor for diversity and inclusion work, wondering whether the institution valued their scholarly contributions (Garrison-Wade et al. 2012). Thus, service demands can be complex to navigate, and telling scholars to reallocate their time oversimplifies the personal and professional repercussions women and men of color may experience if they decline requests from students and colleagues.

Institutional Rewards Systems, Tenure, and Promotion

How women and men of color experience climate, relationships with their colleagues, and workload all have implications for their progression through institutional rewards systems, particularly as they navigate the tenure and promotion process. Demographic trends and decades of research suggest that women and men of color do not experience the same success as their white and male peers as they work towards tenure and promotion in the academy. The professoriate becomes increasingly homogenous as one ascends the academic hierarchy, with white men making up large proportions of tenured faculty and full professors at 4-year institutions (Espinosa et al. 2019; Finkelstein et al. 2016; Perna 2001; Toutkoushian 1999). Perna (2001) conducted a series of analyses on the 1993 NSOPF dataset to better understand the extent and reasons behind differences in the representation of women and men of color among tenured and full professors. Descriptive statistics suggested women in full-time faculty positions at 4-year institutions were less likely to be tenured than men, and Black, Latinx, and Asian faculty were less likely to be tenured

than white faculty. However, when controlling for standard measures of scholarly productivity, field, and institutional type, women and men were roughly equally likely to be tenured, but women were still less likely to be full professors. When controlling for these variables, Black, Latinx, and Asian faculty were as likely as their white colleagues to be full professors, but still less likely to be tenured.

Perna's (2001) research suggests that some of the differences in rates of tenure and promotion are due to how women and men of color engage in their work and whether they are productive in the ways most recognized in the academy. For many universities and comprehensive institutions, success is primarily judged by the extent to which faculty are engaged in and productive researchers (Tierney and Bensimon 1996). More time spent on research translates to greater scholarly productivity (Bellas and Toutkoushian 1999), and multiple scholars suggest women and men of color are often engaged in activities that are both unrewarded and draw time away from research. Lee (2012) argued that the heavy teaching and service loads women and men of color carry are negatively related to engagement in research. Time spent teaching is negatively related to promotion to full professor and time spent on research is positively related to advancement to full professor (Perna 2001). Similarly, faculty who are more invested and spend more time engaging in service generally, and mentoring and advising specifically, have less time for research and scholarship (Bellas and Toutkoushian 1999; O'Meara et al. 2017). Thus, time invested in these relationships may not only go unrewarded and unrecognized; it may translate to more negative outcomes because service detracts from activities that are celebrated in the academy.

In addition to being judged by criteria that do not fully represent their contributions to the academy, women and men of color face racism and sexism as their applications for promotion are reviewed. Institutional policies and decision makers often privilege certain forms of research over others, viewing work that does not fit within their notions of "rigorous scholarship" as unworthy of serious consideration and its authors undeserving of promotion. Research addressing the needs of underserved and underrepresented communities, employing qualitative and critical methodologies, or exploring the experiences of women and men of color is often perceived as outside the mainstream and may be judged negatively by tenure and promotion committees (Griffin et al. 2013b; Johnsrud and Des Jarlais 1994; Tierney and Bensimon 1996; Turner et al. 2008). While teaching is perceived as not counting in meaningful ways towards tenure and advancement, some describe negative teaching evaluations as being judged particularly harshly when they are assessments of women of color (Griffin et al. 2013; Tierney and Bensimon 1996). For example, Griffin et al. (2013) interviewed Black men and women employed at two predominantly white research universities and found that participants perceived the importance placed on teaching very differently. Black men noted that teaching was unimportant in the evaluation process and rarely considered, while Black women were mindful that a negative evaluation could be amplified and ultimately derail their promotion process.

Finally, while often framed as meritocratic and based on an assessment of a professor's work, perceived collegiality and relationships matter in the tenure and

promotion process (Aguirre 2000; Menges and Exum 1983; Tierney and Bensimon 1996; Turner et al. 2008). Tenure and promotion decisions are often at least partially based on subjective factors and assessments of whether or not a faculty member is a good colleague; therefore, likeability and connections to colleagues can come into play in somewhat unexpected ways (Menges and Exum 1983). While finding connections in other departments can be identity affirming, they cannot be a replacement for relationships in one's own department. Focusing solely on the cultivation of external relationship can leave women and men of color with fewer advocates and allies in their own programs to support their work, particularly during professional reviews (Griffin et al. 2011b).

Although they are presented separately, campus climate, navigation of tenure and promotion, access to support, and managing workload are intimately related to one another and the satisfaction of women and men of color in the academy. Perhaps most simply, how a scholars' work is judged and whether they have the time and energy to engage in the activities most rewarded in the academy are critical factors in navigating the tenure and promotion system successfully. However, it is also important to acknowledge that, in many cases, how the work of women and men of color is judged, experiences with social isolation and a lack of support, and how work allocated are fundamentally shaped by campus climate, the behaviors and biases of students and colleagues, and the racism and sexism inherent in campus structures and systems. Further, the cumulative effects of underrepresentation, exclusion from networks, racist and sexist climates, and lower rates of satisfaction combine to negatively influence the personal and career outcomes of women and men of color (Lewis and Richmond 2010). A comprehensive understanding of these challenges and how they are related to one another is a critical step in addressing them and promoting increased equity in the academy.

Promising Practices: A New Model for Increasing Faculty Diversity

The challenges documented in this chapter are difficult to navigate and address. Given the extent to which these problems are interrelated, individual, and institutionalized in structures and systems, there is no "silver bullet" policy or program that will translate to increases in faculty diversity, and piecemeal plans or solo strategies will not produce substantive changes in the demography of the US professorate (Bilimoria et al. 2008; Laursen et al. 2015). Solutions must be holistic, considering both how faculty are recruited and retained, and simultaneously addressing institutional culture, work practices, and structures that perpetuate inequity (Bilimoria et al. 2008; Kelly et al. 2017; Laursen et al. 2015).

The Institutional Model for Increasing Faculty Diversity (Fig. 1) offers a complex, multidimensional framework that helps institutions organize and understand the factors and forces that impact their ability to recruit and retain a diverse faculty. The Model was developed as part of APLU INCLUDES Project, funded by the National Science Foundation (Award Number 1649199), which supports the development of resources and implementation of strategies to increase faculty diversity in

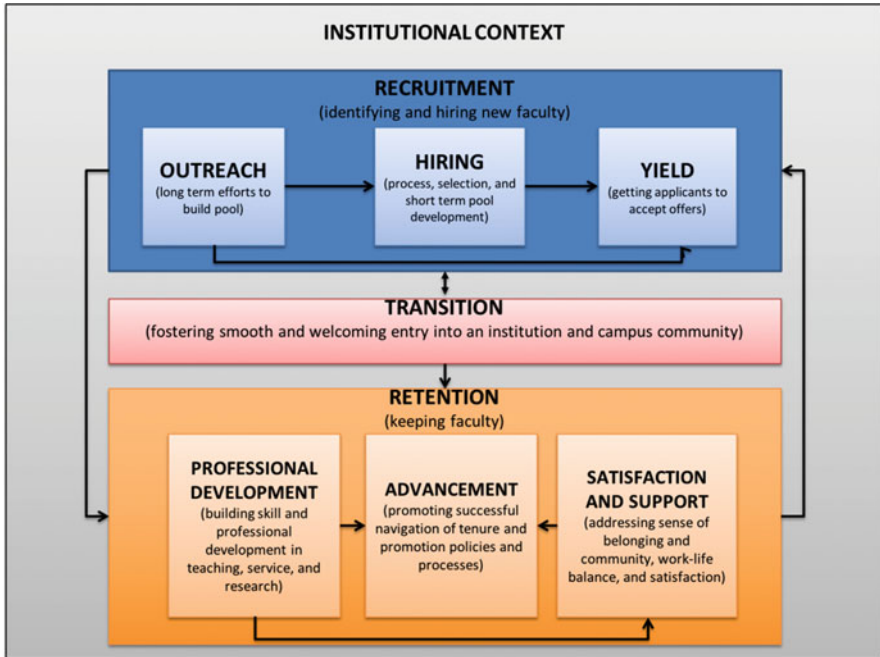


Fig. 1 The Institutional Model of Faculty Diversity

science, technology, engineering, and math (STEM). I was a Co-PI on the project and developed an initial draft of the model based on a review of the scholarly literature on the nature of faculty work, recruitment and retention strategies, and the experiences of underrepresented populations in the academy. I then worked closely with Alan Mabe, then Chief Academic Officer and Vice President for Academic Affairs at APLU and a Co-PI on the grant, to revise the Model, clarifying the relationships between and across dimensions.

Consistent with the collective impact approach undergirding the APLU INCLUDES project (see Kania and Kramer 2011), the Model went through multiple rounds of revision with community stakeholders and subject matter experts. Meetings and discussions with members of the APLU INCLUDES team (Howard Gobstein, PI; Kacy Redd, Co-PI; Travis York, Co-PI; Eugene Anderson, SP) informed early versions of the model, and Travis York was particularly active as a thought partner as we reviewed the literature, revised the Model's dimensions, and aimed to represent how institutional action could promote equity and increased representation in the professoriate.

Once we developed a version of the Model that had been approved by the APLU INCLUDES team, we met with an eight-member Faculty Diversity Task Force, composed of leading scholars in higher education, university presidents, and senior administrators, for feedback. The task force was co-chaired by Roy Wilson, President of Wayne State University, and Ruth Watkins, who was the Provost of the

University of Utah (she later became President). These meetings led to substantive revisions that added clarity to the dimensions and specified what was and was not included. Alan Mabe and Travis York also presented the Model at the APLU Council of Presidents and Council on Academic Affairs (Provosts) meetings to gain feedback on the Model's feasibility and appropriateness as a frame for institutional efforts to promote faculty diversity.

The Model was then shared with attendees at the APLU INCLUDES Summit in the Spring of 2017 and 2018, which convened faculty, administrators, and leaders of organizations that have attempted to increase faculty diversity and implement programs and policies to reach these goals. Summit participants also had an opportunity to provide guidance and feedback, which was subsequently incorporated in the Model. The Model and accompanying institutional assessment tools were also shared with 16 campuses that reviewed the materials and offered detailed feedback on whether the dimensions aligned with their understanding of where there were institutional barriers and opportunities to develop interventions to support women and men of color in the academy. Thus, dimensions of the Model are based on knowledge gleaned from a thorough and thoughtful engagement with both extant scholarship and practice.

While the Model was initially developed to support efforts to diversify the STEM professoriate, the concepts, research, and theories underlying it have broad implications and can guide institutional efforts across campuses and in multiple disciplines. I revisited and modified the Model for this chapter based on a broader review of the literature beyond the STEM fields that includes both barriers women and men of color face and institutional actions aimed at fostering faculty diversity across disciplines.

The Model includes four primary dimensions, highlighting where barriers lie and where interventions must be focused to foster a more equitable environment and to increase faculty diversity:

- Institutional context, or the overarching commitment and investment the campus has made in promoting diversity and inclusion.
- Faculty recruitment, or short- and long-term efforts to bring faculty from diverse backgrounds to campus.
- Transition, or the process by which faculty are welcomed and incorporated into campus communities between their hiring and formal initiation of employment.
- Retention, or efforts focused on promoting faculty success and satisfaction that keep them at the institution.

Some of the connections between recruitment, transition, and retention may seem intuitive, and speak to the linear progression of the process from one step to the next. For example, recruitment precedes transition, and transition programming addresses socialization needs with the goal of increasing the likelihood of retention. However, there are additional relationships captured in the Model that highlight the interconnectedness of these dimensions. First, there are arrows from recruitment to retention that go in both directions. Scholars are increasingly calling attention to the

connections between retention and recruitment, noting that a welcoming climate, access to professional development resources, and the presence of a diverse faculty that appears to be performing well are key to successful recruitment efforts (Gasman et al. 2011; Smith 2000; Tierney and Sallee 2010; Tuitt et al. 2007). Potential candidates are attentive to the signals that they receive about the campus climate, observing the extent to which women and men of color are welcomed and included in their departmental and campus-wide communities, as well as whether diversity is treated as an institutional priority (Price et al. 2005; Tuitt et al. 2007). Further, given that a critical mass of women and men of color appears to influence minoritized professors' sense of isolation and access to support (Kelly and Winkle-Wagner 2017; Stanley 2006; Trower and Chait 2002; Turner et al. 1999, 2008), successful recruitment programs and strategies that result in more diverse hires can also support retention efforts. Similarly, the recursive arrow between transition and recruitment suggests that effective programming in this area can have an impact on candidates' decision making about accepting faculty positions. Comprehensive programs which promote successful transitions to the campus community and access to professional support not only increase the likelihood that faculty will be retained; these programs also may make it easier to recruit potential new hires eager to enter environments offering these forms of support (Tuitt et al. 2007).

Institutional Context

Institutional context refers to the overall campus environment in which faculty diversity is to be addressed. Each institution's unique context must be considered as institutions develop their diversity recruitment strategies (Laursen and Austin 2014). Tierney and Sallee's (2010) research on organizational structures and strategies for increasing faculty diversity suggested that there are no "best practices" that work for all institutions. Based on their assessment of 18 research universities and their practices, they concluded "that no discernable patterns exist to indicate which strategies are most effective in increasing faculty diversity" (p. 177). This is not to say that there were no successes or policies and programs that worked; rather, the authors note that success requires selecting and implementing strategies that align with a campus's specific context and constraints. Similarly, Laursen and Austin (2014) studied organizational change at 19 institutions that received ADVANCE Institutional Transformation grants. ADVANCE is an NSF-funded initiative focused on increasing the representation of women in the STEM professoriate, which supports institutional transformation efforts and the implementation of evidence-based initiatives that promote equity and inclusion, broaden participation, and address systemic inequities. They found that there were no "best practices" that would work equally well across all campuses; rather, institutional leaders had to develop a deep understanding of the specific challenges their institution was facing in promoting faculty diversity and the context within which they wanted change to occur before deciding what combination of interventions and strategies would be most likely to promote faculty equity and diversity.

Institutional context also captures campus-wide factors relevant to whether and how the university has articulated and enacted a commitment to diversity and inclusion. Some institutions may see hiring a Chief Diversity Officer (CDO) as a commitment to faculty diversity, assuming that the person in this role will spearhead faculty diversity initiatives. While CDOs play an important part in diversity planning and improving campus environments for diversity and inclusion, research conducted by Bradley et al. (2018) suggested that the hiring of a CDO is unrelated to increases in faculty diversity. Similarly, Tierney and Sallee (2010) found that out of the seven institutions in their study that had CDOs, only three had made substantive progress on their faculty diversity goals. Instead, presidential leadership and advocacy appear to be key to spurring institutional change and commitment to increasing faculty diversity. Knowles and Harleston (1997) studied 11 research universities that were trying to increase the diversity of their faculty bodies and found that the institutions that were the most successful had a strong commitment from their presidents, and there was a clear sense that faculty diversity was an institutional priority. Kezar (2008) also reminds that university presidents are key to advancing a diversity agenda and are uniquely positioned to institutionalize programs and policies that promote increasing the representation of women and men of color in the professoriate.

While presidential leadership is important, meaningful progress on issues of diversity and inclusion cannot be siloed in one office or be the responsibility of a few select individuals. Progress requires a team of senior-level administrators to make a visible and vocal commitment to holistic engagement across the campus (Smith 2000). Bilimoria and Buch (2010) documented the work of two campuses that received funding from the ADVANCE program, describing promising strategies. They noted that part of the organizational change effort on both campuses included provosts, deans, and senior leaders, who all became more active in the search process, not only through written statements articulating a commitment to diversity, but also speaking at trainings for search committees (Bilimoria and Buch 2010). Similarly, an analysis of the work of 19 ADVANCE Institutional Transformation grantees revealed that it was critical to have an invested and engaged team of senior leaders to make meaningful progress (Bilimoria et al. 2008).

Recruitment

Recruitment refers to efforts to attract and hire a diverse faculty body. Recruitment is not one activity; it is a multistage process (Griffin and Muñiz 2015; Laursen and Austin 2014). For faculty, recruitment can involve generating interest in faculty careers, encouraging people to apply for positions, successfully navigating a selection process, and ultimately getting someone to accept an offer. Griffin and Muñiz (2015) described the recruitment process for graduate students as sharing multiple similarities with faculty recruitment, and used qualitative data collected from administrators charged with increasing graduate student diversity to develop a recruitment framework. In addressing where administrators can have the greatest impact, they

noted the importance of differentiating between: efforts to connect with potential candidates and generate interest amongst a diverse pool of potential applicants (outreach); how applicants are reviewed and selection decisions are made (admissions); and how selected applicants are recruited and encouraged to ultimately enroll at a given institution, particularly when they have multiple offers (yield). This framing is adapted and applied to guide an approach to addressing institutional recruitment of more women and men of color in the professoriate and is similarly divided into three subdimensions: outreach, hiring, and yield.

Outreach

Outreach focuses on long-term efforts to build pools of candidates for faculty positions that will be available at some time in the future. While many campuses may wait until there is a specific position open to cultivate a pool of candidates, establishing relationships with talented women and men of color well in advance of openings may make the institution more familiar and increase the likelihood of matriculation (Aguirre 2000; Lumpkin 2007). Bilimoria and Buch (2010) studied the implementation of recruitment and hiring strategies at two campuses participating in the NSF ADVANCE program. Both institutions changed their thinking about searches, moving from short-term hiring strategies to longer-term, ongoing recruitment. In addition to revising how they reached out to candidates for specific positions, all faculty were expected to engage in recruitment all of the time. Faculty were encouraged to think about making connections to promising scholars from minoritized backgrounds at conferences and invited talks, regardless of whether or not there was an open position. Materials were centrally created and shared that offered detailed information about their respective departments to ensure consistent messages were sent to potential candidates.

In addition to building networks and relationships, some institutions have instituted programs that allow them to develop or leverage relationships with early career scholars. Collins and Johnson (1988) recommended hosting women and men of color for informal talks and visits before positions open to build relationships and a connection to the campus, noting that this strategy was key to increasing faculty diversity on their campus. A similar strategy was implemented at an elite college of education. A lecture series for scholars of color allowed the institution to identify and begin building relationships with potential future applicants (Gasman et al. 2011). Institutionally-funded postdoctoral programs have also become increasingly popular. These programs target individuals underrepresented in the academy or doing work that focuses on marginalized communities, offering scholars an additional one to 2 years to cultivate their research agendas and build their curriculum vitae before beginning a faculty position (Knowles and Harleston 1997; Tuitt et al. 2007). While not all programs explicitly connect the postdoc to a faculty position, it is the hope that the scholars will be retained at the host institution and be offered a tenure-track role. Finally, while they are somewhat controversial, some have recommended “grow your own” programs, where institutions train doctoral students and subsequently hire them into faculty positions (Gasman et al. 2011; Lumpkin 2007; Tuitt et al. 2007).

Hiring

Hiring addresses all efforts related to cultivating an applicant pool and candidate selection for a specific open position. Many institutions have focused efforts in this area as they have developed faculty diversity plans, attending to how the construction of position announcements, advertising, and the behaviors of search committees influence who applies, is invited to campus, and ultimately is offered a faculty position (Laursen and Austin 2014).

Job descriptions must be carefully constructed and framed to be interesting to and attract attention from a diverse audience. Sensoy and DiAngelo (2017) recommended the inclusion of a clear, operationalized definition of diversity and communication of its value to the institution. Further, a study of over 700 searches at three institutions found that including diversity in the job description was connected to the increased likelihood of hiring women and men of color (Smith et al. 2004). Sample advertisements and inclusive text were also helpful to search committees at two ADVANCE institutions seeking to increase the diversity of their applicant pools and hires (Bilimoria and Buch 2010).

Once a job description is completed, searches must be active rather than passive, and multiple scholars recommend building broad networks to identify potential candidates (Gasman et al. 2011; Glass and Minnotte 2010; Smith 2000; Turner 2002a). In her guidebook for faculty search committees, Turner (2002a) recommended that position descriptions be widely circulated beyond traditional networks, reaching out to organizations and individuals that support minoritized professionals and doctoral students. Gasman et al. (2011) found that the personal networks of faculty of color already employed at the institution were valuable resources in generating a diverse applicant pool, allowing search committees to make more focused and personal connections with potential candidates. These strategies translate to meaningful outcomes. Glass and Minnotte (2010) studied the search process in STEM departments over a 6-year time period at a research university. They found that placing advertisements in venues that target women increased the percentage of women applicants in the pool.

In addition to ensuring that job descriptions are widely seen, deans and department chairs must be mindful of the role of the search committee and its power to accelerate or slow progress towards faculty diversity goals. First, institutional leaders should consider inviting a diverse group to participate as members of the search committee. Research suggests more diverse search committees result in more diverse hires. For example, search committees that include women are more likely to have women as finalists, and ultimately hire women scholars (Glass and Minnotte 2010). Further, Smith (2000) acknowledged the subjectivity of the search process and reminds that including the diverse perspectives of women and men of color on the search committee will benefit the process, as well as efforts to reach out to minoritized candidates given their ability to leverage their own networks. Turner (2002a) added that when adding women and men of color to search committees, they should be senior rather than junior scholars, if possible, both to highlight the seriousness of the search and not burden assistant professors with an unreasonable

service load before their tenure review. Diversity in the committee should extend beyond identity, including diversity of perspective and openness to equity and inclusion (Gasman et al. 2011; Sensoy and DiAngelo 2017; Tuitt et al. 2007; Turner 2002a).

The provision of training for search committees is also key to increasing the likelihood of hiring women and men of color (Laursen and Austin 2014). Turner (2002a) noted that committees must be aware of institutional affirmative action policies and come to a common understanding about how diversity and inclusion will be integrated in the hiring process. In addition, implicit bias training has been the focus of a great deal of attention, with the goal of mitigating the ways in which search committee members' deeply held and often unconscious beliefs about the abilities and interests of women and men of color shape their decision-making (Bilimoria and Buch 2010; Carnes et al. 2012; Girod et al. 2016; Kayes 2006; Laursen and Austin 2014). Trainings on recognizing and addressing implicit bias have translated to increases in the number of women in hiring pools, finalist lists, and hires (Bilimoria and Buch 2010; Devine et al. 2017; Sensoy and DiAngelo 2017). Devine et al. (2017) studied the impact of an intervention designed to break participants' tendencies to rely on prejudices, which included trainings to become more aware of implicit bias, understand its consequences, and learn strategies to reduce its impact on behaviors and decision making. The researchers conducted a randomized trial at the University of Wisconsin to determine the intervention's efficacy, which revealed that there was an 18% point increase in the proportion of women hired by departments completing the intervention, while those that did not hired women at the same rates. Similarly, a study of hiring patterns at Montana State University revealed that science search committees that engaged in an intervention that included training how to gain better control over their implicit biases were over six times more likely to make an offer to a woman candidate than those who did not (Smith et al. 2015).

The campus visit and interview are also important dimensions of the hiring process which are often overlooked (Turner 2002a). Institutions may focus largely on their need to assess the candidate and their qualifications, forgetting that candidates are critically considering the campus and whether it is a place at which they would like to work. A study presenting the autoethnographies of three minoritized search candidates (a White lesbian, Latina, and Latino) highlighted the importance of the campus visit in assessing fit. The candidates took note of who attended, how their research was received, and the extent to which there were resources to support their work (Hughes et al. 2012). How the day is scheduled can also have a powerful impact on how women and men of color view the campus and their thinking about whether they want to become a member of the campus community. Tierney and Bensimon (1996) recounted the negative experience a woman had interviewing at one campus, where she was not given any breaks in her schedule or opportunities to engage with other women at the institution. While the institution made her a competitive and attractive financial offer, she chose to accept a faculty position at another institution with a hiring process that was warm and collegial, with more opportunities to rest and connect with future colleagues. Sensoy and DiAngelo

(2017) reminded that it is important to provide candidates with opportunities to meet with students from minoritized communities as well, particularly student activists, so they could better understand the institution's areas for growth. Light (1994) added that candidates should be provided with opportunities to meet community leaders and people who may be relevant to their work and life beyond the institution to foster a sense of comfort and connection.

Finally, search committees, deans, and department chairs must make key decisions about what it means to be a "strong candidate," going beyond traditional metrics of reputation of doctoral institution and advisor or number of publications. Smith (2000) pointed to the elitism embedded in faculty search processes and recommends that institutions create strategies to recognize their bias for candidates who have degrees from institutions that are perceived as prestigious. In his study of hiring practices in the academic workforce, Jackson (2008) argued that while these criteria may appear neutral, narrow definitions of merit often miss the meaningful contributions of candidates from various racial and ethnic minority backgrounds. Sensoy and DiAngelo (2017) recommended making the ability to engage with and promote diversity a formal criterion upon which to make decisions. They also recommended that search committees intentionally assess and ask candidates to articulate how they will actualize a commitment to diversity and inclusion in and outside of the classroom. Similarly, Collins and Johnson (1988) noted that part of their success in increasing the number of professors of color on their campus was rooted in searching for candidates who had an interest in diversifying the curriculum, rather than based solely on traditional metrics of scholarly productivity.

In addition considering how work gets done and the search committee is trained, there must be careful attention to broadening strategies utilized to identify potential candidates. Smith et al. (2004) conducted an extensive study of faculty searches at three elite research universities, exploring how the incorporation of one of three strategies – a job description that engages diversity, targeted diversity hiring policy, or a diverse search committee – translated to hires of candidates of color. The majority of searches that resulted in the hire of a person of color made use of one of these strategies. Notably, 86% of Black faculty and all of the Native American faculty hired were in searches that applied one of these three strategies. Cluster hiring, which brings groups of faculty with shared interests or that are connected to a central theme to institutions as a cohort, is also increasingly popular as a hiring strategy. When implemented on campuses with clear diversity goals and commitments to hired candidates, cluster hiring can translate to more successful hires of women and men of color, as well as higher rates of retention (Muñoz et al. 2017).

Yield

While a campus can make strides in making offers to a more diverse pool of candidates, it is not guaranteed that those offers will be accepted. Little scholarly attention has been focused on what leads to a candidate accepting or declining an offer. According to Tuitt and colleagues, "presenting the candidate of choice with a competitive employment package is the institution's most direct way of signaling to a candidate that they are a valuable commodity" (2007, p. 523). Turner (2002a)

discussed the impact of offers in her guidebook on faculty hiring and explains the importance of compensation and thinking about it holistically. Compensation goes beyond salary and can include resources and support that help individuals make more successful transitions to the institution and faculty life (Tuitt et al. 2007). Light (1994) recounted that while emphasis is often placed on the financial aspects of an offer, consideration must be given to the candidate as whole person, recognizing their needs to build community on and off campus. Thus, institutions must be mindful of factors beyond salary that may be attractive to candidates.

While little research has focused on this area, some ideas have emerged. For example, additional visits may help successful candidates build community and determine where they would like to live, ample start-up budgets can facilitate a strong start on research projects, and access to information about community resources may make offers more attractive. Laursen and Austin (2014) also reminded that not all successful candidates will have insight into what they should or could be negotiating for, leading to inequitable start-up packages, salaries, and resources. They found that several institutions revised their yield strategies to be more equitable, offering negotiation templates as well as checklists of items that could be negotiated for or that candidates should anticipate discussing.

Dual-career issues can also be important to address as offers are made to potential candidates (Laursen and Austin 2014; Laursen et al. 2015; Smith 2000; Tierney and Sallee 2010). Attending to the professional needs of potential hires and their partners has increasingly been recommended as good practice in faculty recruitment (Sorcinelli 2000; Stewart et al. 2016; Wolf-Wendel et al. 2000). A study of almost 400 American Association of Colleges and Universities institutions revealed that approximately a quarter of the institutions had dual-career hiring policies, but most were informal and not in writing. Institutions with and without policies were most likely to help faculty of color, full professors and women (Wolf-Wendel et al. 2000). Smith (2000) noted that offers from institutions that are active in helping partners and spouses find academic employment are taken more seriously than those that do not, and Wolf-Wendel, Twombly, and Rice (2000) also noted that helping “trailing spouses and partners” find employment often resulted in a successful hire.

As noted above, a great deal of public discourse, scholarly work, and media attention has been focused on addressing faculty diversity through increasing the number of individuals from underrepresented backgrounds pursuing PhDs, thus increasing the size of the potential applicant pool. However, it is important to remember that increasing the number of graduates from PhD programs will not automatically translate to increased faculty diversity (Cannady et al. 2014; Kulis et al. 2002), and a holistic assessment and revision of institutional recruitment policies and practices is necessary to make progress towards faculty diversity goals. Also, while an important step, increasing the number of applicants from underrepresented backgrounds when faculty positions are posted should not be the only strategy for increasing faculty diversity. Instead, successful efforts to hire a more diverse faculty body requires a long-term, intentional commitment that incorporates personalized contact and development of connections with high potential applicants (Collins and Johnson 1988; Gasman et al. 2011; Turner 2002a), welcoming and inclusive

application review and interview processes that frame diversity as a strength (Sensoy and DiAngelo 2017; Smith 2000), and intensive efforts to encourage selected applicants to accept offers and join the faculty at that institution (Tuitt et al. 2007).

Transition

Once a successful candidate has been hired, there may be several months before the person actually begins their new faculty position. This time period is represented by the “transition phase,” in the framework, and perceived as an opportunity to build connections, begin introducing the person into the campus culture and community, and initiate and assess the need for professional and skill development. While many campuses offer orientation programs for new faculty, transition appears to be a relatively underexplored area for intervention.

As noted above, early efforts to promote organizational socialization can foster long-term positive professional outcomes, such as job satisfaction, organizational commitment, and intentions to persist within the organization (Bauer et al. 2007; Tierney and Bensimon 1996). Tierney and Bensimon (1996) reminded that there are two stages to the socialization process: anticipatory socialization and organizational socialization. Anticipatory socialization takes place before an individual begins their work on a campus, when they are graduate students or employed at other institutions. Further, organizational socialization is divided into two phases: initial entry, which addresses acts immediately before and after hiring and transition to an institution; and role continuance, which takes place throughout the tenure and promotion process (Sallee 2011; Tierney and Bensimon 1996). As defined here, the transition phase focuses on anticipatory socialization and initial entry.

Bauer et al. (2007) noted “organizations (either passively or actively) create strong or weak situations under which newcomers must adjust to new environments . . . Organizations differ in terms of the goals they have for newcomers, ranging from conformity to innovation, and newcomers must learn what is expected of them through the adjustment process” (p. 709). Newcomer adjustment is fostered by two antecedents: newcomer information seeking and organizational socialization tactics (Bauer et al. 2007). Newcomer information seeking occurs at the individual level and reflects steps new incumbents take to reduce uncertainty and make sense of organizations. While this is certainly an important part of the socialization process, given this review’s focus on organizational factors and forces in the retention process, the focus here is on organizational socialization tactics, or what institutions can do to disseminate information and provide support as newcomers adjust to their new roles. Institutionalized socialization tactics are important and may be the most effective way to promote better transitions and professional outcomes for faculty. Saks et al. (2007) completed a meta-analysis of research on the impact of institutionalized socialization tactics, and found that, overall, they were negatively related to role ambiguity, as well as intentions to leave.

Bauer et al. (2007) specifically recommended interventions that align with the dimensions of newcomer adjustment to foster successful organizational

socialization. Content-based interventions should focus on training and skill development, fostering self-efficacy and abilities to complete the skills associated with the required work of the job. Content-based interventions may be particularly important for individuals beginning their faculty careers immediately after completing graduate school or their postdoctoral training, given that they may have had little experience with teaching, mentoring, and other dimensions of faculty life beyond research (Austin 2007; Austin et al. 2007). Research on graduate education also suggests that women and men of color are often denied access to mentoring and career development that would adequately prepare them for faculty careers (e.g., Cianni and Romberger 1995; Curtin et al. 2016; Eddy and Gaston-Gayles 2008; Patton 2009), which may put these scholars at greater risk for struggles as they adjust to the demands of faculty work. In particular, research on the importance of mentoring for early career faculty (e.g., Curtin et al. 2016; Dancy and Brown 2011; Phillips et al. 2016; Piercy et al. 2005; Thompson 2008; Zambrana et al. 2015) suggests that the establishment of mentoring relationships that provide women and men of color with opportunities to ask questions, get feedback on syllabi and manuscripts, and develop potential collaborations in the time before they arrive on campus could be of potential value.

Interventions should also address role clarity, helping newcomers understand the stages and processes through which individuals must progress to advance and be successful (Bauer et al. 2007). In an academic setting, interventions focused on role clarity often translate to facilitating deeper understandings of the tenure and promotion process. While tenure and promotion policies may be formalized in documents, newcomers may not fully understand nuances of navigating the process or distinctions between requirements in their respective departments, colleges, and at the university level (Eddy and Gaston-Gayles 2008). For those who have been faculty at other institutions, it is important to clarify how the tenure and promotion guidelines at their new campus are similar and distinct from their previous employer. Access to early exposure to how professional reviews work, timelines for completing the various components of the process, and benchmarks to aim for that are indicators of good progress towards a successful promotion and tenure review can be helpful in promoting role clarity.

Finally, there are socially-focused organizational socialization tactics. These interventions offer support and mentorship that foster social acceptance and belonging (Bauer et al. 2007). Beginning a new faculty job often involves a move to a new region of the country, and efforts to help faculty form a sense of community on and off campus can be helpful in promoting sense of belonging and inclusion (Cole et al. 2017; Eddy and Gaston-Gayles 2008; Tierney and Bensimon 1996). Eddy and Gaston-Gayles (2008) reminded that it may be challenging for faculty of color to acclimate to predominantly white neighborhoods off campus, and these faculty may have trouble finding churches, hair salons, and friendships and romantic partnerships. Further, given the isolation and marginalization many women and men of color face in their departments and programs (e.g., Kelly and McCann 2014; Turner 2002b; Turner et al. 1999; Winkler 2000), early opportunities to build relationships with faculty across campus may make social transitions a bit easier.

While institutions can implement strategies that promote each of these dimensions individually, it may be particularly effective to develop comprehensive programs which simultaneously promote self-efficacy, role clarity, and social connections. For example, a study found that a research bootcamp offered by Sisters of the Academy (SOTA) was an important resource for Black women who were new professors (Jones and Osborne-Lampkin 2013). SOTA is an organization founded in 2001 to support Black women in the academy, creating a network of professional and psychosocial support to encourage collaborative scholarship and provide opportunities for professional development. During a focus group, junior faculty participants recounted how the SOTA bootcamp helped them more clearly articulate their research agendas, think through writing manuscripts for publication, and gain access to information about resources that would help them advance their scholarship. Further, they were able to develop relationships and connections with other Black women that provided them with social and emotional support. Similarly, participants in a new faculty mentoring program noted that their mentors, who were faculty outside of their home departments, diminished their social isolation while simultaneously increasing their efficacy by answering questions and affirming their work and ideas (Phillips et al. 2016). Thus, creative interventions that integrate opportunities to build skills and confidence, connect to communities of support, and learn the norms and policies associated with tenure and advancement may be particularly important in facilitating smooth transitions, particularly for new faculty.

Retention

While many campuses emphasize hiring, it is equally important to attend to whether professors are being retained or remain at the institution or in academia. It is not uncommon for campus representatives to discuss their great fortune in hiring a very promising faculty member from an underrepresented group, but lament that the person departed 3 or 4 years later. Some describe a “revolving door” when it comes to faculty from underrepresented backgrounds, noting that new hires who are women or men of color are often replacing a woman or man of color who just left the institution (Carter and O’Brien 1993; Jackson 2008; Kayes 2006; Tuitt et al. 2009). I encourage institutions to consider their retention programs and policies in their faculty diversity and inclusion strategies, focusing specifically on three components: professional development, advancement, and satisfaction and support.

Professional Development

Similar to the content-based organizational strategies recommended by Bauer et al. (2007), professional development focuses on providing training and guidance that supports skill development and opportunities that help faculty reach the highest levels of success in completing the components of their jobs. While important in the process of helping faculty develop skills and competencies to best support their students and advance their research agendas, professional development is rarely addressed directly by institutional administrators; it is often expected that faculty

will gain access to the support they need with little institutional or departmental intervention (Sorcinelli and Austin 2006). The extant literature does not suggest that minoritized scholars are less competent or able to do their work; however, the challenges that they encounter finding collaborators and support for their research, navigating difficult interactions with students, and managing a large number of service demands can necessitate additional support and resources.

Equitably distributed and structured opportunities designed to help faculty gain access to guidance and support in teaching, research, and service can promote faculty members' confidence in their skills and success (Laursen and Austin 2014). Some participants in Zambrana et al.' (2015) qualitative study of faculty of color in institutionally sponsored mentoring programs described their ideal and positive experiences in mentoring relationships, noting the importance of having senior scholars invite them to collaborate on research, offer "hands on" (p. 59) feedback on their writing, and guide them in building the skills necessary to be a strong scholar. Trained mentors benefitted new faculty participating in a formal mentoring program, providing opportunities to discuss strategies for navigating academic life and managing challenges in and outside of the classroom (Phillips et al. 2016). Mentoring breakfasts were offered at Virginia Tech faculty in the College of Human Sciences and Education. Each breakfast had a theme and aimed to promote faculty career development, providing new faculty with access to information and connections across the college (Piercy et al. 2005).

Professional development can also include opportunities for faculty to learn more about how to manage the multiple demands on their time and the stress associated with their workload. A review of the literature suggests that women face more teaching demands (Bellas and Toutkoushian 1999; Winslow 2010), people of color are often asked and expected to have substantial commitments to service (Baez 2000; Griffin et al. 2013b; Padilla 1994; Tierney and Bensimon 1996), and women of color report significant time and emotional energy investments in both activities (Griffin et al. 2011a; Turner 2002b; Turner et al. 2011). Tools and communities of support created and offered by the National Center for Faculty Development and Diversity (NCFDD) provide guidance regarding time management, overcoming perfectionism, aligning time commitments with priorities, and semester planning to help spark faculty productivity, particularly in the face of many demands. Laursen and Austin (2014) also found that several ADVANCE IT institutions implemented successful workshops that offered faculty guidance and support as they find a balance between research, teaching, and service.

Simply telling women and men of color to say "no" more often can be unhelpful, ignoring personal commitments and investments in these activities (Baez 2000; Griffin 2013; Martinez et al. 2017; Reddick 2011), as well as the political implications associated with denying requests, and the volume of requests they receive (Winkler 2000). While institutions should intentionally arm women and men of color with skills and tools that help them navigate and decline services requests, given that they are more often asked to engage as compared to their white and/or male colleagues (O'Meara et al. 2017), institutional leaders must also take responsibility for being more equitable in their requests for faculty time. Tools like online

dashboards that track engagement in service can help faculty and administrators monitor the extent to which faculty are committed to and invested in activities beyond research, informing them about who may have more or less time to take on new responsibilities (O'Meara et al. 2017).

Advancement

Advancement focuses on the extent to which faculty have the tools, support, and information necessary to successfully navigate the administrative structures necessary to be considered for and successful in obtaining tenure and promotion at their institutions. In their research on institutions receiving ADVANCE IT grants, Laursen and Austin (2014) noted that tenure and advancement interventions could be categorized into two groups: educational and structural. Educational interventions were more often implemented and focused on ensuring that all individuals engaged in the review process were well informed about policies, procedures, and expectations. A lack of mentorship and connection to departmental networks can leave women and men of color without important information about the formal mechanisms associated with the tenure and promotion process. Many scholars desire guidance from campus administrators and mentors who understand the system (Thomas and Hollenshead 2001), and institutions both offered training for tenure and promotion committee members and instituted structured opportunities for mentoring and feedback to enhance the consistency of the information that candidates received (Laursen and Austin 2014). Further, clear guidelines and communication about expectations for tenure and advancement to both candidates and faculty reviewers leaves less room for biased interpretations of candidate's achievements and can encourage more positive outcomes for women and men of color (Laursen and Austin 2014; Settles et al. 2006).

In addition to addressing clarity and access to information, it is important to implement structural interventions, which aim to change the process and enhance the extent to which tenure and promotion processes are experienced as fair and equitable (Laursen and Austin 2014). For example, we encourage institutions to consider whether the requirements for advancement (promotion, tenure) are in alignment with institutional rhetoric about the importance of teaching and mentoring (O'Meara 2010; Rice et al. 2000), as well as the contributions women and men of color make to the academy. For example, when Virginia Tech developed a new faculty retention program, they incorporated a research component, conducting three focus groups with untenured faculty from underrepresented backgrounds to better understand their needs and concerns. In addition to wanting tenure and promotion policies to be clearer, faculty wanted these processes to consider and incorporate teaching and service contributions in more meaningful ways (Piercy et al. 2005). Some institutions have reformed their promotion and tenure criteria, adopting broader definitions of scholarship inclusive of teaching and community engagement (O'Meara 2010). O'Meara acknowledged that policy reforms are important, but such reforms also require widespread buy-in from faculty, given that the faculty ultimately implement policy through their service on tenure and promotion committees.

Satisfaction and Support

The final component of retention focuses on satisfaction and support, addressing the importance of a professor's quality of life, ability to develop meaningful relationships, and sense of inclusion in their likelihood of persisting. Faculty satisfaction has been widely studied, as scholars have aimed to establish a relationship between it and intentions to leave the academy (August and Waltman 2004). Across multiple studies, women and men of color reported lower levels of satisfaction with a variety of dimensions of faculty life, leaving them more vulnerable to departure (Bilimoria et al. 2008; Hesli and Lee 2013). This component encourages institutions to consider how to promote satisfaction by addressing and improving hostile or unwelcoming climates, creating and supporting opportunities to build community and connection, and supporting faculty as they manage their personal and professional lives and commitments.

Steps must also be taken to address climate challenges, focusing on the behaviors and biases of white and male faculty who often have more power (both formally and informally) in organizational hierarchies. Climate assessments can be a critical tool that helps uncover where problems and challenges are rooted (Hurtado et al. 2008; Whittaker et al. 2015); however, the findings must be translated into action and be used to develop interventions that promote inclusion and sense of belonging. Virginia Tech sponsored a faculty retention workshop targeting administrative leaders across campus, arming them with information about the challenges women and men of color face in the academy and providing an opportunity to generate ideas about how to address these issues (Piercy et al. 2005). While there is little research prescribing specific interventions to transform departmental climates, structured opportunities to engage with colleagues, intergroup dialogues, and implicit bias trainings may help facilitate more inclusive environments.

Settles et al. (2006) described welcoming climates as collaborative, respectful, and collegial, and call for department chairs to take active steps towards facilitating these environments. In their study of 19 ADVANCE IT grant recipients, Laursen and Austin (2014) identified four strategies or models capturing how institutions aimed to address departmental climate issues. Two involve providing support directly to departments, allowing them to determine their own problems and potential solutions. In the first case, grants were awarded to departments to address a climate-related issue, and in the second, departments developed comprehensive change plans with the support of external facilitators. The other two models relied on external intervention, with departmental change efforts being led or informed by ADVANCE leaders. In these cases, department heads and chairs participated in ADVANCE programming, providing them with professional development that would help them foster a more inclusive climate, or made receipt of resources contingent on participation in ADVANCE activities.

Access to support, both professionally and personally, is critical to navigating and surviving environments that are often hostile and marked by racism and sexism (Patitu and Hinton 2003; Turner et al. 1999). The ability to develop community with peers and colleagues who share a minoritized identity is also key to promoting

retention. Minoritized faculty seek connections with colleagues and peers, and when able, intentionally build supportive communities that promote their own persistence (Cole et al. 2017; Fries-Britt and Kelly 2005; Martinez et al. 2017; Piercy et al. 2005). Those who were able to find communities of support, particularly with other minoritized scholars, described the importance of these relationships, noting that the relationships affirmed their identities, created valuable space for building trust, and helped maintain faculty members' motivation (Fries-Britt and Kelly 2005; Fries-Britt and Snider 2015; Garrison-Wade et al. 2012; Griffin et al. 2011b; Jones and Osborne-Lampkin 2013; Kelly and Winkle-Wagner 2017; Patitu and Hinton 2003; Patton and Catching 2009). Thus, rather than hoping these encounters happen by chance, institutions can promote satisfaction and retention by providing structured opportunities for women and men of color to connect with colleagues outside of their departments and programs through the sponsorship of affinity groups, colloquia, networking receptions, and other events.

Further, being able to form academic communities can be a motivator, providing opportunities for both social support and collaboration (Ropers-Huilman 2000). For example, a study completed by two Black women reflecting on their own working and personal relationships highlighted the creativity, motivation, and clarity generated through scholarly collaboration (Fries-Britt and Kelly 2005). A research bootcamp for Black women created valuable opportunities for networking, connection, and exploration of possible collaborations (Jones and Osborne-Lampkin 2013). Additionally, Black faculty in one study described the importance of formal connections with ethnic studies programs or race-related research centers, explaining that these affiliations provided them not only with a scholarly home for their research, but also with access to supportive environments and affirming colleagues (Griffin et al. 2011b).

While peer support and guidance can offer great value, many studies have touted the importance of mentorship as a source of socioemotional support and recommended the implementation of formal or assigned mentors to mitigate the isolation women and men of color may experience. Formal mentoring programs for new hires can be particularly attractive to women and people of color, who may see these relationships as a way to partially escape the isolation of being the only or one of a few with a marginalized identity in their departments and programs (Phillips et al. 2016; Stanley 2006; Zambrana et al. 2015). Zambrana et al. (2015) and Stanley (2006) found that scholars of color had a mix of positive and negative mentoring experiences, and relationships that recognized and validated the identity of the mentee were more positive and affirming. Piercy et al. (2005) conducted three focus groups with untenured, minoritized faculty at Virginia Tech, and found that faculty wanted access to mentorship that was culturally responsive and supported their needs to form community.

Finally, satisfaction with academic work has been linked to the ability to attend to family responsibilities and engage in caregiving (August and Waltman 2004). An analysis of institutions receiving NSF ADVANCE institutional transformation grants revealed that multiple campuses institutionalized-family friendly policies as they

aimed to support women and increase faculty diversity. Specifically, they implemented family leave policies for parents and caregivers, tenure clock extensions for individuals who need to take family leave, and workload modifications that allow for better work-life integration (Bilimoria et al. 2008). Similarly, Laursen and Austin (2014) found that 19 ADVANCE IT grant recipients implemented a variety of family-friendly accommodations, including grants to support faculty during major life transitions, family leave, programs to support pregnant and nursing women, child care support, and broad communication about family-friendly policies and resources.

While institutions are increasingly implementing family-friendly policies, they must also create conditions that allow faculty to feel comfortable making use of the policies without experiencing professional repercussions (Lester 2015; Sallee et al. 2016). Finkel et al.' (1994) analysis of surveys from almost 1400 men and women employed at one research university suggests that there is wide support for many family-friendly policies, including both paid and extended unpaid leave for infant care, policies enabling faculty to return to work part-time after having a child, and stop-the-tenure-clock procedures. However, it is important to note that 70% of survey respondents thought that taking advantage of these kinds of policies would hurt them professionally, and women were more likely than men to say that this was the case. Thirty percent of women who gave birth took less leave than what they were allotted, and 40% of new mothers took no leave at all. Similarly, while there were leave policies in place at the large research university where Gardner (2012, 2013) interviewed eleven women for her study on institutional departure, the women felt that using these policies was not viewed favorably. Thus, in addition to making these options available, all faculty must have assurance that they can participate without negative repercussions, as well as visible models and examples of those who benefitted from these policies.

Multidimensional problems require holistic interventions. The persistent lack of faculty diversity and underrepresentation of women and men of color in the academy are rooted in the racism and sexism embedded in recruitment and hiring, how work is assessed and allocated, how resources and support are distributed, and the extent to which faculty are welcomed into academic communities and included in departmental networks. As outlined above, the Model accounts for how these barriers manifest across the academic journeys of women and men of color, offering strategies and suggestions for improving the rates at which minoritized faculty are recruited and retained at 4-year institutions. It is important to highlight and acknowledge that in addition to addressing the pathway into and through the academy in comprehensive ways, the structure of the interventions must align with the challenges presented. Strategies described above vary in their foci, addressing systemic organizational barriers, the behaviors and beliefs of institutional gatekeepers (e.g., senior faculty and administrators), and/or individual faculty members' needs. Thus, in addition to considering how to create comprehensive plans that address recruitment, transition, and retention, I also encourage institutional leaders and policymakers to diversify their strategies, developing institutional action plans that integrate policies and

practices that reflect their unique challenges at the institutional, departmental, and individual levels.

The Unique Contributions of Women and Men of Color Faculty

While institutions are increasingly recognizing the need to increase faculty diversity and considering how to engage in this work, our field less often reflects on why this work is important and what higher education stands to lose if we are unsuccessful in recruiting and retaining a more diverse faculty body. Public discourse has focused on the role that women and men of color play as mentors and role models for students, providing support that recognizes students' identities and reminds them that success in the academy is possible (Cole and Griffin 2013; Crisp et al. 2017; Guiffrida 2005; Patton 2009). However, the unique contributions women and men of color make to teaching, service, and particularly research, often go unrecognized and have less often been the focus of study (antonio 2002; Umbach 2006). In this section, I describe the unique contributions women and scholars of color make to higher education, highlighting their importance in fulfilling their institutions' missions and meeting teaching, learning, and community engagement goals.

Teaching and Facilitating Learning

While all faculty are required to teach courses, data suggest that women and men of color carry heavier teaching loads and make many meaningful contributions to teaching and learning in higher education. Multiple studies tracking faculty time suggest that professors who are women and/or people of color spend more time preparing for and engaging in the act of teaching and mentoring than their white and/or male colleagues, despite their rank or role on campus (Bellas and Toutkoushian 1999; Misra et al. 2012; O'Meara et al. 2017). Also, women and men of color are more heavily concentrated among instructors and lecturers than white men, consequently shouldering the majority of the instructional load on college and university campuses (Espinosa et al. 2019; Finkelstein et al. 2016). Thus, women and men of color are making critical contributions to institutions' ability to execute their educational missions and commitments to student learning, growth, and development.

In addition to teaching more, it appears women and men of color teach differently, engaging students in ways distinct from their white and male colleagues. Women and men of color are more likely to implement active, student-centered pedagogies (Eagan and Garvey 2015; Milem 2001; Umbach 2006). Umbach's (2006) analysis of the teaching practices of almost 14,000 faculty across 134 colleges suggested that women and men of color faculty uniquely contribute to undergraduate education through their pedagogy. Participants who identified as women or people of color more often reported implementing active and collaborative learning techniques and engaging in activities to bring about higher order thinking and facilitating efforts to make conceptual connections as compared to men and white faculty. Milem

(2001) similarly found that professors who identified as women, Native American, or Puerto Rican reported more significant engagement with active pedagogies in the classroom.

These pedagogical choices can translate to shifts in students' perspectives, biases, and expectations. Decades of research suggest that opportunities to engage with diversity and interact with individuals with identities different from one's own facilitates a broad range of learning outcomes, including skills and competencies critical to engaging in our increasingly diverse democracy (Hurtado et al. 2008). While scholarship on diversity and learning has largely addressed the manifestation of these benefits as a result of students engaging across difference (Engberg 2007; Gurin et al. 2002; Hurtado 2007), there may be similar benefits associated with taking classes from professors who are women or men of color given their commitments to facilitating engagement across difference and discussions about diversity, equity, and inclusion.

Turner (2002) suggests that "the more diverse college and university faculty are, the more likely it is that all students will be exposed to a wider range of scholarly perspectives and to ideas drawn from a variety of life experiences" (p. 2). This often translates into specific pedagogical practices and curricular choices that encourage student learning. Both women and people of color participating in the HERI faculty survey placed greater emphasis on supporting students' socioemotional development, highlighting the importance of students' moral, civic, and affective development as a result of their teaching than men and participants identifying as white (antonio 2002). Umbach (2006) found that women faculty and those who identify as Black, Latinx, or Native American were more likely to engage in diversity-related activities in the classroom, such as encouraging interactions across difference or developing assignments that include diverse perspectives. Milem (2001) similarly found that Black, Latinx, and Native American faculty were twice as likely to incorporate readings on race and ethnicity in their syllabi as compared to white faculty; women were twice as likely to incorporate these readings as compared to men. Chicana/o faculty that participated in Urrieta and Méndez Benavídez's (2007) qualitative study saw their teaching as an act of social justice, and described their commitment to providing students with curricular content that elevated students' critical thinking and consciousness.

Further, minoritized faculty not directly engaged in work or pedagogies intended to cultivate an appreciation for diversity or broader perspective may still have a notable impact on students' learning about diversity and inclusion. More women and men of color in the academy represent alternative viewpoints and research a wide range of topics; these factors can disrupt stereotypes and provide evidence to students that there are many ways to embody one's identity in the academy (Alger 1999; Alger and Carrasco 1997). For example, Alger (1999) noted that the presence of faculty of color in the classroom challenged white students' assumptions about the interests and abilities of people of color, irrespective of the topic of the class or if issues related to communities of color are directly engaged. Alger explained, "For example, a white student's stereotypical assumptions can be challenged effectively by exposure to an Asian-American art history professor who specializes in Western

Renaissance art, even if the class discussions do not address issues of race or ethnicity” (p. 194). Thus, exposure to faculty of color, regardless of the subject they teach, can contribute to the deconstruction of students’ stereotypes and biases.

Mentoring Students

Scholars have often noted that increasing the representation of women and men of color in the professoriate is especially important given that these faculty members can serve as role models and mentors for minoritized students and pre-tenured faculty. White women, men of color, and women of color are more often called upon to mentor and support students and junior colleagues (Griffin and Reddick 2011; Johnson 2016; Joseph and Hirshfield 2011; O’Meara et al. 2017). Scholarship focusing on undergraduate and graduate women (Chesler and Chesler 2002; Ong et al. 2011) and students of color (Cole and Griffin 2013; Griffin et al. 2010; Patton 2009) conclude that mentors can provide important academic and psychosocial support as students navigate challenging campus environments, particularly where they feel unwelcome or marginalized. Mentorship can have a similarly powerful impact on minoritized early career faculty, affirming their talent and facilitating a sense of belonging and connection to the academy (Chesler and Chesler 2002; Gibson 2004; Zambrana et al. 2015).

Faculty with privileged identities can and should offer similar forms of support to minoritized students, and the labor associated with mentorship must not fall to women and men of color alone (Brown II et al. 1999; Johnson and Smith 2016). However, the research does highlight the unique contribution women and men of color make through their support of students generally, and students of color in particular. Homophily, or the tendency for individuals to be most attracted and interested in working with those who share their identities and interests (McPherson et al. 2001) can drive early perceptions of potential fit in mentoring relationships, leading mentees to feel a closer connection to and assume better relational fit with those with whom they share salient identities (Baker et al. 2014). Students and early career scholars with minoritized identities often express a preference for and reach out to faculty mentors who share their identities, assuming they will be able to uniquely understand the challenges they face, offering unique socioemotional support that recognizes how identity can impact educational and work experiences (Alger and Carrasco 1997; Baker et al. 2014; Benitez et al. 2017; Blake-Beard et al. 2011; Brown II et al. 1999; Patton 2009; Reddick 2011).

Beyond mentorship and close relationships, there is some research that suggests that minoritized students are more likely to be retained and perform better when they have more opportunities to be exposed to minoritized professors in both formal and informal ways. Bettinger and Long (2005) found that women were more likely to take additional courses in an academic field when they had taken a course from a woman professor. Hagedorn et al. (2007) found that Latinx community college students in Los Angeles had higher rates of academic success on campuses with more Latinx faculty members, which the authors connected to the increased presence

of role models to foster students' sense of belonging and social integration into the campus community. Students who have professors who share their identity or who are also minoritized in the academy are less likely to feel isolated or experience stereotype threat (Benitez et al. 2017). Black college students participating in an experiment by Marx and Goff (2005) performed better on a verbal test when questions were administered by a Black proctor than a white proctor, whereas there was no difference in performance for white students based on the proctor's race. Further, those taking the verbal test with a Black proctor reported lower levels of activation of thoughts consistent with stereotype threat (e.g., "I worry that people's evaluations of me will be affected by my race; I worry that if I perform poorly on this test, the experimenter will attribute my poor performance to my race") (Marx and Goff 2005, p. 649).

antonio (2002) argued that faculty of color appear to endorse norms and engage in behaviors that run counter to those most often celebrated in the academy, prioritizing commitments to service and community outreach. The motivations and decision-making process behind engagement in these activities are complex. It is important to recognize that these patterns of behavior are often chosen intentionally (Baez 2000), and may connect to the reasons many women and men of color pursue academic careers in the first place. Multiple studies reveal that women and men of color often enter the academy with larger commitments to "lifting as they climb" and giving back to communities that supported their success.

According to antonio's (2002) analysis of over 20,000 individuals participating in the HERI Faculty Survey, faculty identifying as women or people of color were more likely to report that they chose academia to change society. Similarly, a qualitative study of early career biomedical scientists and their career decision making revealed that women and underrepresented minority scientists interested in faculty roles voiced the value of and commitment to working in ways that diversify science and expand access for students underrepresented in the field (Gibbs Jr and Griffin 2013). Martinez et al.'s (2017) qualitative study of faculty of color underscored their commitment to service, as the professors saw it as a way to engage in and uplift their communities. Black professors participating in Griffin's (2013) and Reddick's (2011) qualitative studies described not only a generally high investment in student contact, but also a closeness and commitment to working with Black students based on their commitments to success in the larger Black community.

Research and Discovery

Perhaps least acknowledged are the contributions women and men of color who are faculty make in terms of research and discovery. Scholars have more often documented barriers and challenges resulting in women and men of color's lower and slower rates of productivity, particularly when measuring more traditional forms of scholarship (e.g., peer-reviewed journal articles, large grant-funded research projects) (antonio 2002; Bellas and Toutkoushian 1999; Eagan and Garvey 2015; Misra et al. 2012). These findings should not lead to the assumption that research is less

important to these faculty. In fact, women and professors of color continuously communicate strong commitments to research and making scholarly contributions to their respective fields. For example, Antonio's (2002) analysis of data from the Higher Education Research Institute (HERI) suggests that although they are less productive in terms of peer-reviewed publications, faculty of color spend more time than their white colleagues on research and writing and are more likely to report that research was important in their choice to pursue an academic career.

While often critiqued and perceived as outside of the "mainstream," women and men of color have often been innovators, introducing research, and in some cases creating whole new fields of study, centering marginalized populations that are often overlooked and ignored. One study found that, while approximately one in five faculty does research on race and ethnicity, over 60% of Black and Latinx faculty conduct research on these topics (Milem 2001), meaning they are making the majority of contributions to our understandings of racially and ethnically minoritized communities.

Women and men of color also have introduced new theoretical frameworks and methodologies to their respective fields, changing how research is done. A qualitative study of 34 women revealed that women scholars were often subversive as they engaged in the act of research and writing, challenging traditional paradigms and innovating in terms of how their respective fields think about knowledge (Gonzales 2018). Many of the women in the study made contributions to research that extended beyond the norms of their traditional disciplines, centered and made contributions to practice, or intentionally centered and allowed their identities to guide their research process. Scholars of color are responsible for the development and application of widely used frameworks like Critical Race Theory, Community Cultural Wealth, and Funds of Knowledge. Women of color generally, and Black women in particular, have made notable contributions in this regard. For example, Black women faculty were pioneers in the development and evolution of intersectionality and Black Feminist Thought (Collins 2015). Zinn and Zambrana (2019) wrote about the often-ignored contributions Chicanas have made and continue to make to feminist and intersectional theory and research, highlighting the contributions this work has made to understandings of identity-based inequality, particularly in the labor market and in education.

Finally, given their commitments to community engagement and uplift, women and scholars of color may be more likely to prioritize knowledge translation, or efforts to promote the use of research findings to address public needs and concerns (Baines 2016). Organizations in the US and abroad note the importance of engaging in knowledge transfer, not only for the advancement of social justice and the public good, but also to serve as a "return on the investment of public funds" (Baines 2016, p. 77) in academic research. Multiple studies suggest women and people of color value and are invested in research that addresses persistent social justice issues and partners with communities to promote uplift (Gibbs Jr and Griffin 2013; Urrieta and Méndez Benavidez 2007). For example, 12 Chicana/o faculty described their commitments to community engagement and uplift through their research in Urrieta and Méndez Benavidez's (2007) qualitative study. Participants saw their research as an

extension of their larger commitment to social justice and prioritized generating knowledge that had the power to transform their communities. Similarly, faculty of color in Martinez et al.'s (2017) study explained the importance they placed on engaging in research that met pressing social needs, seeing it as a way to maintain their connections to their identities and communities beyond the academy. Ro pers-Huilman (2000) analyzed narratives from women faculty and found that women benefitted greatly from opportunities to do research that would contribute to social change and prioritized their work's impact over the number of manuscripts they were able to publish.

While there continues to be a commitment to discovery of knowledge for knowledge's sake, there is an increasing emphasis on generating research that addresses persistent problems and serves the public good. Funding agencies have increasingly required researchers to articulate how their work will support broader societal goals and the funding organization's mission. For example, grant proposals for the National Science Foundation (NSF) must outline the "broader impacts" of the work, speaking to how the proposed research will advance the public good by addressing societal problems, expanding the public's science knowledge, broadening participation in the science enterprise, or promoting opportunities to learn (March n.d.). Given that women and men of color have long expressed commitments to and engaged in this kind of work, amplifying these contributions not only promotes the larger contributions the academy makes to society, but also highlights how minoritized faculty facilitate social change beyond academe.

Conclusion

The demands of students have pushed many institutions into the national spotlight, and institutional leaders at campuses across the country have increasingly acknowledged the need to address the persistent underrepresentation of women and men of color on their faculties. While there has been much energy and attention focused on calls for increased faculty diversity since the Missouri student protests of 2015 cascaded to other campuses, Patton Davis (2015) reminds us that students' frustrations regarding a lack of faculty diversity and demands for change are not new. On the contrary, Black students in particular have been protesting the racism and marginalization they experience on college and university campuses for several decades and have been demanding increases in the number of faculty of color generally, and Black faculty specifically, since the 1960s. Given the many ways in which women and men of color add to the quality of teaching and learning, contribute invigorating new lines of research, and provide a unique form of mentoring and student support, I add my voice to the many others demanding that we reform how we, as individual institutions and more broadly as a field, think about and engage in actions that promote equity in the academy and increase the representation of women and men of color in the faculty.

The consistency in student demands is likely a reflection of a lack of change not only in the demographics of the professoriate, but also how often women and men of

color experience racism and sexism as they seek entry into and success within the academy. Despite growth in the number of women and men of color completing doctoral degrees, institutional leaders and search committees continue to argue that a lack of diversity in the pool of talented minoritized candidates limits their ability to make meaningful progress towards faculty diversity goals. Search committees too often rely on insular, white, male networks to identify candidates and “traditional” criteria that minimize the innovative contributions women and men of color make to teaching and research. There has also been consistency on how institutions have approached efforts to address the underrepresentation of women and men of color in the academy. For decades, institutions have followed diversity-centered approaches, emphasizing a lack of competitive minoritized candidates and attributing the disparities to the shortcomings of women and men of color. Campuses have inconsistently engaged in efforts to increase representation, and when they have developed plans, they often focus on trainings and programs that increase the number of women and men of color PhD candidates and hires, growing the “pipeline.” However, institutions have less often taken an equity-focused perspective, developing holistic interventions and strategies that address how institutions themselves perpetuate disparities by sustaining inhospitable climates, supporting policies that reify traditional notions of merit and productivity, and minimizing the contributions women and men of color make to the academy.

There is no shortage of equity-based literature, focused on how institutions present barriers, limit access to resources, and perpetuate unequal systems that maintain the lack of representation of women and men of color, particularly at the highest ranks of the academy. Over the past four decades, scholars have generated an impressive body of research documenting the exclusion and oppression women and men of color experience as they teach, learn, and work on college and university campuses. The themes emerging from the literature are strong and consistent. In many ways, the results of research conducted in the 1990s are, again, quite similar to the findings of studies published in recent years. The data are clear: women and men of color faculty face environments marked by racism and sexism, where they are made to feel unwelcome. Students and colleagues alike are less likely to treat them with respect, and they are excluded from departmental networks. Their research, particularly if focused on marginalized and minoritized communities, is viewed as suspect and superficial, and their teaching is judged more harshly. Their workloads are different from those of their white and male colleagues; women tend to carry heavier teaching loads and people of color are more extensively engaged in service. Women, and mothers of small children in particular, continue to juggle commitments to their families with professional expectations, and are skeptical that their work will be judged fairly if they take advantage of work-life balance policies that provide access to parental leave or stop their tenure and promotion clock.

These scripts and patterns must change in comprehensive ways to see progress in the diversity of the professoriate. If they do not, the next decade will bring more protests and lists demanding change and increased institutional action. Institutions will continue to miss the valuable contributions that minoritized faculty make to teaching and research. Researchers can play a big part in facilitating this shift,

contributing to a body of literature that supports institutional action and organizational change. As the next generation of researchers aims to contribute to efforts to increase faculty diversity, there are several areas that warrant additional attention.

First, there are ways that researchers can contribute to our understanding of the problems that perpetuate a lack of faculty diversity and hinder efforts to promote inclusion. Attention has been increasingly focused on graduate students' and post-doctoral scholars' career development, documenting how they learn about various careers and the experiences that shape their professional aspirations. While there appear to be general decreases in interest in faculty careers, research suggests that women and men of color may be particularly unlikely to express interest in this career path. Scholars have started to focus on uncovering why this is the case, and more work must address how racism and sexism manifest in students' training and translate to a lack of interest in faculty careers.

A more nuanced understanding of the problem also requires research that acknowledges how different racial and ethnic subgroups experience racism and marginalization. A substantial amount of research has been done on faculty of color in the aggregate, with increasing focus on women of color and their unique experiences. Black faculty have also been the subject of many studies. However, there is less work that identifies the unique challenges of Latinx, Asian American, Multiracial, and particularly Native American scholars. There is also limited research that unpacks how racism manifests differently across these groups, translating to different experiences, degrees of inclusion and exclusion, satisfaction, and productivity in the academy. Research must address unique experiences of these populations, exploring how racism and identity-based oppression manifest differently outside of the Black-white racial binary.

Further, there has been an increase in intersectional research, with more scholars publishing studies specifically focusing on the experiences and outcomes of women of color. However, research focusing on women rarely had a sample that was racially or ethnically diverse, and more often captured the experiences of white women, without explicitly saying so. A somewhat different challenge manifests in the literature on faculty of color. While there are notable exceptions, studies focused on the experiences of racially and ethnically minoritized faculty less often interrogate gender differences or speak to distinctions in how men and women of color experience oppression and marginalization. Future research would be strengthened by more directly taking up the nuance in faculty encounters with institutional barriers based on their multiple intersecting identities and exposure to various forms of identity-based oppression. Researchers studying women must recruit more racially and ethnically diverse samples and more directly engage how sexism *and* racism shape the lives of faculty and the extent to which they can make use of family-friendly policies, how teaching loads are allocated, and the time and emotional labor they invest in service. Researchers that aim to speak generally to the barriers and marginalization experienced by racially and ethnically minoritized faculty can and should add another layer of analyses to their data, determining whether and how phenomena look different when comparing the experiences of men and women.

Using a diverse array of methodological tools to understand the experiences and outcomes of women and men of color in the academy also will propel our efforts to increase faculty diversity. Much of the recent work on women and men of color in the academy is based on qualitative research, which provides important and rich insights into their experiences and perspectives on academic work and life. This research can and should be the foundation for the development of new measures and surveys that allow researchers to test theories and better understand how workload, stress, marginalization, and satisfaction vary across institutions and departmental contexts. While there are notable exceptions, our field continues to generate and rely on conclusions about satisfaction and faculty worklife based on quantitative data collected in the mid and late 1990s, specifically the National Study of Postsecondary Faculty. While it is likely that disparities in satisfaction, salary, and workload persist, it is important to understand whether and how these dynamics have changed in the past 15 years. The last cycle of NSOPF data were collected in 2004, and it would benefit our understanding of faculty life and work greatly if national agencies and organizations would work collaboratively to sponsor another administration of the NSOPF or similar data collection strategy in the near future.

Finally, and perhaps most importantly, there needs to be more research identifying the individual and collective strategies that work most effectively to promote faculty diversity. While there is some knowledge about hiring practices, less is known about institutions that have successfully generated diverse pools of candidates or have yielded the candidates that have received offers. There is little research that clarifies the necessary conditions underlying programs that promote a faculty member's transition into an institution. Mentorship is often recommended to offer professional and social support to women and men of color in the academy, but more work must examine the conditions under which departments undergo cultural change and improve their climates, the process and impact when institutions change their tenure and promotion policies to be more inclusive, and how campuses can build communities of support that sustain minoritized scholars.

This is a critical, catalytic moment to be seized. Multiple conditions are present that can facilitate institutional transformation and meaningful changes in the diversity of the next generation of the professoriate. Students, campus presidents, and national organizations are invested. There are more women and men of color pursuing and attaining PhDs than ever before. Careful attention to research that illuminates the ways sexism and racism shape the experiences and outcomes of minoritized faculty can guide a suite of holistic interventions that aim to promote successful recruitment to, transitions to, and retention within 4-year colleges and universities. The Institutional Model for Increasing Faculty Diversity offers institutions a guide in this process, as well as meaningful direction as they assess their strengths and weaknesses and develop comprehensive plans to address them. Intentional, strategic investments of time, effort, and resources can have transformative power, and it is my hope that action now will create better contexts for working, living, and learning, where women and men of color thrive in years to come.

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The Ambivalence About Distance Learning in Higher Education

7

Challenges, Opportunities, and Policy Implications

Di Xu and Ying Xu

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Abstract

In the past two decades, one of the most important trends in the US higher education system has been the steady increase in distance education through online courses. College administrators have expressed strong support for online education, signaling that the current online expansion will likely continue. While the supply and demand for online higher education is rapidly expanding, questions remain regarding its potential impact on increasing access, reducing costs, and improving student outcomes. Does online education enhance access to higher education among students who would not otherwise enroll in college? Can online courses create savings for students by reducing funding constraints on postsecondary institutions? Will technological innovations improve the quality of online education? This chapter provides a comprehensive review of existing research on online learning's impact on access, cost, and student performance in higher education. Our review suggests that online education has the potential to expand access to college, especially among adult learners with multiple responsibilities. Yet, the online delivery format imposes additional challenges to effective instruction and learning. Indeed, existing studies on college courses typically find negative effects of online delivery on course outcomes and the online performance decrement is particularly large among academically less-prepared students. As a result, online courses without strong support to students may exacerbate educational inequities. We discuss a handful of practices that could better support students in online courses, including strategic course offering, student counseling, interpersonal interaction, warning and monitoring, and the professional development of faculty. Yet, college administrative data suggests that high-quality online courses with high degrees of instructor interaction and student support cost more to develop and administer than do face-to-face courses.

Keywords

Online learning · Access to higher education · Degree-granting institutions · Cost · Quality · “50 percent rule” · Funding for online education · Reasons for taking online courses · Characteristics of online course takers · Supply of online courses and programs · Demand for online coursework · Exclusive online degree programs · Student learning outcomes · Challenges to effective online learning · Community colleges · Heterogeneous impact of online learning by student characteristics · Design features of online courses · Strategies to improve online education

Introduction

Distance learning generally refers to education that is delivered to students in remote locations. It includes a wide variety of learning environments that are different from the traditional brick-and-mortar classroom setting, such as telecommunication courses (in which instruction is delivered on videotape or through cable distribution to students studying at home), correspondence study (where the instructor mails or

emails lessons to students who work independently), and online courses (in which course content is delivered via the internet, sometimes through modules or websites). However, with the advancement in technology, online course has become the primary format of distance education at postsecondary institutions nowadays.¹

The growth of distance education was once intentionally constrained by the “50 percent rule” of the Higher Education Act (HEA) of 1992.² This rule denied federal funding for institutions with predominantly or exclusively distance education programs. Specifically, the rule dictated that institutions that offered more than 50% of their courses through distance education or enrolled more than half of their students in distance education courses would not be eligible for federal student aid programs such as Pell Grants, subsidized loans, and work-study funding. Since the 50 percent rule applied to institutions instead of programs, an education program could be composed entirely of traditional face-to-face courses and still lose its eligibility to Title IV if it is offered at an institution that ran afoul of the 50 percent rule.

While institutions and students were subject to the 50 percent rule when offering and enrolling in distance education, the rule particularly affected nontraditional students who often need to balance coursework with other job and family commitments, and therefore may benefit substantially from the flexibility of distance learning. The rule also substantially constrained the growth of for-profit institutions, which had originally pioneered distance learning to allow individuals to pursue further forms of education (Deming et al. 2012). Since the for-profit sector disproportionately serves adult learners, women, underrepresented racial minority students, and low-income students (Deming et al. 2012), educational opportunities for the most disadvantaged populations were substantially compromised due to the 50 percent rule.

To promote new advances in distance education and to address the increasing demand for it, the HEA was amended in 1998 to create the Distance Education Demonstration Program (DEDP), which granted waivers to colleges from the 50 percent rule. The DEDP-granted waivers grew from 15 institutions or university systems in 1999 to 24 in 2003, and the number of offsite students enrolled in distance learning programs more than doubled during the same period (Domestic Social Policy Division 2005). In 2006, the HEA was amended again to discontinue the 50 percent rule. The discontinuation of the 50 percent rule, together with other trends, such as the rapid advancement of technology, increasing demand for higher education, and growing population of nontraditional students, has spurred the growth of dedicated online institutions (U.S. Department of Education 2006). The share of bachelor’s degrees awarded by institutions that offered exclusively online courses grew from 0.5% in 2000 to over 6% in 2012 (Deming et al. 2015).

At the state level, funding for online education programs and students enrolled in online classes varies. In 2015, Education Commission of the States, through its State Financial Aid Redesign project, analyzed statutes and regulations for the largest 100 state financial aid programs across the country (Education Commission of the States 2015). The report indicates that all states, except for Pennsylvania, had eliminated the

¹In this chapter, we will use “online course,” and “online learning” interchangeably to refer to semester-length college courses where more than 80% of the course content is delivered online.

²Higher Education Amendments of 1992, Pub. L. No. 102–325.

50 percent rule from state-level policies. Several states have also explicitly promoted the growth of online education in their state budgets. In 2018, for example, California committed \$100 million to create an online community college that will offer certificate and credentialing programs to primarily serve workers in need of new skills. The California state budget further committed another \$20 million to expanding existing online offerings in the current brick-and mortar campuses (SB-840 2018).

The strong support for online education is also explicitly stated by college administrators in their long-term strategic plan, indicating that the current online expansion is likely to continue. For example, based on a national survey of college administrators in all degree-granting institutions of higher education, Allen and Seaman (2016) found that in the academic year of 2015, almost half of all postsecondary institutions have included expanding online learning as a critical component in their formal strategic plan, and almost two thirds of the institutions believed that development of online courses is critical for their long-term strategy.

While online enrollment has been increasing rapidly at postsecondary institutions, questions remain regarding its impact on access to college, costs, and student outcomes. Can the advancement of technology bend the cost curve for postsecondary institutions and students? Does online education enhance access to higher education among students who would not otherwise be enrolled in college or have to take fewer courses without online learning? Does online course offering and enrollment vary across state, and by school sector and selectivity? How does the expansion of online learning affect student learning outcomes? What are some potential strategies to better support students in college online courses? This chapter reviews existing research on these important topics and discusses the benefits and challenges associated with online learning in higher education.

The rest of the chapter includes six sections and will begin with a general overview of the demand and supply of online courses in higher education and the characteristics of students taking online courses and online programs. Section “[The Cost of Online Education](#)” reviews existing evidence on the costs associated with developing online courses, compared with face-to-face courses. Section “[Online Education and Student Outcomes](#)” summarizes key findings from existing studies on the impacts of online learning on student learning outcomes, with a focus on studies using experimental or quasi-experimental research design that would deliver a causal interpretation. Section “[What Explains Online Performance Decrement?](#)” discusses the challenges typically faced by students in online learning. Section “[Strategies to Improve Online Education](#)” examines potential strategies to improve the effectiveness of online learning, and the final section concludes the chapter.

Expanding Access: How Many Students Take Online Courses and Why?

Why Do Students Take Online Courses?

The literature on online learning identifies two primary reasons that students take online courses. First, the online delivery format provides greater flexibility and convenience (e.g., CCCCCO 2017; Daymont et al. 2011; Hirschheim 2005; Jaggars

2014), especially for students who have other work and family commitments (Aslanian and Clinefelter 2012; Hannay and Newvine 2006). The California Community College Chancellor's Office conducted a distance education survey among all students who completed a distance education course in the fall term of 2016 (CCCCO 2017). The survey asked distance education students to rank the importance of 16 reasons why they enrolled in a distance course.³ Among the 6,625 survey respondents (a 9% response rate), the number one reason was convenience with their work schedule (74% of the respondents rated it as important or very important).

Second, individual student preferences about the course delivery drive enrollment in online education. Based on interviews with online course takers at two community colleges in Virginia, Jaggars (2014) found that students who prefer working independently and at their own pace are more likely to choose online courses. In a similar vein, almost 60% of the California Community Colleges Chancellor's Office (CCCCO) student survey respondents were enrolled in distance courses because they "enjoy learning on a computer" (CCCCO 2017, p. 32).

Jaggars (2014) also found that students make conscious decision on a course-by-course basis based on three factors specific to a course: (i) suitability of the subject areas to the online context; (ii) difficulty of the course; and (iii) importance of the course. In general, the interviewed students seemed to have an implicit understanding that they would not learn the course materials as well when they took a course online rather than face-to-face. As a result, students were only comfortable taking online courses when the course is easy (where "easy" was typically used to refer to humanities courses whereas "difficult" to math and science courses), is less important to their academic career (such as courses not in their academic major), and is in subject areas which they have less interest in. A number of students directly pointed out that they would only take a course online when they felt competent to "teach themselves" strictly from a textbook or other readings, with little or no explicit instruction. In contrast, students explicated the need for the immediate question-and-answer context of a face-to-face course in a subject where they would need stronger instructor guidance. These findings suggest that many online courses implemented at community colleges, at least as currently practiced, may not support student learning as effectively as traditional face-to-face classes and therefore need systematic efforts from both the institution and the course instructors to better facilitate teaching and learning in the online environment.

³It should be noted that since the survey did not ask students the motivation for choosing a particular delivery format, some of the top rated reasons are general motivation for course enrollment. More specifically, the top seven reasons students took a distance education course were: (i) the course was convenient with my work schedule; (ii) the course met requirements for the associate degree; (iii) the course met requirements for transfer to a 4-year college or university; (iv) the course would improve my job skill; (v) I had a personal interest in the subject; (vi) I had success with a previous distance education course; and (vii) I enjoy learning on a computer.

Characteristics of Online Students

Due to the flexibility of online learning, online course may be particularly appealing to students who assume working and family responsibilities and would otherwise have to take fewer courses or not enroll in college at all. Indeed, based on the 2015–2016 National Postsecondary Student Aid Study (NPSAS) that surveyed approximately 113,000 postsecondary students (89,000 undergraduate and 24,000 graduate students), our calculation suggests that 46% of undergraduate students and 45% of graduate students took at least one course that was taught exclusively online in the 2015–2016 school year. These students differed from other postsecondary students in a number of ways. Compared with students who did not take any online courses in the 2015–2016 school year, online course takers were older (28-year-old versus 25-year-old), more likely to be married (24% versus 13%),⁴ more likely to be employed full time (36% versus 20%) and had higher average income.

These patterns are also echoed in several studies using college administrative data. For example, based on data from California's Community College System, Johnson and Mejia (2014) found that students aged 25 or older are much more likely than younger students to take online courses. Specifically, 15.4% of older students take online courses as compared to 8.5% of their traditional college-aged peers (aged 18–25 years). Additionally, this report also reveals a racial and ethnic difference in online enrollment, with Latino students having a substantially lower online enrollment rate than the White, African American, or Asian students. This disparity may partially reflect the broadband internet access divide, as research suggests that Latinos are typically less likely to have internet access at home (Baldassare et al. 2013). Given the flexibility of online learning as the most important consideration cited by students for enrolling in online courses and the demographic characteristics of the online course takers, it may seem self-evident that online courses provide an avenue to pursue higher education for individuals who otherwise would not enroll. However, there is surprisingly little causal evidence on whether the availability of online learning opportunities indeed increase access to higher education, especially for disadvantaged or underrepresented student groups.

The only quasi-experimental evidence in this regard came from a recent study that utilizes data from a new Online Master of Science in Computer Science (OMSCS) offered by the Georgia Institute of Technology (Goodman et al. 2019), in which all courses are delivered exclusively online. The researchers found a significant difference in the age of students applying for the online program and its in-person equivalent. Specifically, the average in-person applicant is 24-year-old student recently out of college, whereas the average online applicant is 34-year-old mid-career worker. A survey with OMSCS applicants in 2014 also revealed that geographic and temporal flexibility is the primary appeal of online education to those whose jobs, families, or residential situations do not allow for enrollment in traditional programs. Eighty percent of those admitted to the online program accept those

⁴Individuals who were separated are counted as married; those who were divorced were counted as single.

offers and enroll, suggesting that the online program expanded access to education for mid-career or older populations who would not otherwise enroll. Based on a regression discontinuity approach,⁵ the researchers find that access to this online option substantially increased overall enrollment by about 20 percentage points, and such effects are fairly consistent across different demographic subgroups, such as by gender, ethnicity, age, or citizenship. Importantly, among applicants who fell right below the cutoff score and were therefore not admitted into the online program, very few enrolled in other non-OMSCS programs, providing support to the claim that the online option indeed increases access to higher education.

Supply and Demand of Online Education

With the added convenience of online classes and their potential ability to expand access to higher education, the supply of and demand for online courses has increased throughout the last decade. That is, more colleges are now offering online courses than ever before (more *supply*) and more students are now enrolling in those courses (more *demand*) than ever before. How large is this increase? The Department of Education's Integrated Postsecondary Education Data System (IPEDS) provides comprehensive national statistics on postsecondary education, and since 2012, IPEDS has reported data regarding online education offerings and enrollment for degree-seeking students. IPEDS defines online education as a credit-bearing course or program in which the instructional content is delivered exclusively online. Therefore, hybrid courses that include traditional face-to-face time do not count as online course per IPEDS's definition.⁶ Below, IPEDS data from the 2016–2017 school year is used to show the overall increase in supply of online education courses, along with the increase in demand for those courses by students. The data represents more than 7,000 postsecondary institutions across the USA, among which almost 5,000 are degree-granting institutions. IPEDS defines online education as a credit-bearing course or program in which the instructional content is delivered exclusively online.

⁵Specifically, the researchers exploited an arbitrary undergraduate GPA cutoff of 3.26 for admission into the online program that is unknown to applicants, and employed a regression discontinuity design to examine the extent to which the quasi-random variation in admission among applicants just above and below that threshold lead to differential higher education enrollment outcomes based on the national student clearinghouse data.

⁶It should be noted that the IPEDS uses a relatively more strict definition of online course compared with other national surveys. For example, Babson Survey Research Group and the Instructional Technology Council (ITC) define online courses as those in which at least 80% of instruction is delivered online (Miller et al. 2017). Despite the disparity in definition, however, the trends and descriptive statistics regarding the growth of online courses are fairly consistent across these reports. This is probably due to the fact that fully online course has been dominating online education at the higher education sector and a relatively small proportion of courses are provided through a hybrid format (Streich 2014; Xu and Jaggars 2011).

The Supply Side: Increases in Online Courses and Programs

In the 2016–2017 academic year, approximately 3,500, or 76%, of all degree-granting institutions reported to offer online courses. This number has increased steadily since 2012, when 70% of those institutions reported to offer online courses. Among institutions that offered any online course, almost all of them offered online courses at the undergraduate level, whereas only half offered online courses at the graduate level. While online courses provide flexibility to students in general, programs offered *entirely* online allow students to attain a higher education credential remotely and thus have the potential to expand access to higher education among individuals who do not live near a physical college campus, such as those serving in the army. According to IPEDS, more than half of degree-granting institutions offered at least one exclusively online program in the 2016–2017 academic year.

Figure 1 shows the percentage of degree-granting postsecondary institutions that offer any online course and at least one exclusively online program, broken out by sector (public, private nonprofit, and private) and level (2-year versus 4-year). Online learning is most prevalent in the public sector, where more than 95% of public institutions offered at least one course online in 2016 and more than two thirds of the institutions offered at least one program that can be pursued exclusively online. Online course and exclusive online program are less prevalent in both the private nonprofit sector and the for-profit sector, especially at two-year institutions.

Comparing data between 2012 and 2016 also reveals noticeable increases in the availability of exclusively online programs at both 2-year and 4-year institutions in all three sectors. Among 2-year public institutions, for example, only 415 (44%) institutions offered an exclusive online program in 2012. By 2016, this number increased to 610, or 68%, of all degree-granting 2-year public institutions. The only exception are for-profit 2-year institutions, where only 15% of these institutions offered exclusively online programs in both 2012 and 2016.⁷

Figure 2 further takes into account the selectivity of an institution and displays online course and program offering by sector among institutions with similar levels of selectivity. The selectivity measure is created by IPEDS based on several admission-related factors, such as college admission test scores, the number of applicants, and the number of students admitted (Cunningham 2005). In general, more selective institutions have lower acceptance rates and tend to admit students with higher average entrance test scores (such as the SAT or ACT), suggesting that they predominantly admit the most academically qualified students.

While online education offering is most prevalent among public institutions across board, the gap in online course and program offering is particularly pronounced among the most selective institutions: during the academic year of 2016–2017, 91% of more selective public institutions offered at least one online

⁷It is worth noting that some universities have multiple campuses. Each campus is treated as an independent institution in IPEDS with unique institution ID, selectivity, and program and enrollment information. Taking DeVry University as an example, all campuses offer at least one online course and nine campuses offer at least one exclusively online program.

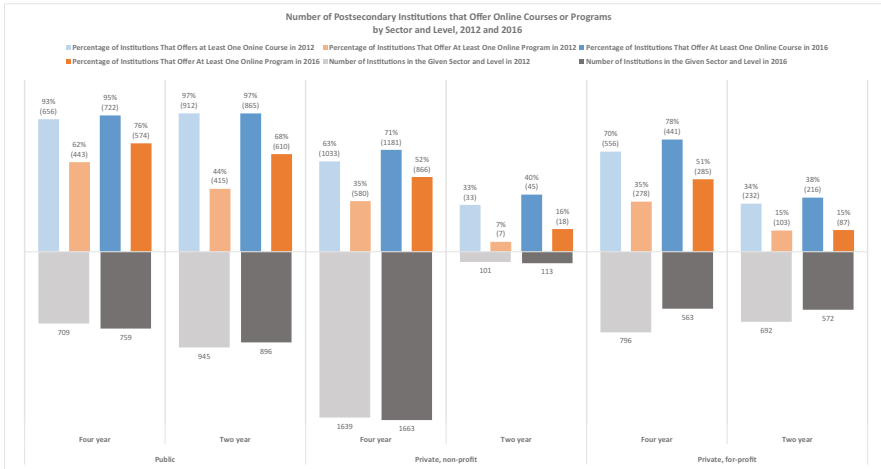


Fig. 1 Percent of postsecondary institutions that offer online courses or programs in 2012 and 2016 by sector and level. **Note.** The numbers reported in the figure are calculated based on data from active degree-granting institutions with valid enrollment data in each year ($n = 4,566$ in 2016; $n = 4,882$ in 2012). The numbers in parentheses represent the total number of institutions in a specific category. (Source: National Center for Education Statistics, Integrated Postsecondary Education Data System. 2012 and 2016. <https://nces.ed.gov/ipeds/use-the-data>)

course compared to 63% of more selective private nonprofit institutions; similarly, whereas 76% of the more selective public institutions offered exclusively online programs, only 41% of the more selective nonprofit private institutions did so.

IPEDS further divides exclusively online programs by Classification of Instructional Programs (CIP) code, thus enabling a more detailed examination of fully online programs by academic subject areas. Figure 3a presents the total number of education programs that can be pursued completely online at degree-granting institutions in each field of study. Due to both variations in demand and the suitability of the online format in delivering the course content, the supply of fully online programs shows substantial variations across subject areas. Business and marketing top the list, where 7,437 programs can be pursued exclusively online and represent one quarter of all programs in this area, followed by health (4,783 programs) and education (3,443 programs). To examine the possibility that the availability of fully online programs in each field may vary by the type of credential, we further break down the distribution of programs for AA and BA (3b), for graduate degree (3c), and for certificates (3d), respectively. It seems that business, health, and education are among the top three programs for all three types of credentials, with one exception: there are relatively fewer AA and BA programs in the field of education that can be fully pursued online (569 programs, representing only 6% of all AA and BA programs in education).

Finally, Fig. 4 shows the distribution of programs by sector and selectivity of institutions for the top five fields with the largest number of exclusively online

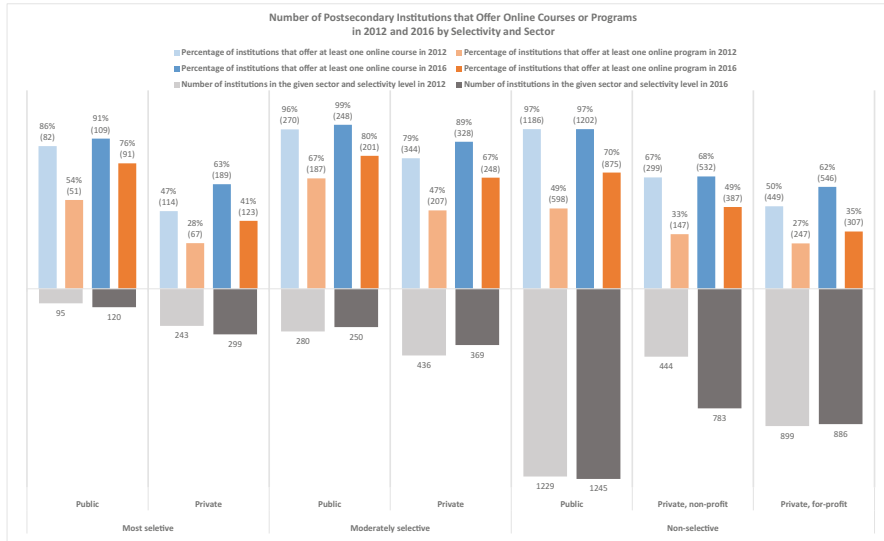


Fig. 2 Percent of postsecondary institutions that offer online courses or programs in 2012 and 2016 by selectivity and sector. **Note.** These numbers are calculated based on active degree-granting institutions with valid enrollment data and with valid selectivity score in a given year. The sample includes 3,952 institutions in 2016 and 3,626 institutions in 2012. Selectivity is derived from the Carnegie Classification of Institutions of Higher Education (variable “C15UGPRF” in the IPEDS 2016 and variable “CCUGPROF” in the IPEDS 2012 database, respectively). Based on the 15 subcategories: (1) 2-year, higher part-time, (2) 2-year, mixed part/full-time, (3) 2-year, medium full-time, (4) 2-year, higher full-time, (5) 4-year, higher part-time, (6) 4-year, medium full-time, inclusive, lower transfer-in, (7) 4-year, medium full-time, inclusive, higher transfer-in, (8) 4-year, medium full-time, selective, lower transfer-in, (9) 4-year, medium full-time, selective, higher transfer-in, (10) 4-year, full-time, inclusive, lower transfer-in, (11) 4-year, full-time, inclusive, higher transfer-in, (12) 4-year, full-time, selective, lower transfer-in, (13) 4-year, full-time, selective, higher transfer-in, (14) 4-year, full-time, more selective, lower transfer-in, and (15) 4-year, full-time, more selective, higher transfer-in, we coded all institutions into three selectivity levels: (i) nonselective, (ii) moderately selective, and (iii) most selective. (Source: IPEDS 2012 and 2016 <https://nces.ed.gov/ipeds/use-the-data>)

programs.⁸ Two interesting patterns emerge from the findings. First, except for the field of education, fully online programs are overwhelmingly offered by non-selective public and private for-profit institutions. In particular, three quarters of exclusively online computer science programs were offered by institutions from these two categories. Second, a relatively small percentage of exclusively online

⁸The five largest programs are (1) Business, Management, Marketing, and Related Support Services; (2) Health Professions and Related Programs; (3) Education; (4) Computer and Information Sciences and Support Services; and (5) Homeland Security, Law Enforcement, Firefighting, and Related Protective Service. We combined “most selective” with “moderately selective” into one category (as opposed to “nonselective”) in Fig. 4.

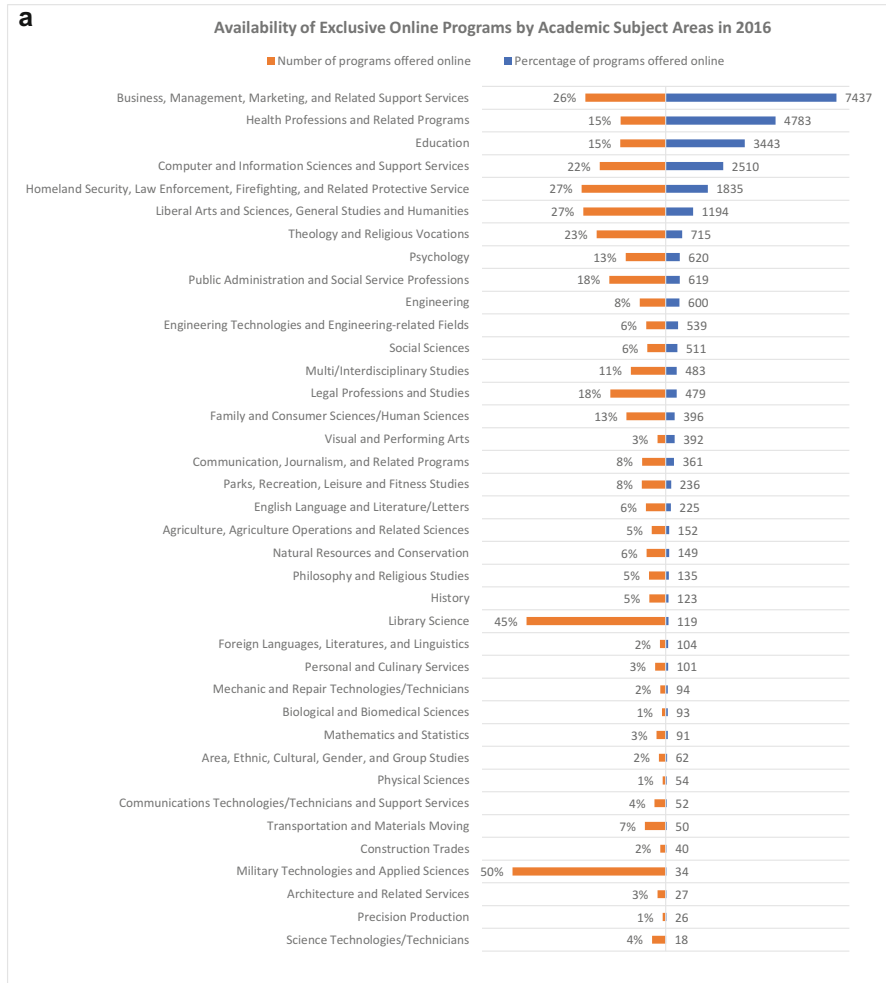


Fig. 3 (continued)

programs can be pursued at selective institutions. (Education is a notable exception, where more than half of the programs are offered at selective institutions.)

The Demand Side: Increases in Online Enrollment

Among all postsecondary degree-granting institutions, 15% of all degree-seeking students were exclusively enrolled in online courses during the 2016–2017 academic year, and approximately one third of degree-seeking students were enrolled in at least one course through online learning (referred to as “any-online student” hereafter). There are substantial variations in student enrollment in online education across sectors: Private, for-profit institutions, particularly for-profit four-year

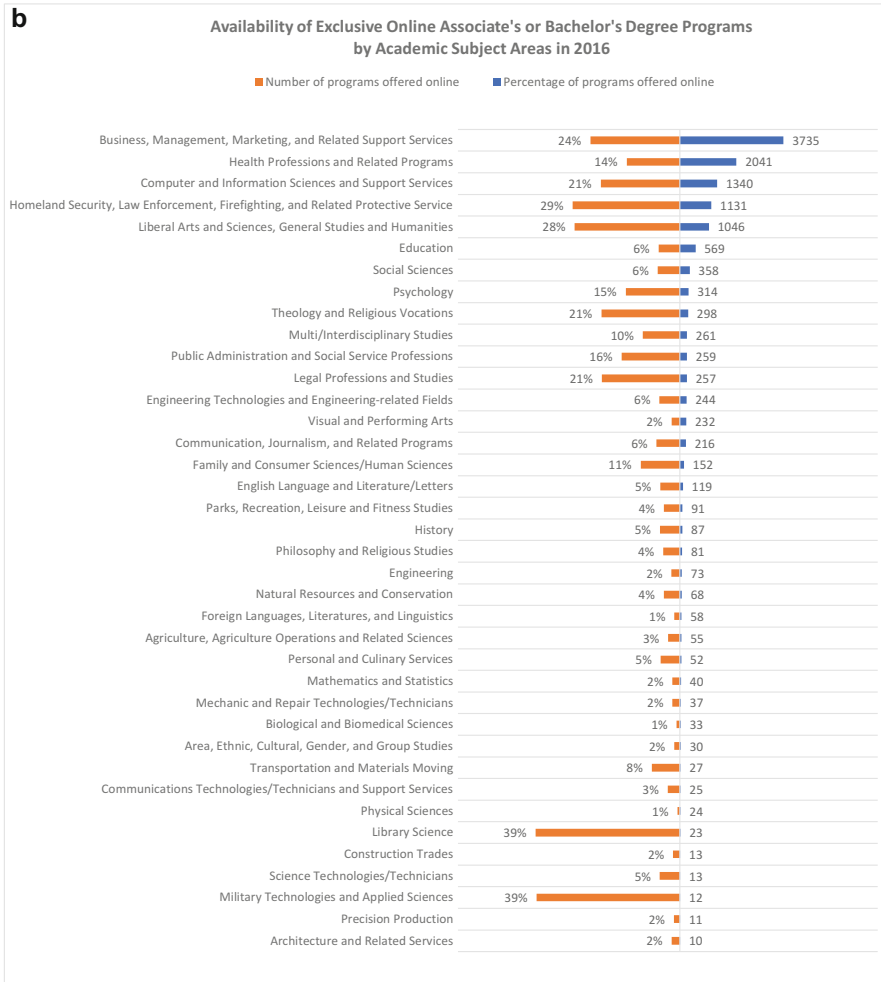


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institutions had the highest online enrollment rate, where 68% of students enrolled in this sector during 2016–2017 academic year took at least one online class; among these students, the majority (85%) were enrolled online exclusively (referred to as “only-online students” hereafter). Institutions in the public sector and private non-profit sector had a much lower online enrollment rate, where 30% and 27% students took at least one online class, respectively. Compared with any-online students enrolled in the for-profit sector, any-online students in the public and private nonprofit sectors were more likely to take face-to-face classes simultaneously, where approximately one third (35%) in the public sector and 65% in the private nonprofit sector were enrolled online courses exclusively.

Figure 5 shows the overall changes in student enrollment in online courses between 2012 and 2016 across all degree-granting postsecondary institutions. The number of

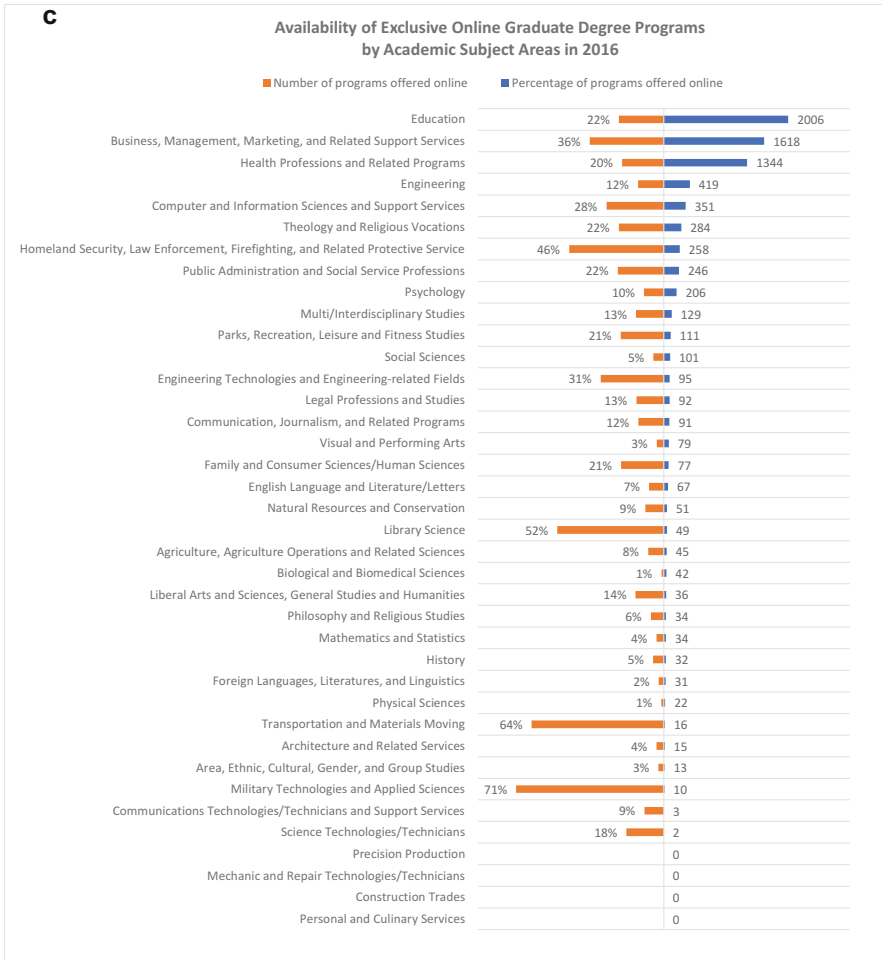


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any-online students increased by 1 million, representing a 19% increase overall. The number of only-online students also increased by 0.3 million during this period, or a 12% increase. The nationwide increase in online enrollment displayed in IPEDS is also evident in state and local reporting. At California community colleges (the largest community college system in the USA) online course enrollment increased by almost 850,000 between 2002 and 2012; in the meanwhile, enrollment in face-to-face classes has declined by almost 285,000. Consequently, the proportion of online course enrollment surged from 1.4% to 10.7% over this period (Johnson and Mejia 2014).⁹

⁹Most of the California community college students who take online courses also take face-to-face classes simultaneously.

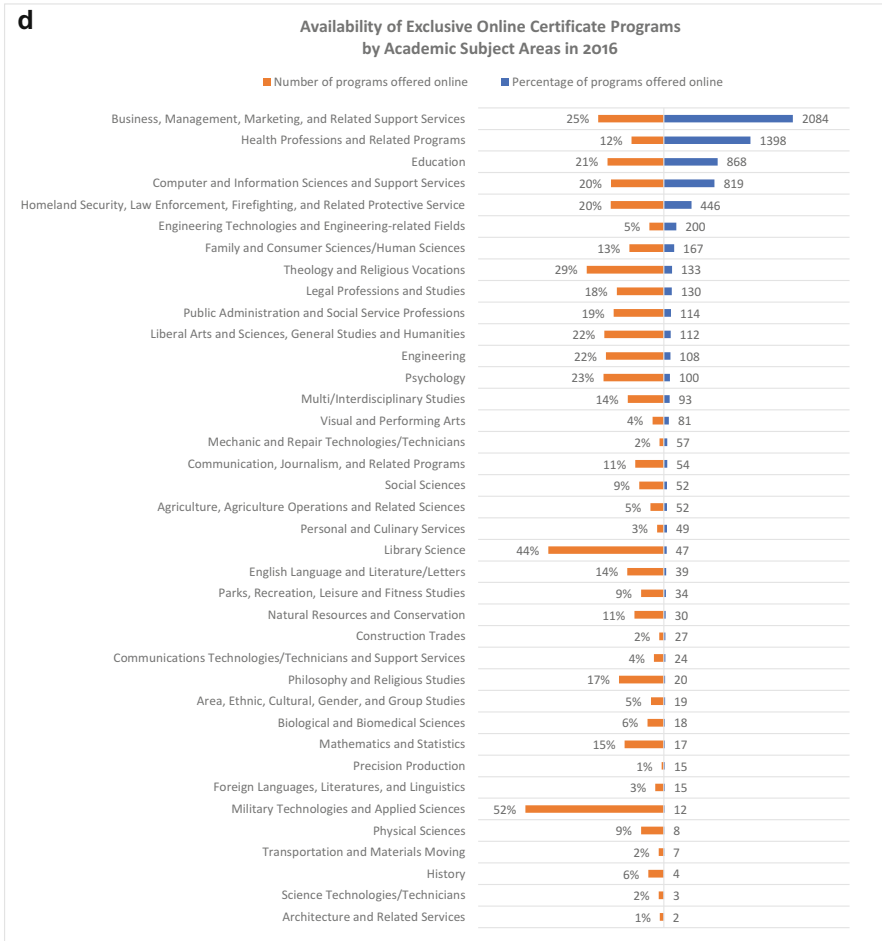


Fig. 3 (a) Availability of exclusive online programs by academic subject areas in 2016. **Note.** These numbers are calculated based on active degree-granting institutions that reported valid data regarding online education offering in 2016 (n = 4,566). Academic subject areas were retrieved from variable “CIPCODE” in the IPEDS database. (Source: IPEDS 2016 <https://nces.ed.gov/ipeds/use-the-data>). (b) Availability of exclusive online AA or BA degree programs by academic subject areas in 2016. **Note.** These numbers are calculated based on active degree-granting institutions that reported valid data regarding online education offering in 2016 (n = 4,566). Academic subject areas were retrieved from variable “CIPCODE” in the IPEDS database. (Source: IPEDS 2016 <https://nces.ed.gov/ipeds/use-the-data>). (c) Availability of exclusive online graduate degree programs by academic subject areas in 2016. **Note.** These numbers are calculated based on active degree-granting institutions that reported valid data regarding online education offering in 2016 (n = 4,566). Academic subject areas were retrieved from variable “CIPCODE” in the IPEDS database. (Source: IPEDS 2016 <https://nces.ed.gov/ipeds/use-the-data>). (d) Availability of exclusive online certificate programs by academic subject areas in 2016. **Note.** These numbers are calculated based on active degree-granting institutions that reported valid data regarding online education offering in 2016 (n = 4,566). Academic subject areas were retrieved from variable “CIPCODE” in the IPEDS database. (Source: IPEDS 2016 <https://nces.ed.gov/ipeds/use-the-data>)

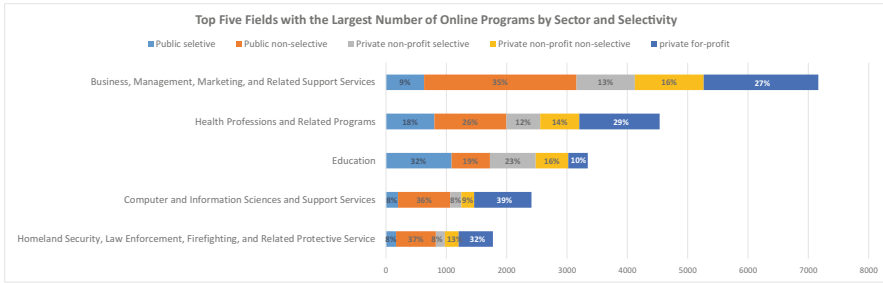


Fig. 4 Top five fields with the largest number of online programs by sector and selectivity. **Note.** These numbers are calculated based on active degree-granting institutions with valid enrollment data and with valid selectivity score (n = 3,952). Academic subject areas were retrieved from variable “CIPCODE” in the IPEDS database. Selectivity is derived from the Carnegie Classification of Institutions of Higher Education (variable “C15UGPRF” in the IPEDS 2016 and variable “CCUGPROF” in the IPEDS 2012 database, respectively). Given that over 99% of the institutions in private for-profit sector were categorized as nonselective institution, this chart did not break out institutions in this category between selective and nonselective. (Source: IPEDS 2016 <https://nces.ed.gov/ipeds/use-the-data>)

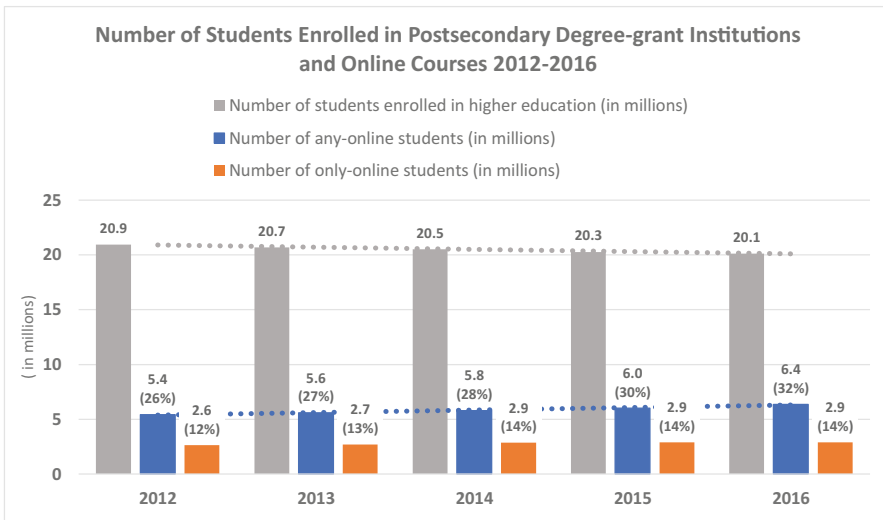


Fig. 5 Number of students enrolled in postsecondary degree-grant institutions and online courses 2012–2016. **Note.** The numbers reported in the figure are calculated based on data from active degree-granting institutions in each year. Numbers in parentheses represent the percentage of any-online or only-online students among those enrolled in higher education in a given year. (Source: IPEDS 2012, 2013, 2014, 2015, and 2016 <https://nces.ed.gov/ipeds/use-the-data>)

Figure 6 further displays the trends of any-online and only-online students by institutional sector. Overall, the shares of online students (both any-online and only-online students) increased steadily across all three sectors between the 2012 and 2016

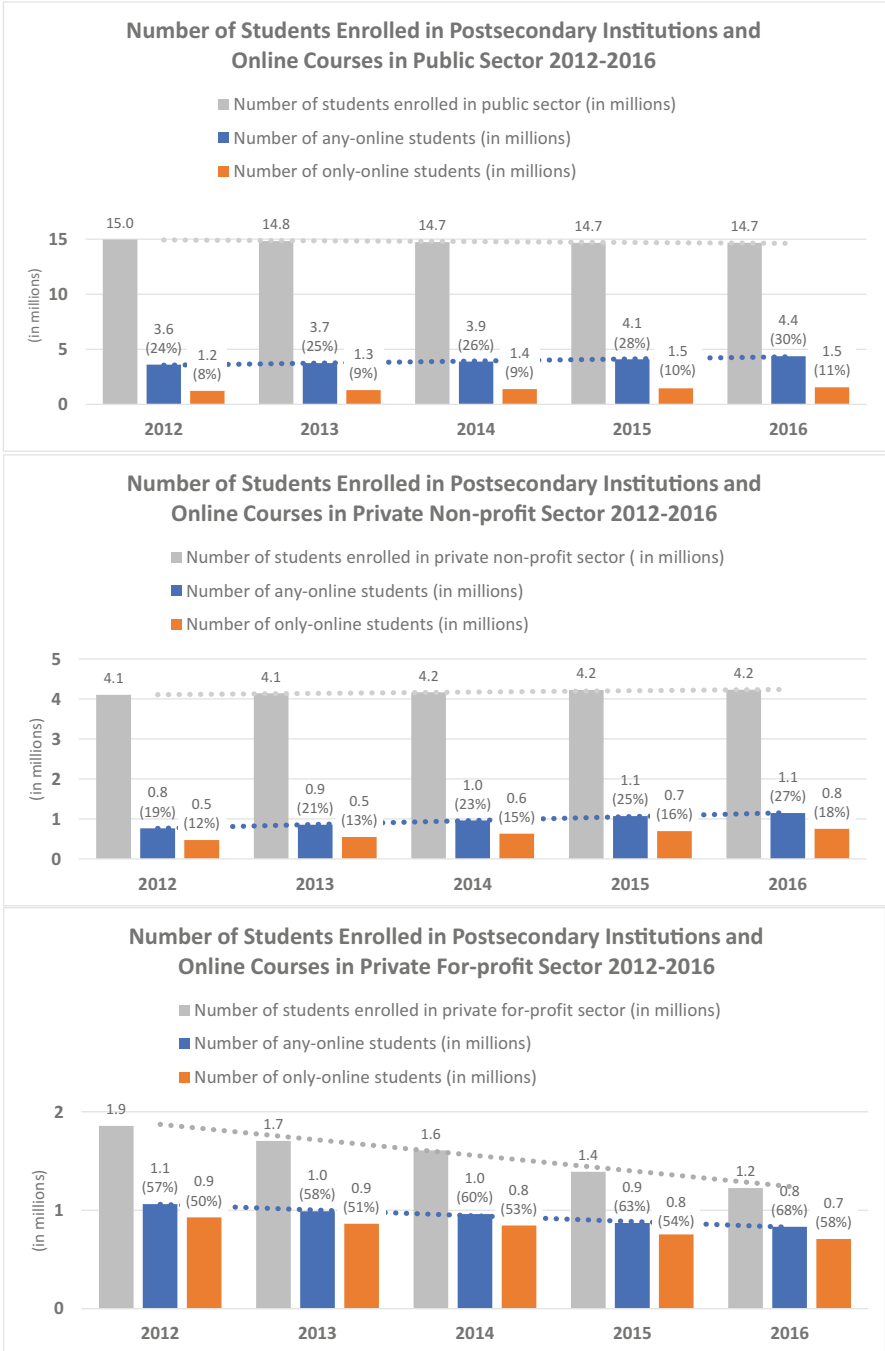


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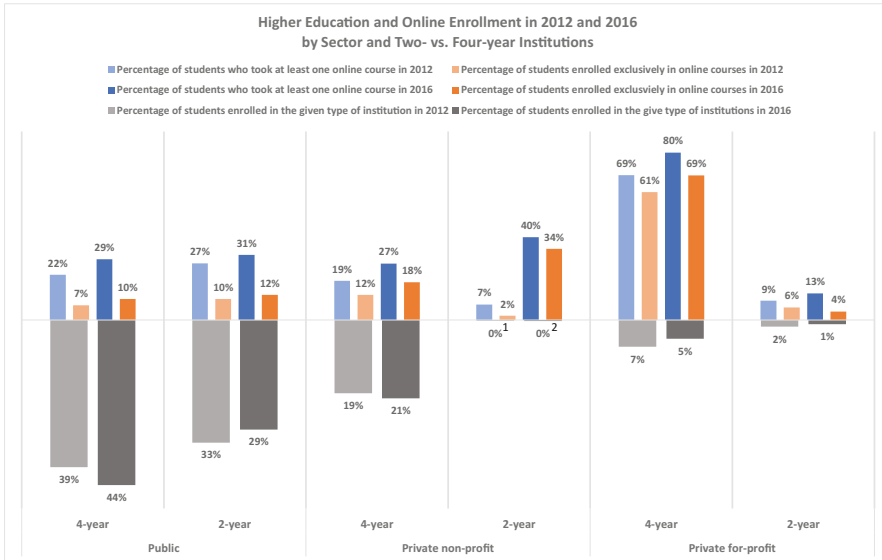


Fig. 7 Higher education and online enrollment in 2012 and 2016 by sector and 2- vs. 4-year institutions. **Note.** These numbers are calculated based on active degree-granting institutions with valid enrollment data in the current year (n = 4,566 in 2016; n = 4,882 in 2012). Institutional sector is retrieved from variable “CONTROL” and institutional level is retrieved from variable “ICLEVEL” in the IPEDS database. 1. Total enrollment rate in private, nonprofit 2-year institutions in 2012 is 0.18%. 2. Total enrollment rate in private, nonprofit 2-year institutions in 2016 is 0.26%. (Source: IPEDS 2012 and 2016 <https://nces.ed.gov/ipeds/use-the-data>)

academic year. While the total number of online students slightly increased during the 5-year period in both the public and private nonprofit sectors, the number of online students at private for-profit colleges declined, which seems to be primarily driven by the overall shrinkage of total student enrollment in this sector during this period.

To examine possible differences in online enrollment between 2-year and 4-year colleges, Fig. 7 further differentiates between 4-year and 2-year institutions within each sector and shows the percentage of students enrolled in any online course in 2012 and in 2016, respectively. Overall, the percentage of any-online and only-online students increased in both 2-year and 4-year colleges across all sectors. In the public sector, 2-year institutions had slightly higher online enrollment rate than 4-year institutions in both 2012 (27% vs. 22% for any-online; 10% vs. 7% for only-online) and 2016 (31% vs. 29% for any-online; 12% vs. 10% for only-online). In the

Fig. 6 Number of students enrolled in postsecondary institutions and online courses 2012–2016 by sector. **Note.** The numbers reported in the figure are calculated based on data from active degree-granting institutions in each year. The numbers in parentheses represent the percentage of any-online or only-online students among all enrollees in higher education in a given year. (Source: IPEDS 2012, 2013, 2014, 2015, and 2016 <https://nces.ed.gov/ipeds/use-the-data>)

private nonprofit sector, 2-year institutions showed a dramatic increase in online enrollment rate between 2012 and 2016 (from 7% to 40% for any-online; from 2% to 34% for only-online), although these 2-year institutions only accounted for less than 1% of the total postsecondary enrollment. In the private for-profit sector, 4-year institutions had an extremely high online enrollment rate (80% for any-online and 69% for only-online in 2016), while the rate was fairly low at 2-year private for-profit institutions (13% for any-online and 4% for only-online in 2016).

Figure 8 displays the percentage of any-online and only-online students by institutional selectivity. The patterns across institutions are strikingly consistent: the more selective an institution, the less likely the students would attempt any online course. For example, only 16% of the students enrolled in most-selective institutions attempted any online course during the 2016–2017 academic year, which is half the rate compared to students enrolled at nonselective institutions (39%).

The higher rate of online enrollment among nonselective institutions shown in Fig. 8 might be primarily driven by large share of students enrolled at private for-profit institutions. To address this possibility, Fig. 9 shows the percent of students enrolled in online courses broken out by sector within each category of selectivity. After disaggregating the data by both sector and selectivity level, the pattern of higher online enrollment rate in nonselective institutions holds within the public sector and the private nonprofit sector. In the private nonprofit sector, for example, only 10% of the students at more selective institutions took any online course in 2016–2017. The percent of any-online students almost tripled at moderately selective nonprofit institutions and also increased by about half at nonselective nonprofit institutions.

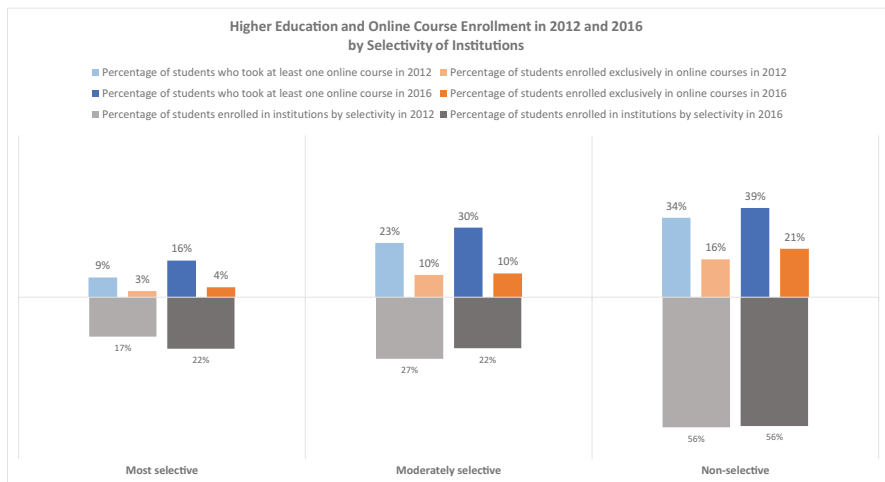


Fig. 8 Higher education and online enrollment in 2012 and 2016 by selectivity of institutions. **Note.** These numbers are calculated based on active degree-granting institutions with valid enrollment data and with valid selectivity score in a given year. The sample includes 3,955 institutions in 2016 and 3,626 institutions in 2012. Selectivity is derived retrieved from the Carnegie Classification of Institutions of Higher Education (variable “C15UGPRF” and variable “CCUGPROF” in the IPEDS 2016 and IPEDS 2012 database, respectively). (Source: IPEDS 2012 and 2016 <https://nces.ed.gov/ipeds/use-the-data>)

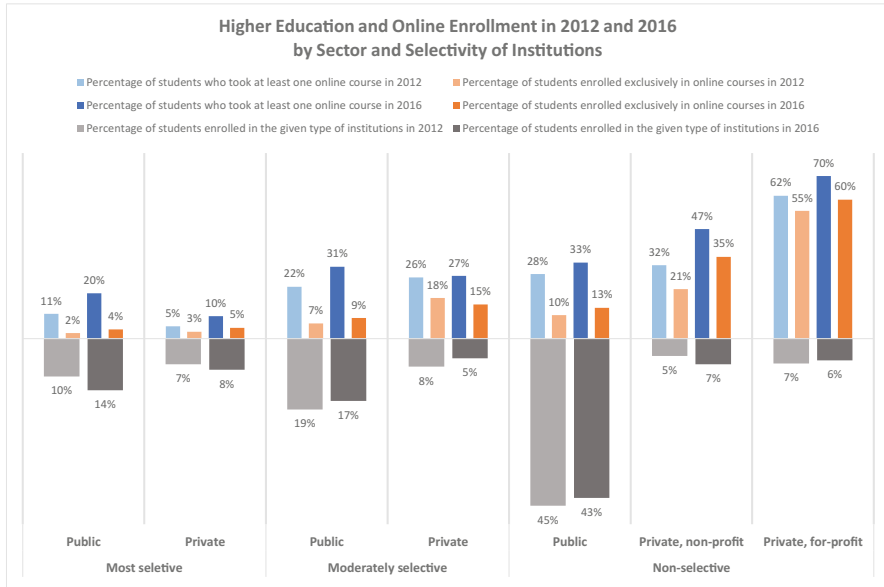


Fig. 9 Higher education and online enrollment in 2012 and 2016 by sector and selectivity of institutions. **Note.** These numbers are calculated based on active degree-granting institutions with valid enrollment data and with valid selectivity score in a given year. The sample includes 3,955 institutions in 2016 and 3,626 institutions in 2012. Selectivity is derived retrieved from the Carnegie Classification of Institutions of Higher Education (variable “C15UGPRF” and variable “CCUGPROF” in the IPEDS 2016 and IPEDS 2012 database, respectively). (Source: IPEDS 2012 and 2016 <https://nces.ed.gov/ipeds/use-the-data>)

Finally, considering that state-level policies may shape online learning in unique ways, Fig. 10 shows online enrollment by state. Unsurprisingly, the most populated states, such as California, Texas, and Florida also had the largest number of online course takers. Once accounting for between-state differences in overall higher education enrollment, four states has the largest share of students who enrolled in at least one online course in 2016: Arizona (61%), New Hampshire (58%), West Virginia (57%), and Idaho (52%); at the other end of the spectrum, three states – Rhode Island, New York, and Connecticut – had less than 20% of students enrolled in at least one online course.

The Cost of Online Education

Can Distance Learning “Bend the Cost Curve”?

One reason for the support behind online education and distance learning is that it has the potential to help address funding insufficiencies in higher education by reconfiguring the use of highly paid faculty and reducing the demand for brick-and-mortar construction and maintenance (Twigg 2003; Waddoups et al. 2003),

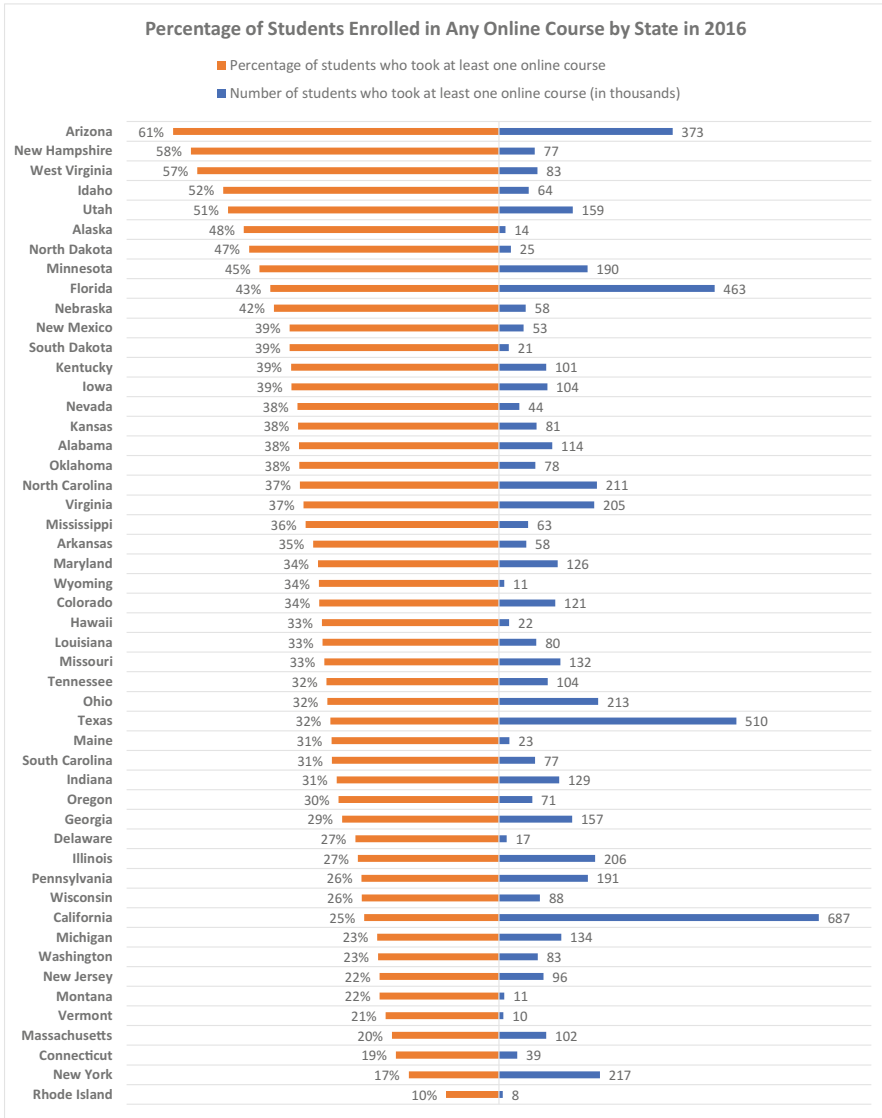


Fig. 10 Percentage of students enrolled in any online course by state. **Note.** These numbers are calculated based on active degree-granting institutions that reported valid data regarding online education offering (n = 4,566). (Source: IPEDS 2016 <https://nces.ed.gov/ipeds/use-the-data>)

which some scholars refer to as “bend the higher education cost curve” (Deming et al. 2015). Since online courses do not have physical space limitations on enrollment, colleges can increase class sizes in online courses as a response to changes in demand relatively easily compared to brick-and-mortar classrooms. Moreover, the consequence associated with increased class size on student learning may also differ substantially by course delivery format: While larger class sizes can negatively

influence student learning outcomes through increased classroom disruptions in the traditional face-to-face setting (Lazear 2001), these mechanisms would be largely muted if an online course has limited synchronous student-instructor interactions and peer interactions. Bettinger et al. (2017a) directly assess the effects of increasing class size on student learning outcomes in online courses at DeVry University, one of the nation's largest for-profit postsecondary institutions. The authors exploit a field experiment where more than 4,000 course sections of 111 courses were randomly assigned to either regular-sized classes of 31 students or slightly larger classes with an average 10% increase in class size, and estimate the effect of online class size on a variety of student outcomes. The authors find, after addressing potentially endogenous student sorting into different classes, that increasing the online class size by 10% has no statistically significant effect on either current course grade or subsequent course enrollment. The null results suggest that online courses have the potential to reduce the cost of providing education by increasing online class size without affecting student outcomes.

If online course offering can indeed serve as cost-saving innovations for institutions, colleges may also charge lower tuitions for their online programs and courses, therefore lowering the costs for students to pursue postsecondary education. Indeed, using the IPEDS of the US Department of Education, Deming et al. (2015) find that institutions with higher shares of students enrolled online charge lower prices, providing some suggestive evidence that online education might be able to “bend the cost curve” in traditional higher education.

Caveats Against Online Courses as a Cost-Saving Strategy

At first, these results seem to provide evidence that online courses present a promising opportunity to reduce higher education costs for both institutions and students. A caveat against this promise, however, is the extent to which online courses and programs compromise the quality of education received compared with traditional face-to-face instruction. If the primary reason why online class size can be increased without degrading learning outcomes is that interpersonal interactions are muted enough in online classrooms, it is reasonable to question whether the reduced interpersonal interactions and social presence may compromise the quality of education received by students. In fact, in a separate paper that uses data from a large for-profit university, Bettinger et al. (2017b) find that online courses do significantly less to promote student academic success than similar in-person courses. The negative association between online learning and student learning outcomes, which is discussed in detail below, indicates that college online courses do not currently support student learning equally well as face-to-face classes. Thus, perhaps a more compelling question is whether online technology has the potential to deliver *similar* quality of education in a less expensive way relative to brick-and-mortar instruction.

Another important caveat to the promise of online education is the large upfront cost of developing high-quality online courses. The complexities involved in making generalizations about costs across different types of courses and institutions make it extremely difficult, if not entirely impossible, to provide a clear-cut answer as to

whether online courses are indeed cheaper in terms of both upfront costs in course development and recurring costs in course delivery (Rumble 2003). For example, Poulin and Straut (2017) noted substantial variations in how an online course is designed and implemented, ranging from a set of slides with little student-instructor interaction to a highly interactive course with well-designed videos of lectures (Poulin and Straut 2017). As a result, development costs for online courses can vary widely across institutions from \$10,000 to \$60,000 per course, depending on a variety of factors such as specific online course design features, student services, and faculty compensation (Schiffman 2005).

Based on expenditure data from the University of North Carolina (UNC) system, a report provides suggestive evidence that well-designed online courses with technologically enabled interaction between students and instructors are *more* expensive than traditional on-campus courses in terms of both start-up expenditures in course development and in recurring expenditures in delivering the course (North Carolina General Assembly 2010).¹⁰ More specifically, based on the cost information on a sample of 92 courses (46 on-campus and 46 distance courses) from 15 UNC campuses,¹¹ the report indicates that the average cost for developing a distance course (\$5,387) is 6% higher than the average cost for developing an on-campus course (\$5,103).¹² The higher costs associated with developing online courses are primarily driven by higher expenses for staff or consultants that assist faculty in course development. In terms of course delivery, the cost for delivering an online course (\$17,564) is also higher than the average cost for delivering an on-campus course (\$16,433), which is due to the fact that distance education courses often had other costs associated with delivery that on-campus courses did not incur, such as special software or hardware needed for content delivery or technologically enabled interaction between students and instructors.¹³

¹⁰The differences in costs to deliver a distance course and an on-campus course do not reach statistical significance though.

¹¹A total of 1,979 new courses were developed since 2004 at UNC. The evaluation team further limits the sample to 801 courses developed between 2008–2009 and 2009–2010 academic years to determine the most recent costs for course development. Finally, the evaluation team stratified the sample by funding category and type (distance vs. on-campus) and randomly selected courses for each category and type. The report includes a more detailed explanation of the sampling methodology in Appendix A.

¹²It should be noted that UNC defines “distance education” as “a coherent course of study in which the student is at a distance from the campus and the instructor may or may not be in the same place as the student.” Therefore, the UNC definition of distance education includes a broader range of courses than the typical definition of online course in which course content is delivered fully online.

¹³The report indicates that UNC faculty use a variety of technology platforms, where the instruction may be delivered either synchronously (such as through two-way video conferencing or internet chat) or asynchronously (such as providing course materials via video). Faculty in focus group interviews generally agreed that instructors are able to “get to know their distance students better than their on-campus students because mandatory posting requirements for online courses increase student-instructor interaction” (p. 6).

Most interestingly, the average class size for distance education courses was significantly smaller than the average size for on-campus courses (18 vs. 23), and faculty in follow-up campus interviews emphasized the need to maintain smaller class sizes for online courses specifically because “teaching online courses is more time consuming for faculty” and “due to the amount of work necessary to engage students in the online environment” (p.11, North Carolina General Assembly 2010). The possibility that faculty may need to spend more time to ensure the quality of instruction and interaction in an online course than face-to-face classes raises questions on the potential of online courses to serve as a cost-saving strategy through larger class size.

If cost saving is not the primary reason for institutions to offer online courses, then why do postsecondary institutions generally agree on the importance of expanding online learning? Interviews conducted by Bacow et al. (2012) identified two major reasons for providing online learning opportunities: First, many institutions view online education as an important new revenue source, as it may generate new revenue streams by reaching students who would not otherwise enroll in traditional degree programs. Second, most institutions intend to use online learning as a way to improve students’ learning experience. Specifically, several administrators noted online learning as an effective way to address space constraints, particularly in low-division, high-demand introductory courses – an issue many institutions are facing due to the increasing demand for higher education. Freedom from the constraint of physical classroom space allows administrators to create as many course sections as they can find qualified instructors for, which could address the availability barrier. In addition, online learning may also expand access to better educational resources: while small colleges do not always have the resources to offer a wide range of courses to their students, shared online courses allow these campuses to offer students a wider variety of courses. Finally, college administrators are also optimistic about the potential of online courses to reform the traditional learning process through technology, such as enabling greater level of learning flexibility, achieving strong computer-mediated student-to-student interaction and collaboration, and providing immediate personalized feedback on student learning.

Online Education and Student Outcomes

With the rapid growth of online education and its potential benefits to address the needs of diverse student populations, questions remain regarding its effectiveness (Aragon and Johnson 2008). Do online courses effectively prepare students with the knowledge and skills needed to succeed in college and later in their careers? Earlier observational studies (e.g., Berg 2001; Paden 2006; Ury 2004) attempted to compare student learning outcomes between online and face-to-face formats, and the findings are mixed. Such discrepancies in research findings might be partially explained by the issue of “self-selection”: most of these observational studies simply made comparisons between students who opted to take the course through online and those who self-selected into the traditional face-to-face format and, therefore, did not control for the possibility that a common set of personal characteristics and school circumstances may jointly influence

decisions on online course enrollment and course outcomes. As a result, the extent to which these statistical findings are attributable to cause-effect relationships remains uncertain.

To provide an overview of the causal link between course delivery format and student learning outcomes, we reviewed the literature that either uses experimental or quasi-experimental research design to control for student sorting by course delivery format. Appendix A summarizes the key information of each study discussed below.

Online Delivery Format Improves Learning Outcomes

The strongest support for the optimism around online learning comes from a meta-analysis by the US Department of Education (2009). Based on only randomized experiment or quasi-experiments, the meta-analysis suggests that on average, students in online learning conditions performed better than those receiving face-to-face instruction.¹⁴ However, a thorough review by Jaggars and Bailey (2010) of the 45 experimental studies included in the meta-analysis raises concerns regarding whether the findings from the Department of Education report could be generalizable to typical college courses.

First, the majority of the studies included in this meta-analysis focused on only one specific topic, where the duration of the intervention could be as short as only 15 minutes. Results from these short interventions may not speak to the challenging issues inherent in maintaining student attention and motivation over a course of several months. Among all the 45 studies included, only seven were relevant to typical online semester-length college courses (Caldwell 2006; Cavus et al. 2007; Davis et al. 1999; LaRose et al. 1998; Mentzer et al. 2007; Peterson and Bond 2004; Schoenfeld-Tacher et al. 2001). Overall, these seven studies showed no strong advantage or disadvantage in terms of learning outcomes among students who stayed in the course throughout the entire semester.¹⁵ However, all seven studies were conducted at mid-sized or large universities, with five rated as “selective” or “highly selective” by *U.S. News and World Report*, and all seemed to involve

¹⁴The meta-analysis defines online learning as “learning that takes place partially or entirely over the Internet,” which excludes purely print-based correspondence education, videoconferencing, or broadcast television that do not have significant internet-based instruction. The specific practices of online learning vary substantially across studies though, such as the inclusion of computer-mediated asynchronous communication with instructor or peers, video or audio to deliver course content, opportunity for face-to-face time with instructor or peers, etc. The duration of the instruction examined in these studies also varies substantially, ranging from as short as 15 minutes to a semester-long college course.

¹⁵The meta-analysis (U.S. Department of Education 2009, Exhibit 4a) reports the effect sizes for six of these studies as positive for online learning, while one was reported as negative. However, the reexamination of the studies (Jaggars and Bailey 2010) suggests that three should be classified as negative (Davis et al. 1999; Peterson and Bond 2004; Mentzer et al. 2007), one as mixed (Caldwell 2006), two as positive (Cavus et al. 2007; Schoenfeld-Tacher et al. 2001), and one as unclassifiable based on information provided in the published article (LaRose et al. 1998).

relatively well-prepared students. These results may not speak to academically underprepared students who may struggle more in online learning environments due to poor time-management and independent-learning skills, which are thought to be critical to success in online education (e.g., Bambara et al. 2009; Ehrman 1990; Eisenberg and Dowsett 1990), or due to technical difficulty, such as slowness of typing, problems navigating the course management system, and difficulty following material on the screen (Aman and Shirvani 2006; Bambara et al. 2009), all problems that may be more common among students with weak educational backgrounds. Only one of the studies examined the impacts of the course delivery format on lower-performing students: Peterson and Bond (2004) performed a descriptive analysis suggesting that the lowest third of academically prepared students performed substantially better in the face-to-face setting than in the online setting.

In addition, the studies included in the meta-analysis almost exclusively focus on course grade and did not study attrition as an outcome. While course attrition rates might be low and ignorable in a selective institution with academically well-prepared student population, a large proportion of students enrolled in open-access public institutions, especially at 2-year community colleges, are academically underprepared. These underprepared students withdraw from courses and drop out of college at a higher rate (Bailey et al. 2010). Indeed, studies consistently identify higher course attrition rates in online courses compared to similar face-to-face courses at 2-year colleges (e.g., Bendickson 2004; Carr 2000; Rovai and Wighting 2005; Xu and Jaggars 2011a). If less academically prepared students are more likely to withdraw due to the online nature of the delivery format, it may not be surprising, then, that students who *stayed* in the online course were more likely to earn a good grade than were students who took face-to-face courses.

Finally, several studies in the meta-analysis were conducted by professors who taught the course in subjects likely to be especially well-suited to online learning, such as computer programming. These professors were either online course advocates or potentially highly motivated professors teaching unusually high-quality online classes. The classes often involved synchronous sessions,¹⁶ timely instructor feedback, effective technical support, clear grading rubric, and well-organized course structure with intuitive navigation. Yet, the quality of the courses designed and offered by these online advocates may not be representative of typical online courses offered at colleges. Indeed, studies that examine the design features of online courses currently offered at postsecondary institutions, especially open-access public colleges, noted that many instructors simply transfer their in-person pedagogy to the online format and include minimal level of synchronous interpersonal interaction opportunities (Cox 2006; Jaggars and Xu 2016).

¹⁶In synchronous sessions, students would interact with instructors or peers in real time, but not in person, such as through video conferences or chat-based online discussions.

Online Delivery Format Hinders Learning Outcomes

Aside from the meta-analysis, most of the other experimental and quasi-experimental studies on semester-length college courses that we are aware of find negative effects on student course performance, course persistence, and other downstream learning outcomes such as course repetition and subject persistence. The effect of taking online courses on these outcome metrics is explored in detail below.

Course Performance

Nearly all causal studies find negative effects of online course taking on student course performance (e.g., Hart et al. 2018) or, at best, null results (e.g., Bowen et al. (2014)).¹⁷ The outcome measures include course grades (e.g., Figlio et al. 2013), course completion with a passing grade (e.g., Johnson and Mejia 2014), and standardized post-test scores (e.g., Bowen et al. 2014).

Four experimental studies (Alpert et al. 2016; Bowen et al. 2014; Figlio et al. 2013; Joyce et al. 2015) are conducted in relatively selective 4-year institutions and randomly assign students into different delivery formats within a single course in economics or statistics with a total enrollment ranging between 312 and 725 students. Figlio et al. (2013) compare between a purely online or face-to-face classroom setting in teaching microeconomics principles, where students assigned to the online format watch videos of the lectures online. Joyce et al. (2015) also conducted the study in the course of principles of microeconomics, but the online instruction in their study instead takes the form of blended learning that included an online component and reduced the weekly face-to-face meeting time by half. Similar to Joyce et al. (2015), Bowen et al. (2014) compares an online delivery format with one hour per week of instructor contact time to a purely face-to-face delivery format with three hours per week of contact time in a statistics course by randomly assigning students on six public university campuses. The online instruction in their study is the most sophisticated among the four studies, which includes an interactive learning system that provides students with customized machine-guided instruction, as well as timely information about student performance to course instructors for more targeted and effective guidance from the instructor. Additionally, the blended group is also accompanied by one hour of face-to-face instruction each week. Alpert et al. (2016) compared student learning outcomes in a microeconomic principle course delivered through three formats – face-to-face, blended, and fully online – at a public university. Both the blended and the online formats provide

¹⁷It should be noted that a much broader literature used randomized assignments to compare between online and face-to-face training sessions across a variety of settings (e.g., Bello et al. 2005; LaRose et al. 1998; Meyer 2003; Yaverbaum and Ocker 1998; Padalino and Peres 2007; Peterson and Bond 2004). The majority of these studies suggest that student course grades do not differ between the online and face-to-face context. However, results from these studies cannot address the challenging issues inherent in maintaining student attention and motivation over a course of several months, and we therefore focus on studies on semester-length college courses only.

students with online lectures; additionally, students in the blended format attend a weekly in-person discussion session, whereas students in the fully online format attend a weekly online synchronous discussion session.

Except for Bowen et al. (2014) that identifies no significant difference in learning outcomes between the blended and face-to-face instruction, the other three all find negative effects of online instruction on course grades. Bowen et al. (2014) point out that one potential explanation for the null effects in their study versus more negative impacts in other studies may be due to the form of online instruction: the online course examined in their study uses an advanced, less commonly used interactive learning system with machine-guided protocols, whereas the online instruction in the rest of the studies is mainly through videotaped lectures that do not enable student-faculty interactions.

While well identified, all the experimental studies focus on a small number of students in a specific course and therefore shed limited insights on the impacts of online learning in the broad set of college courses. A handful of studies address this issue by using college administrative data that include a large swath of both online and face-to-face courses at one college (e.g., Bettinger et al. 2017b) or multiple colleges in an entire state (e.g., Hart et al. 2018). The majority of these quasi-experimental studies examine online learning at 2-year community colleges (Hart et al. 2018; Johnson and Mejia 2014; Streich 2014; Xu and Jaggars 2011b, 2013, 2014), which is a population of particular interest for policy on online learning. Four state community college systems have been examined thus far, including California (Hart et al. 2018; Johnson and Mejia 2014), North Carolina (Streich 2014), Virginia (Xu and Jaggars 2011a), and Washington (Xu and Jaggars 2013, 2014), and all states demonstrate rapid growth of enrollment in fully online course during the past decade.

Without randomly assigning students into online and face-to-face delivery formats, the key challenge to identifying the causal impacts of online delivery format on student outcomes is that online takers and face-to-face takers may differ from each other in a variety of ways that could also be related to one's potential learning outcomes. In addition, online enrollment may be concentrated in either more or less challenging courses. Researchers have used two primary identification strategies to address possible between-course and within-course selection: (i) an instrumental variable approach and (ii) a multiple fixed effects model. For the first identification strategy, Xu and Jaggars (2013) used distance from home to campus as an instrument for a student's probability of taking a specific course through the online delivery format, based on the assumption that students who live relatively further away from college are more likely to take advantage of the flexibility of online learning. Streich (2014) instead instrumented for whether a student enrolled in the online or hybrid format of a course with the share of seats offered online or hybrid for that course in a specific term. Bettinger et al. (2017b) combined the two instruments together, where their instrument is the interaction between term-by-term changes in in-person seats at a student's local campus and the distance each student must travel to attend an in-person course at that local campus, thus substantially weakening identifying assumptions underlying either of the two instruments on its own. The other identification

strategy used in the current study is a multi-way fixed effects model (e.g., Hart et al. 2018; Xu and Jaggars 2014) that control for any observed or unobserved selection at both the student- and course-level simultaneously.

Using different quasi-experimental methods to address student sorting into online courses and drawing on data from different states and settings, the results from the quasi-experimental studies find patterns that are strikingly similar: students in fully online delivery formats had learning outcomes that were substantially worse than those in the face-to-face section of the same course. It is worth noting that the current evidence on the negative effects of online delivery format are primarily based on data from a large swath of courses at nonselective institutions, such as for-profit 4-year college (Bettinger et al. 2017b) or 2-year community colleges (e.g., Hart et al. 2018). In contrast, all the studies conducted at selective 4-year institutions only involve a few hundred students enrolled in one specific course. As a result, it is uncertain whether the consistent and substantial performance decrement observed at the nonselective institutions also speaks to online courses at 4-year colleges. We do know, however, compared to the robust and sizable negative impacts of online learning identified across all studies conducted at nonselective institutions, the studies conducted at relatively selective 4-year institutions yield mixed findings; even among studies that identified a negative association between online delivery and student learning outcomes, the magnitude of the negative effects also tend to be smaller compared with those based on student course performance at 2-year or for-profit colleges.

One concern that is often raised about comparisons between the online and face-to-face sections of a course in the absence of randomized controlled trials is that there might be systematic differences between instructors teaching the online versus face-to-face sections. For example, if more experienced and high-quality instructors avoid teaching courses online, the negative effects identified by these quasi-experimental studies might be partly attributable to teacher productivity. Hart et al. (2018) directly assessed the extent of this problem by including a rich set of instructor characteristics into the fixed effects model. Their analyses indicate that the inclusion of observable instructor characteristics does little to alter the negative relationship between online course-taking and student performance.¹⁸

Course Persistence

While course persistence – measured as making it through the entire semester of a class – is generally high at 4-year colleges, course attrition is a serious issue at open-access institutions, particularly at 2-year community colleges, where a large proportion of students withdraw before the end of a course at a high rate

¹⁸Specifically, four types of instructor characteristics are included into the model: (i) the contract status of the instructor (temporary adjuncts, tenure-track non-tenured, or tenured); (ii) years of experience; (iii) whether the instructor is teaching any courses as an overload; and (iv) whether the course is team-taught.

(Bailey et al. 2010).¹⁹ This particular retention problem in community colleges is even worse with online courses. Indeed, most community colleges acknowledge that online course dropout rates are higher, although it is not clear whether these dropout rates are due to the online course format, or to the characteristics of students who choose that course format based on simple raw comparisons.

Four quasi-experimental studies explicitly examine the causal impacts of online delivery format on course persistence at the four state community college systems mentioned above and all identified sizable negative impacts of online course-taking on course persistence. The research finds that students in online courses are between 3 percentage points (Xu and Jaggars 2014) and 15 percentage points (Xu and Jaggars 2011b) more likely to withdraw from the course compared to similar students taking face-to-face classes, depending on the state examined and the statistical method used. It is worth noting that students who withdraw during the add/drop period were not included in the analysis. As a result, mid-semester course withdrawal not only penalizes students academically – students do not obtain any credit from the course and a grade of “W” also appears on their permanent record – but also economically, since student that withdraw after the add/drop period pay full tuition for the course and do not receive any refund for the course.

Downstream Outcomes

A handful of studies examined whether online delivery format influences students’ downstream outcomes, including course repetition (e.g., Hart et al. 2018) defined as whether a student retakes the same course; subject persistence (e.g., Hart et al. 2018) defined as future enrollment in other classes within the same subject area; follow-up course grades (e.g., Krieg and Henson 2016); and college persistence – as opposed to dropping out of college after that term (Huntington-Klein et al. 2017; Jaggars and Xu 2010; Shea and Bidjerano 2018).

Using a multi-way fixed effects model, Hart et al. (2018) find that online course-taking is positively associated with course repetition and negatively associated with subject persistence at the California community colleges. Based on transcript records from nearly 40,000 students at a large comprehensive university over a 10-year period, Krieg and Henson (2016) match each course with all subsequent courses for which it is a prerequisite and used an instrumental variable approach to control for student sorting by course delivery format. They find that students taking online prerequisites courses earn lower grades compared with students who took the prerequisite face-to-face.

The sizable negative impacts of online learning on subject persistence into the next course may be driven by two distinct sources: an uninspiring experience in a

¹⁹Course persistence is defined as persisting to the end of the course, or completing a course no matter if they have received a passing grade. In other words, students are considered to have persisted if they receive any letter grade (A–F) or a pass or no pass designation from a course. Almost all the studies conducted at 4-year institutions did not study course persistence as an outcome, probably because course persistence at 4-year institutions, particularly relatively selective ones, is fairly high regardless which delivery format is used.

course may either reduce the student's probability of taking another course in a particular field or drop out from college completely. While both are undesirable, the latter is particularly worrisome, since completing college – not just enrolling in it – is imperative when it comes to economic opportunity, especially among disadvantaged populations.

Regression analyses also find that taking online courses has a negative effect on college persistence. After controlling for multiple observable covariates, numerous studies find that students who take online courses are less likely to persist in college and attain a degree (Huntington-Klein et al. 2017; Jaggars and Xu 2010; Shea and Bidjerano 2018). For example, based on data from Washington community colleges, Huntington-Klein et al. (2017) find a negative effect of two percentage points of taking an online course on the probability of earning a degree. Based on data from Virginia community colleges, Jaggars and Xu (2010) also find that students who took at least one online course in their first semester at college were 5 percentage points less likely to return for the subsequent semester and students who took a higher proportion of credits online were significantly less likely to attain any credential or transfer to a 4-year college.

Given the robust negative impacts of online learning on concurrent and subsequent course performance, the question then is whether the expansion of online learning may negatively influence a student's eventual labor market performance, such as average employment rate and income level. Unfortunately, experimental or quasi-experimental studies that are able to estimate the causal impact of exposure to online learning and labor market outcomes are still missing from the literature.

Heterogeneous Impacts by Student and Course Characteristics

A handful of experimental (e.g., Figlio et al. 2013) and quasi-experimental studies (e.g., Hart et al. 2018; Johnson and Mejia 2014; Krieg and Henson 2016; Xu and Jaggars 2014) compared the size of the online performance decrement by a number of student characteristics and found strikingly consistent patterns. Specifically, the performance gaps between online and face-to-face learning seem to be particularly strong among underrepresented racial minority students, younger students, students with lower levels of academic preparation, students with part-time enrollment, and students who do not intend to transfer to a 4-year institution. Since most of these subgroups already tend to have poorer academic outcomes overall, the achievement gaps that existed among these subgroups in face-to-face courses became even more pronounced in online courses. For example, in California community colleges, among online course takers, the average gap between white and African American students in course completion with a passing grade increased by 5 percentage points, from 13 percentage points to 18 percentage points, representing an almost 40% increase (Johnson and Mejia 2014).

In addition to online performance gaps by student subpopulations, a number of studies also found that the online performance gap varied across academic subject areas (e.g., Hart et al. 2018; Johnson and Mejia 2014; Xu and Jaggars 2014). For

example, based on data from the Washington community college system, Xu and Jaggars (2014) found that some of the variability in the online performance gap across academic subject areas seemed due to peer effects: regardless of their own characteristics, students experienced stronger online performance decrement when they took courses in subject areas where a larger proportion of peers are at risk for performing poorly online.²⁰ Perhaps in online courses with a high proportion of students who are struggling in the online environment, interpersonal interactions and group projects are more challenging than they would be with the same group of students in the face-to-face setting; or perhaps instructors need to respond to highly demanding students, thereby decreasing the support to other students enrolled in the class. After removing the effects of measurable individual and peer characteristics, Xu and Jaggars further identified two subject areas that demonstrated significant online performance gaps: the social sciences (e.g., anthropology, philosophy, and psychology) and the applied professions (business, law, and nursing). These subject areas may require a high degree of hands-on demonstration and practice or require intensive interactions between faculty and students, which studies have suggested are more difficult to effectively implement in the online context (e.g., Bambara et al. 2009).

The results regarding the relative impact of online learning across subject areas are less consistent across studies, partly due to the different ways that researchers categorize courses. For example, using data from California community colleges, Hart et al. (2018) divide all courses into five broad disciplines (Social sciences, Business and management, Humanities, Information Technology, and Math) and find that the online performance decrement is particularly pronounced in math and humanities classes. Also using data from California community colleges, Johnson and Mejia (2014) provides a much more detailed subject categorization that includes 17 subject areas in total. They find that students enrolled in public and protective services, engineering, and media and communications suffer from the largest online performance penalty. Despite the variations in effect sizes, the online performance gaps are observed consistently across student subgroups as well as by different subject areas.

What Explains Online Performance Decrement?

Why do students struggle more in fully online courses? Practitioners and scholars increasingly acknowledge two critical challenges to successful learning in online environments: requirement of higher-level self-directed learning skills and greater difficulties in enabling effective human interactions. On top of these challenges,

²⁰The authors created an indicator, online-at-risk, defined as students who are academically less prepared (with a first-term face-to-face GPA below 3.0) and who also have at least one of the other demographic characteristics indicating greater risk of poor online performance (i.e., being male, younger, or Black).

individual differences in technology literacy and unequal access to computers and internet may also hinder some students' online learning effectiveness. For example, in 2010, only 55% of African Americans and 57% of Hispanics had high-speed Internet access at home, compared to 72% of Caucasian and 81% of Asians (Rainie 2010).

Requirement of Self-Directed Learning Skills

The literature in education psychology (e.g., Azevedo et al. 2004; Hannafin and Land 1997) converges to suggest that technology-enhanced student-centered online learning requires individuals to assume greater level of responsibility for this self-paced learning compared with traditional learning context. Unlike face-to-face courses where students attend course lectures at a fixed time, students working in a fully virtual environment are required to plan out when they will watch the course lectures and work on corresponding assignments. Even in high-quality online courses, students must learn course materials independently, manage time wisely, keep track of progress on course assignments, overcome technical difficulties and the feeling of isolation, and take the initiative to communicate with instructors and peers for questions and group assignments (e.g., Bambara et al. 2009; Ehrman 1990; Eisenberg and Dowsett 1990; Roll and Winne 2015). As such, online learning has been recognized as a highly "learner-autonomous" process that requires high levels of self-motivation, self-direction, and self-discipline to succeed (Corbeil 2003; Guglielmino and Guglielmino 2003).

Granted, these skills – generally falling under the broad rubric of "meta-academic" or "self-directed" learning skills – are important to success in any learning environment, but they are more critical to effective online education. A recent national report on online learning finds that more than two thirds of academic leaders believe that "Students need more discipline to succeed in an online course than in a face-to-face course" (Allen and Seaman 2014, p.23). Thus, while we would expect students with lower self-directed learning skills to fare more poorly in any course compared to their more-prepared peers, students with insufficient time management and self-directed learning skills may struggle particularly in an online learning environment. Yet, upon college entry, most students are unaware of or tend to underestimate the challenges associated with learning in a fully online environment (Bork and Rucks-Ahidiana 2013), nor have they been equipped with the learning skills that allows for control of the self-directed learning in online courses. Consequently, many students need additional support, investment, and scaffolding to move toward successful online learning that reflects self-directed and self-regulated philosophies.

Lack of Interpersonal Connections

The primary interactions in many of the online classes happen between an individual learner and the course management system with limited and sparse social

interactions. As a result, online courses not only create a physical separation between students and instructors; rather the physical separation is likely to lead to a psychological and communication gap, what Moore (1989) defines as “transactional distance.” The lack of interpersonal connections imposes at least two challenges to individual learners. First, due to the absence of physically present peers and their behaviors, social comparisons are limited. Extensive research from psychology indicates that making comparisons to peers is one of the fundamental ways through which students adjust and regulate their behaviors during the learning process (e.g., Blanton et al. 1999; Huguet et al. 2001). In traditional classrooms, peer comparisons happen naturally with the physical presence and visibility of classmates, where students can easily identify “desired” role models and learn from them. However, such affordance of social comparison is missing in most online courses. With sparse social and normative signals, online learners need to regulate their learning process independently, which can affect learning outcomes.

Second, computer-mediated communications are often criticized as inherently impersonal since nonverbal and relational cues – common in face-to-face communication – are generally missing based on the social presence theory. Initially posed by Short et al. (1976) and further developed by Gunawardena (1995), the theory of social presence posited that user satisfaction within a communication is fundamentally dependent on the degree to which a person is perceived as a real person, or the degree of “social presence.” An individual’s social presence also serves as a critical component of her social integration and sense of belonging (Tinto 1998). An extensive literature in psychology consistently indicate that an individual’s sense of belonging, defined as feeling acceptance, respect, and inclusion as well as feeling valued within a group, is particularly relevant to student learning outcomes, as common challenges become much more severe when students feel they are the only ones dealing with them (Fulford and Zhang 1993; Kearsley 1995; Moore and Kearsley 1996; Friesen and Kuskis 2013; Picciano 2001; Salmon 2002, 2004; Scardamalia and Bereiter 2006; Sherry 1995). Despite the high potential of leveraging advanced technology to facilitate peer-peer and student-instructor interactions, most of the online courses, particularly those offered at public open-access institutions, involve limited peer interactions and student-faculty interactions (Cox 2006; Jaggars and Xu 2016). Low levels of social presence may lead to increased feelings of loneliness and isolation (e.g., Grubb and Hines 2000; Robinson 2000), which has negative effects on course persistence and learning performance (Wei et al. 2012).

Why Is the Online Performance Decrement Particularly Wide Among Some Students?

The evidence reviewed above indicates that most students tend to perform worse in online settings compared to face-to-face classes, but the performance decrement is particularly strong among certain subpopulations. Why is online learning more challenging for some students than others? Successful online learning requires a high level of self-directed learning skills; yet, existing literature on learning autonomy suggests that

females, White students, and individuals with high prior educational attainment on average have higher level of self-directed readiness than males, Black students, and individuals with lower educational attainment (e.g., Hoskins and Van Hooff 2005; Jun 2005; Muse 2003; Stewart et al. 2010; Wiggam 2004). Studies also consistently support the notion that self-directness may have a positive developmental trajectory over the lifespan until the 50s (Reio and Davis 2005). As a result, older students may have higher levels of self-regulation and self-directed skills that would contribute to success in online course. These substantial variations in self-directed learning readiness and regulation skills across student subgroups imply that learners may not be equally predisposed to engage in online learning. As directly pointed out by Michael Zastrocky, research director for academic strategies for the Gartner Group, “there are some students who really do not do well outside a traditional classroom. There are some who do very well” (cited in Kokmen 1998, p. 1).

The notion that certain subgroups of students, such as racial minority students and academically underprepared students, may perform more poorly than other students in online courses would be unsurprising, given that these students tend to perform more poorly in college overall, due to systematic disadvantages in the quality of their primary and secondary schooling (Allen 1997; DuBrock 2000; Feldman 1993; Wiggam 2004). However, the possibility that students may vary in their ability to learn as effectively in online environment as they can in face-to-face delivery format warrants further policy attention, as it suggests that online learning may widen the equity dimensions of student performance gap by aggravating the academic challenges. For example, while one would expect students with lower levels of academic preparation to fare more poorly in any course compared to their better prepared peers, one might expect that performance gap to be even wider in the online context. In this regard, the continuing online expansion in college, especially in high-stake lower-division courses, may in effect exacerbate rather than improving performance gaps that are already observed in traditional face-to-face courses.

Strategies to Improve Online Education

What Online Design Features Predict Better Learning?

The effectiveness of online learning depends on how specifically an online course is designed and delivered. Therefore, the first step toward benchmarking online course quality is to identify specific course design features and instructional practices that have substantial impacts on successful online learning. Numerous studies have been conducted in the arena of teaching effectiveness, examining the online delivery format through theoretical approaches, student ratings, and faculty opinions (e.g., Grandzol 2006; Keeton 2004; MacDonald et al. 2001; Ralston-Berg 2010, 2011; Smissen and Sims 2002). To ensure the quality of online education, several educational associations have synthesized research findings from existing studies into rubrics to certify the quality of online courses, some of which have been widely adopted by higher education institutions, such as the “24 Benchmarks for Success in

Internet-Based Higher Education” created by the Institute for Higher Education Quality (Merisotis and Phipps 2000), Sloan Consortium (Sloan-C)’s “Five Pillars of Quality Online Education” (Moore 2005), and the widely adopted rubric “Quality Matters” developed by MarylandOnline.

While these online rubrics have provided a comprehensive set of recommended online instructional practices, research has not yet established a clear empirical link between these specific indicators and student learning outcomes. As a result, it is both difficult for instructors to choose among the wide variety of recommended practices to design their own online class, and for institutions to decide which items to use for measuring online course quality. In order to link various aspects of online course design features and student course performance, Jaggars and Xu (2016) grouped the specific instructional practices mentioned in the current rubrics into four general areas and explored the impact of each area on student end-of-semester performance in 35 online classes at two community colleges. The four areas are: (1) organization and presentation – course has an easy to navigate interface and helps students to identify and manage course requirements; (2) learning objectives and alignment – learning objectives and performance standards are clearly outlined so that students have information about what they need to know and will be asked to do; (3) interpersonal interaction – course includes plentiful opportunities for students to interact with the instructor, and other students; (4) technology – instructor integrates current technologies into courses in an easily accessible way. Their findings indicate that while well-organized courses with well-specified learning objectives are certainly desirable, these design features do not significantly predict student learning outcomes. Among the four areas of design features examined, only the quality of interpersonal interaction relates positively and significantly to student grades.

The links between effective interactions in online courses and student learning outcomes are also bolstered in several empirical studies that focus on student-faculty interactions and peer interactions in online classes (e.g., Bernard et al. 2009; Gunawardena and Zittle 1997). Bernard et al. (2009) conducted a meta-analysis of the experimental literature of online education that compares interaction treatments with other instructional treatments. The results from the meta-analyses suggest that designing effective interactions into online education courses, either through increasing interaction with the course instructor or with peers positively affects student learning. The adjusted average effect of 0.38 represents a moderate and significant advantage for interactions over alternative instructional treatments, including less prominent ones. In addition to evidence from experimental designs, studies that explore student and faculty perceptions of online learning also lend support to the importance of effective communication and interactions (e.g., Ralston-Berg 2010, 2011; Smissen and Sims 2002). Student and faculty seem to agree that effective faculty-student and student-student interactions are critical to effective online learning.

The importance of effective interpersonal interactions in online learning is closely in line with learning theories that nominate active interactions with faculty and peers as a critical predictor of general sense of belonging and college persistence (e.g., Tinto 1998), and in the online learning environment specifically (e.g., Anderson

2004). The “Theory of Online Learning” proposed by Anderson (2004), for example, argues that effective learning environment should afford many modalities of interactions between the three macro components namely students, instructors, and content. These interactions are described as critical to effective learning and take place when the learning environment is learner-centered, knowledge-centered, assessment-centered, and community-centered. Balaji and Chakrabarti (2010) in their theoretical review of online education also indicate that “interactivity has been considered as central tenet to the concept of ‘online learning theory.’”

The major advantages of effective interactions, according to these online theorists, are twofold: First, collaborative work and effective interactions can help build a learning community that encourages critical thinking, problem solving, analysis, integration, and synthesis, thus promoting deep understanding on a topic (Fulford and Zhang 1993; Kearsley 1995; Moore and Kearsley 1996; Picciano 2001; Scardamalia and Bereiter 2006; Sherry 1995). In addition, many researchers (e.g., Gunawardena and Zittle 1997; Shearer 2013; Young 2006) indicate that effective interactions can also reduce the sense of isolation and increase student satisfaction with online learning by enhancing the extent of social presence. Young (2006), for example, directly pointed out: “When interactive activities are carefully planned, they lead not only to greater learning, but they also enhance motivation” (p. 67).

Promises and Caveats of Specific Strategies to Facilitate Online Learning

Based on the growing knowledge regarding the specific challenges of online learning and possible course design features that could better support students, several potential strategies have emerged to promote student learning in semester-long online courses. It should be noted that the teaching and learning literature has a much longer list of recommended instructional practices; however, research on improving online learning focuses on practices that are particularly relevant in virtual learning environments. These include strategic course offering, student counseling, interpersonal interaction, warning and monitoring, and the professional development of faculty.

Strategic Online Course Offering

Above all, given students’ differential ability to successfully learn in an online environment, colleges may need to be more strategic in online course offerings. Considering that the convenience of online learning is most valuable to adults with multiple responsibilities (Jaggars 2014) and that older students typically have higher level of self-directed learning skills, college may be able to expand online learning more drastically in courses or programs enrolling a large proportion of adult learners. In contrast, in lower-division course where the majority of students are fresh high school graduates, colleges may need to provide more face-to-face interaction opportunities and support to the students. To combine the benefits from both delivery formats, one popular approach that has been adopted by many colleges is replacing

part of the traditional face-to-face time with online learning, or a hybrid course. This strategy could partly address issues of resource constraints but will also largely overcome the challenges associated with learning in a fully virtual environment.

Student Counseling

When students struggle academically, they may benefit from institutional resources and supports, such as counseling and tutoring services. However, since online students often choose the format in order to accommodate work and family responsibilities (Jaggars 2014), they may face challenges accessing these supports if they are delivered exclusively on campus. To better address the need of the growing online student population, especially those who enroll exclusively online, many colleges have started to provide comprehensive counseling and tutoring through the online format.

The California community college system, for example, established the Online Education Initiative (OEI) in 2014 to coordinate efforts in online education across campuses and has developed a series of services to support online learning (Online Education Initiative 2018). These services include 24/7 online tutoring in high-volume subjects, an online counseling platform that connects students to counselors from their own campus, and a set of online readiness tutorials that help students evaluate their readiness for online learning, as well as to provide students with information that may help them identify barriers to success in online learning and make plans to address those barriers. A recent report on the pilot testing of OEI supports suggests that students in OEI pilot courses outperformed their peers in non-pilot courses (Nguyen 2017). Although the evaluation was purely descriptive, it provides suggestive evidence that online learners may benefit from institutional resources and services tailored for online learning specifically. Of course, providing additional resources alone will do little to improve online course performance if students do not utilize them. For resources to be most effective, colleges should ensure that services are clear, easy to use, and accessible to all students.

Promoting Interpersonal Interactions

Interpersonal interactions are key to successful learning in any environment. Researchers have proposed a number of ways to strengthen interpersonal communication in fully online courses, including assigning students to peer groups and incorporating small-group problem-solving activities to facilitate student-to-student interactions (e.g., Walker and Leary 2009), and providing synchronous online discussion sessions to improve instructor-student interaction by mimicking traditional classroom interactions (e.g., Means et al. 2009). Researchers also agree that creating opportunities for students to meet face-to-face with their instructors could substantially improve student-instructor relationships and student motivation (e.g., Acitelli et al. 2003), although this can be challenging for some students since they may have enrolled in online courses due to work schedules, family commitments, and other obligations.

In current online courses, the most common form of face-to-face meetings takes place through office hours. However, studies suggest that many students are

uncomfortable seeking assistance from instructors through individual meetings (Cho and Kim 2013; Hrastinski 2006) and office hour visits are often brief and underutilized (Jaasma and Koper 1999; Nadler and Nadler 2000). Based on these observations, some researchers suggest providing structured group face-to-face meeting session as a substitute for office hours for answering student questions (Nadler and Nadler 2000).

While students may benefit substantially from a well-organized online course with high-level of peer interactions and student-faculty interactions, maintaining these high-level interaction requires instructors to devote a substantial amount of time throughout the course. For example, in a recent study based on a total of 35 online course sections selected from the most popular introductory academic subjects at two community colleges (Jaggars and Xu 2016), students in high-interaction courses reported that their instructors posted announcements on a regular basis to remind students about requirements and deadlines, responded to questions in a timely manner (typically, within 24 hours), provided multiple ways for students to communicate with the instructor, offered personal feedback on students' assignments, responded to individual student postings on the discussion forum, and were also more likely to ask for student feedback and responsive to that input. All these activities require strong time commitment from the instructor. As a result, colleges that contemplate benchmarking online course quality will need to take into account the workload on instructors in delivering a high-touch online class, as well as the cost of supporting instructors in using sophisticated technology infrastructure and instructional platforms.

Warning and Monitoring

One great advantage of the virtual learning environment is its potential to identify at-risk students in a timely way, based on individual online learning behaviors that might otherwise go unnoticed in face-to-face lectures with large class sizes (Romero and Ventura 2010). Based on student click-stream and learning analytics data, online platforms can closely record when and how students access online materials and complete assignments. Colleges could incorporate early warning systems into online courses in order to identify and intervene to help struggling students before they withdraw from the course. For example, Arnold and Pistilli (2012) used local course data to build predictive models that correlate disparate types of measures (such as online learning patterns, student surveys, and online learning diagnostics) with student course performance to identify students who are at risk of negative academic outcomes. Early identification of at-risk learning behaviors can enable course instructors or counselors to take more proactive steps to determine whether a student is experiencing problems and to discuss potential supports or solutions. Yet, the extent to which this strategy helps students succeed in online learning environments largely depends on the quality of follow-up supports that instructors and advisors provide.

Scaffolds for Online Learning Skills and Faculty Professional Development

Online courses require students to assume greater responsibility for their learning; thus, a successful online student may need high levels of self-regulation and

self-discipline (Azevedo et al. 2004; Corbeil 2003). Given the critical importance of self-directed learning skills and time management in online success, researchers argue that students, especially those from disadvantaged backgrounds, may need additional support or scaffolding in order to build those skills (Azevedo 2005; Quintana et al. 2005; Shapiro 2000). For example, some researchers (e.g., Ashraf et al. 2006; Giné et al. 2010; Kaur et al. 2015) argue that it would be beneficial to provide online learners with the opportunity to pre-commit to studying course materials at a specific day and time, which in turn may provide students with a self-control mechanism to avoid procrastination.

It is not clear whether most online courses incorporate such skill development or scaffolds when they are offered. However, a recent qualitative study at two community colleges (Bork and Rucks-Ahidiana 2013) found that many faculty expected their online students to begin courses already equipped with self-directed learning skills and did not believe that faculty should be responsible for helping students develop those skills. Colleges therefore may consider offering faculty professional development opportunities that inform online instructors of the challenges faced by students in online courses and ways to scaffold self-directed learning skills effectively.

Conclusion

Online education is a growing industry, and students are choosing online learning in ever-greater numbers. But is online education simply substitute for in-person education, or can it instead expand access to students who would not otherwise have enrolled in an educational program? A review of the existing research on this topic provides suggestive evidence that online education indeed has the potential to expand access to college. The convenience of online learning is particularly valuable to adults with multiple responsibilities and highly scheduled lives; thus, online learning can be a boon to workforce development, helping adults to return to school and complete additional education that could otherwise not fit into their daily routines. From an institutional perspective, online courses allow colleges to offer additional classes or programs, increasing student access to required courses. Given the value of these benefits, online courses are likely to become an increasingly important feature of postsecondary education.

Yet, the reasons given by students for selecting online versus face-to-face delivery format seem to suggest that students suspected compromised learning experiences in a fully online course. If students indeed learn less well on average in online courses than face-to-face courses, the current online expansion at higher education institutions may be at the cost of worse academic outcomes. A comprehensive review of the research literature reveals that online courses are substantially more prevalent at nonselective institutions that disproportionately enroll students from underrepresented groups and from lower socioeconomic background.

In the particular setting of nonselective institutions, students on average learn less well in online courses compared to similar students in face-to-face classes. Research finds that online learning can even exacerbate education inequality among different demographic groups that already exist in traditional face-to-face classrooms, since

successful online learning requires high level of self-directed learning skills that often impose additional challenges to students who are academically less prepared.

While future research is still needed to examine the overall net gain of the current online expansion in human capital accumulation at the postsecondary education sector, what we do know from the current literature is that the net benefits of online learning vary significantly across subgroups of students. While older students performed more poorly in online courses than in face-to-face courses, many of these students have family and childcare obligations and may need to take fewer courses or not be able to receive postsecondary education without the flexibility of online learning. For this population, a slight decrement in performance may represent a rational trade-off. In contrast, many students opt into online sections either because of limited availability of face-to-face sections or due to misconceptions regarding the challenges of distance learning. These students would be subject to performance decrement while not benefit from the flexibility of online learning at the same time.

Based on the growing knowledge regarding the specific challenges of online learning, institutions seem to be increasingly invested in benchmarking the quality of online courses and providing necessary supports to online students. Central to these efforts is the advocate for effective interpersonal interaction opportunities in a virtual learning environment. Yet, while some students may benefit substantially from a well-organized online course with high-level of peer interactions and student-faculty interactions, maintaining these high-level interaction requires instructors to devote a substantial amount of time throughout the course. Students in high-interaction online courses report that instructors posted announcements on a regular basis to remind students about requirements and deadlines, responded to questions in a timely manner (typically, within 24 hours), provided multiple ways for students to communicate with the instructor, offered personal feedback on students' assignments, responded to individual student postings on the discussion forum, and were also more likely to ask for student feedback and responsive to that input. All these activities require strong time commitment from the instructor. As a result, colleges that contemplate benchmarking online course quality will need to take into account the workload on instructors in delivering a high-touch online class, as well as the cost of supporting instructors in using sophisticated technology infrastructure and instructional platforms.

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Appendix A: Experimental and Quasi-experimental Evidence on the Impact of Online Learning on Student Outcomes

See Table 1.

Table 1 Experimental and Quasi-experimental Evidence on the Impact of Online Learning on Student Outcomes

Study	Setting	Sample	Experiment conditions	Description of online format	Methodology	Outcome measures	Key findings
Experiment studies							
US Department of Education (2009)	K-12 and higher education	45 studies	Face-to-face; blended; fully online	Unspecified	Meta-analysis	Unspecified	1. Positive effects of fully online and blended format on learning outcomes
Figlio et al. (2013)	Research universities	N = 312	Face-to-face; fully online	Online lecture with access to face-to-face meeting with instructor and graduate student teaching assistants	Random assignment	1. Course grade	1. Negative effects of fully online format on course grade
Bowen et al. (2014)	Public universities	N = 605	Face-to-face; blended	Interactive online learning system with some face-to-face instruction	Random assignment	1. Course grade 2. Comprehensive Assessment of Outcomes in Statistics (CAOS) 3. Course completion with a passing grade	1. No format effects on course grade 2. No format effects on CAOS post-test scores 3. No format effects on course completion
Joyce et al. (2015)	Public universities	N = 725	Face-to-face; blended	Online learning system with one 75-minute face-to-face lecture each week	Random assignment	1. Course grade 2. Course persistence 3. Class attendance 4. Study time	1. Negative effects on blended format on course grade 2. No format effects on course persistence 3. No format effects on class attendance 4. No format effects on study time

(continued)

Table 1 (continued)

Study	Setting	Sample	Experiment conditions	Description of online format	Methodology	Outcome measures	Key findings
Alpert et al. (2016)	Public universities	N = 323	Face-to-face; blended; fully online	Blended format: online lectures with a weekly face-to-face discussion session Fully online: online lectures with online synchronous discussion	Random assignment	1. Course grade	1. Negative effects of fully online format on course grade compared to face-to-face format; no difference between blended vs face-to-face format
Quasi-experiment studies							
Coates et al. (2004)	Public universities	N = 126	Face-to-face with online assignments; fully online	Online lecture with online synchronous or asynchronous discussion	2SLS correction	1. Course grade	1. Negative effects of fully online format on course grade.
Xu and Jaggars (2011b)	Community colleges	N = 22,279	Face-to-face; fully online	Unspecified	Propensity score matching	1. Course grade 2. Course persistence	1. Negative effects of fully online format on course grade 2. Negative effects of fully online format on course persistence
Xu and Jaggars (2013)	Community colleges	N = 22,624	Face-to-face (less than 50% online); Online (over 51% online)	Unspecified	Instrumental variable	1. Course grade 2. Course persistence	1. Negative effects of online format on course grade 2. Negative effects of online format on course persistence

Johnson and Mejia (2014)	Community colleges	N = 126,509	Face-to-face; Online (over 80% online)	Online lecture with either asynchronous or synchronous interaction	Instrumental variable	1. Course completion with passing grade	1. Negative effects of fully online format on course completion
Streich (2014)	Community colleges	N = 112,566	Face-to-face; blended; fully online	Unspecified	Instrumental variable	1. Course grade 2. Course persistence	1. Negative effects of fully online and blended format on course grade 2. Negative effects of fully online and blended format on course persistence
Xu and Jaggars (2014)	Community colleges	N = 498,613	Face-to-face; fully online	Unspecified	Individual fixed-effects	1. Course grade 2. Course persistence	1. Negative effects of fully online format on course grade 2. Negative effects on fully online format on course persistence
Krieg and Henson (2016)	Reginal comprehensive universities	N = 38,652	Face-to-face; online (over 75% online)	Unspecified	Fixed-effects with instrumental variable	1. Subsequent course grade	1. Negative effects of online format on subsequent course grade
Bettinger et al. (2017b)	Private for-profit universities	N = 230,484	Face-to-face; fully online	Online lecture with online discussion and group projects	Instrumental variable	1. Course grade 2. Subsequent course grade 3. Subsequent enrollment	1. Negative effects of fully online format on course grade 2. Negative effects of fully online format on subsequent course grade 3. Negative effects of fully online format on subsequent enrollment

(continued)

Table 1 (continued)

Study	Setting	Sample	Experiment conditions	Description of online format	Methodology	Outcome measures	Key findings
Hart et al. (2018)	Community colleges	N = 440,405	Face-to-face; fully online	Online lecture with either asynchronous or synchronous interaction	Student and course fixed effects	<ol style="list-style-type: none"> 1. Course grade 2. Course persistence 3. Course completion with a passing grade 4. Course repetition 5. Subsequent course enrollment 	<ol style="list-style-type: none"> 1. Negative effects of fully online format on course grade 2. Negative effects of fully online format on course persistence 2. Negative effects of fully online format on course completion 2. Negative effects of fully online format on course completion 3. Fully online format increases likelihood of same-course repetition 4. Fully online format decreases likelihood of subsequent course enrollment in the same subject

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Learning to Change and Changing to Learn

8

Conceptions of Teaching Improvement Through a Faculty-Centered Lens

Aimee La Pointe Terosky and Katie Conway

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Abstract

This chapter critically reviews the extant literature on teaching improvement in higher education, noting historical efforts by stakeholders to improve teaching yet suggesting that research has not centered on faculty members' perspectives from inside their own teaching efforts. We offer an alternative framework for thinking about and studying teaching improvement which, viewed through the lenses of faculty learning and faculty change, seeks to reposition faculty members at the center of this work. This chapter is divided into six sections: (a) overview of key terms and theoretical framing, (b) overview and critique of policy-driven and programmatic approaches that have dominated the teaching improvement landscape in higher education, critical discussion of the interdisciplinary literature on conceptualizations of what "good" teaching entails, and a view of teaching improvement through the lenses of (c) *learning* and (d) *change*, (e) an exploration of an example of teaching improvement efforts as viewed through these lenses, and (f) implications for future research.

Keywords

Teaching · Teaching improvement · Faculty · Learning · Change · Standpoint theory

Introduction

Although students attend college for many reasons and while the outcomes of postsecondary education are varied, the central role of colleges and universities is to provide an education to students – to ensure that students learn what the curriculum intends them to learn. This knowledge – along with calls for increased focus on student learning in recent years – has driven heightened attention to what it means to teach well and, in turn, to a focus on teaching improvement efforts. How, institutions are increasingly asking, can faculty teach better? This attention has resulted in noted accomplishments, including an expanded awareness around student engagement and the introduction of scholarly work that examines teaching practices (Beach et al. 2016; O'Meara 2005). However, despite a growing body of writings and programming on the topic, to date, we continue to have limited evidence that points to significant progress in improving the quality of college and university teaching or of lasting student learning from these change efforts (American Academy of Arts and Sciences 2017; Angelo 2001; Pallas et al. 2017).

Historically, policymakers, higher education leaders, and practitioners have viewed teaching improvement in two ways: as policy-driven (viewing externally driven teaching-related mandates pursued by higher education institutions and government/stakeholder entities will result in large-scale teaching improvement) and as

programming-based (believing that if faculty members master a skill set in teaching, then their teaching will improve and/or their engagement in teaching initiatives will increase). These approaches stand in contrast to a view of teaching improvement driven by the needs and priorities as understood by faculty members who carry it out. Although we wholeheartedly agree that a part of teaching improvement requires changes to policy (i.e., policy-driven approaches) and quality opportunities for faculty members to develop their skills (i.e., programming approaches), we present in this chapter a review of literature suggesting that comprehensive teaching improvement requires a still more complex treatment than responsiveness to external mandates or acquisition of technical teaching skills by faculty members.

This chapter presents a possible framework for understanding why prior efforts, anchored largely in policy and programming perspectives, have not yielded their desired outcomes and presents suggestions for how to remedy this going forward. We note that teaching improvement falls on the shoulders of faculty members, and in doing so, makes demands on them in two related, but distinct forms: demands to *learn* (including learning to teach differently and learning to engage with students and colleagues differently) and demands to *change* (including changing their conceptions of professional and scholarly identities and changes in how they respond to incentives and norms). As such, we focus this chapter on teaching improvement through the *lenses of learning and change*, and we hone in on the centrality of faculty members' own role in improving their teaching, a focus that has been applied inconsistently, at best, in prior teaching improvement efforts. Through the lenses of learning and change, we suggest that efforts to improve teaching are fundamentally opportunities whereby faculty are asked to learn – about teaching, about learning, about knowledge – and so we look to the literature on learning (in higher education but also, where relevant, the K-12 education and beyond) to better understand the role of learning in faculty members' teaching improvement. We also suggest that efforts to improve teaching are opportunities whereby faculty are asked to change – not just their teaching, but also in their very identities. To address the former, we look to literatures that draw on ideas developed by philosophers, psychologists, and sociocultural scholars and to address the latter, we look to literature from education and also from philosophy, behavioral psychology, and other relevant fields to understand how such efforts might be developed in order to support faculty as they consider what such changes might entail.

Overview of Chapter

In this chapter, we draw on an interdisciplinary literature to ignite a conversation around what it might mean to approach teaching improvement efforts with faculty at the center of that work, with an acknowledgment first and foremost of what is being asked of them as they learn to change the way they approach their teaching. The chapter is organized into five sections. In the first section, we define key terms and discuss our theoretical framework, which guides us in re-centering teaching improvement efforts around faculty learning and change. In the second section, we provide an overview and critique of policy-driven and programming approaches that have dominated the teaching improvement landscape in higher education. In the

third section, we provide a critical discussion of the interdisciplinary literature on conceptualizations of what “good” teaching entails (drawing on relevant research from the higher education literature as well as that from the K-12 context and beyond) and present a view of teaching improvement through the lens of *learning*, considering what kind of learning is asked of faculty members as they pursue good teaching. In the fourth section, we look at the same issue through another faculty-centric lens: that of *change* and, in doing so, consider what kinds of change may be required of faculty as they improve their teaching and what may make this form of change particularly challenging. Finally, in the fifth section, we look through two faculty-centered lenses – that of learning and change in teaching improvement – and consider implications for future research. In doing so, we suggest that, in addition to the policy-driven and skills-based interventions that have been invested in to date, teaching improvement efforts are more likely to be successful if they are framed with support for faculty to *learn to change* effectively.

Guiding Terms and Theoretical Framework

Before moving forward, we define the key terms and theoretical framework guiding this chapter. The key terms include: faculty, teaching, learning, change, and teaching improvement efforts. These definitions are intended to provide clarity around our use of the terms but should not be viewed as negating other meanings. We rely on Hegelian ideas about the importance of perspective to frame the chapter overall and also discuss these below, drawing as well on the work social scientists such as Sandra Harding who have considered related ideas in the context of faculty work.

Key Definitions

Faculty/faculty members refers to both tenure track and nontenure track professors (e.g., assistant, associate, or full professors, adjunct professors, visiting professors, clinical professors) who have obtained a high level of scholarly expertise in a subject matter area and are employed by a college, university, or postsecondary education setting (i.e., face-to-face, online, hybrid formats) to create learning experiences for traditional and nontraditional students.

Teaching is a complex and evolving term. We explore conceptualizations of teaching in the second section of this chapter. We ourselves define teaching as the design of a learning environment that facilitates learners’ acquisition of and growth in knowledge and skills, within the context of a subject matter.

We borrow from Anna Neumann’s (2005) definition of *learning*: “Learning, as changed cognition, involves the personal and shared construction of knowledge; it involves coming to know something familiar in different ways, or to know something altogether new, from within one’s self and often with others” (p. 65). Based on the focus of this chapter, we reserve a larger discussion on learning, and our framing

of teaching improvement through the lens of learning, to the third section of this chapter.

In defining the idea of *change*, we look not only to higher education but also to philosophical and organizational behavior literatures. The Merriam-Webster dictionary notes that “change” can be used as both a noun and a verb, both of which indicate a “transformation” or “alteration.” Two related definitions are “to replace with another” and “to become different.” These definitions suggest that change is understood to be significant – not a slight shift, but rather (to draw on another definition from the same dictionary entry) a “radical difference.” In the vernacular, then, change is understood to be a significant move from one state to another. We frame our fourth section of this chapter through the lens of change.

Teaching improvement efforts are the policies, initiatives, and actions taken at the level of the individual, the institution, or beyond (including within foundations, disciplinary associations, and government agencies, for example) and aimed at enhancing instructional practices and, subsequently, student acquisition of new or expanded knowledge and skills. Various examples of teaching improvement are highlighted throughout this chapter. We use the phrases “teaching improvement” and “teaching and learning improvement” interchangeably, as our working definition of teaching has the intended outcome of learning.

Theoretical Framework

Our assertion that faculty have not always been at the center of efforts to improve teaching practices may seem counterintuitive. Of course, administrators and others will assume faculty members have been at the very center of this work. We argue, however, that, while faculty members have been a *focus* of these efforts, their perspectives are rarely primary in the design and leadership of these efforts. Indeed, as we detail below, many, if not most, faculty development efforts have been conceived of, driven by, and executed by administrators and other nonfaculty. We argue that however well-intentioned, these individuals are fundamentally unable to see faculty needs from the precise perspective of faculty members themselves. In order to better understand this dynamic, we look to the Hegelian idea that relationships are asymmetrical, and that those standing in one position cannot, by definition, see things from the perspective as those standing in another position (Hegel 1807). That is, while administrators and others may seek to position faculty at the center of teaching-improvement efforts, the fact that their perspective on faculty work comes from their position as administrators (even in the case of administrators who were once faculty) means that those faculty perspectives cannot be fully centered in such efforts.

Social scientists and philosophers have long contended that there is always an asymmetry in relationships. For Hegel, this took the form of the master-slave dialectic wherein the party in power in a given relationship could not truly see the perspective of the other member of the relationship or vice versa (Hegel 1807). For Marx, Engels, Lukacs, and others following in Hegel’s ideological footsteps, this

idea entered into considerations of political dynamics, on the belief that social structures and one's position within those structures had the capacity to impact how one views everything (Marx 1972). For Marx and his peers, this meant that those in positions of political power would, by definition, be unable to see and understand a given situation from the perspective of those not in positions of power.

Others have applied this idea of being unable to fully walk in someone else's shoes in educational and also in broader social contexts. For example, Sandra Harding considers the role of a feminist epistemology in adding to our understanding of what makes knowledge accepted. She argues that knowledge originating in women's lives has long been subjugated within the realm of what is determined by those with power to make decisions about what is determined to be real knowledge (Harding 1991). Harding suggests, like Hegel and Marx, that those in dominant positions cannot fully see the perspective of those they oppress; that is, she argues, that it is not that those in positions of power are actively trying to suppress the perspectives of others but rather that they cannot fully see them in the first place. Smith (1987) places this in a modern institutional context, suggesting – in Harding's terms – that “the administrators and managers who constitute the ‘rulers’ in contemporary Western society” do not base their knowledge on the underlying experience of those doing the work but rather on tidied up images of those efforts, thereby missing the full perspective (Harding 1991, p. 128). We are suggesting a variant of this, one that is less about any implied power differential between faculty and those asking faculty to improve their teaching practices, and more about the extent to which individuals coming from different perspectives – as faculty and others (whether administrators, policymakers, or even other faculty acting beyond their traditional faculty roles) struggle to center, or even fully see, the other's viewpoint and priorities. In Neumann's (2012) words, “The world looks and feels different depending on where, in a structure of power, one begins one's thoughts, thereby establishing a standpoint” (p. 315).

Our goal in framing the contents of this chapter in this theory is to suggest that unless faculty are driving teaching improvement efforts, their perspective cannot be centered in that work. We do not seek to suggest that faculty are not in positions of power in university contexts, but rather that they have not historically been drivers behind institutional teaching improvement efforts and, as such, a critical perspective may be missing from this work. Through this focus, we honor the learning and the change required of faculty members to improve their teaching. We believe that a focus on the faculty member – the very people charged with teaching – is overdue when considering the external, top-down nature of many teaching improvement initiatives that has, essentially, sidelined faculty members' experiences in this important endeavor. In short, we note that higher education cannot authentically strive for improving teaching without thinking more from the perspective of those who are, ultimately, responsible for its improvement. We suggest that prior efforts have not gained traction not because they are irrelevant or misguided, but rather because they have largely overlooked the fact that – in addition to requiring time, motivation, and skills – efforts to improve teaching ask faculty to learn and change, which is – are – by their very nature – complicated. In this

view, providing incentives and training are insufficient on their own to get individuals to grapple with the processes of learning and change.

In the next section, we provide an overview of the incentives, policies, and training that comprises the dominant approaches to teaching improvement historically in higher education.

History of Teaching Improvement: Policy-Driven and Programming Approaches

In his book on the underachievement of colleges' approaches to teaching, Derek Bok asserts that, "No faculty ever forced its leaders out for failing to act vigorously enough to improve the prevailing methods of education. On the contrary, faculties are more likely to resist any determined effort to examine their work and question familiar ways of teaching and learning" (Bok 2006, p. 334). Consistent with this perspective, scholars have noted that while there is widespread agreement that there remains room for improved teaching in higher education classrooms, efforts to do so have not had as much success as might be expected given the persistence, variety, and quantity of those efforts (American Academy of Arts and Sciences 2017; Beach et al. 2016; Halpern and Hakel 2002; O'Meara 2005).

The literature on efforts to improve faculty teaching and student learning centers around two narratives, each of which suggests that faculty would improve their teaching if certain external conditions were met. The first narrative is that if faculty only had more time or better incentives, they would improve their teaching (Brownell and Tanner 2012; Sunal et al. 2001). The second dominant narrative is that if faculty only knew how to teach better, they would (Haras et al. 2017; Lieberman 2005). From these narratives arise two approaches driving improvement in teaching: one that focuses on changing policies (whether national or institutional) that will incentivize better teaching and the other that focuses on the provision of new skills to improve teaching practices. Overviews of each of these traditional approaches to improving teaching follow, along with some thoughts about the extent to which these approaches do not hold faculty perspectives at the center of this work and the implications of not doing so.

Policy-Driven Approaches to Teaching Improvement

"Our nation's investment in education has always implied a compact among the generations, in which each generation has accepted some responsibility for the success of the next" (American Academy of Arts and Sciences 2017, p. 6). This quote represents the historic grounding of higher education's mission as a learning enterprise, in which colleges and universities facilitate students' learning, as well as provide for the public good through research, teaching, and community engagement. During the second half of the twentieth century, the United States' higher education system started to expand access and academic offerings in hopes of providing

educational opportunities for students from a variety of socioeconomic and demographic backgrounds, rather than just the social and economic elite who have long benefited from this system (American Academy of Arts and Sciences 2017). With expanded access, higher education stakeholders are now turning from a concentrated focus on quantity (of higher education access and offerings) to quality (of effective teaching and learning). In the 2017 American Academy of Arts and Sciences report, *The future of undergraduate education: The future of America*, the authors speak to this new focus on quality:

What was once a question of quantity in American undergraduate education, of enrolling as many students as possible, is increasingly a challenge of educational quality – of making sure that all students receive the education they need to succeed, that they are able to complete the studies that they begin, and that they can do all of this affordably, without mortgaging the very future they seek to improve. (p. 1)

As such, teaching is central to what happens in higher education: the teaching and learning that happens in classrooms, and beyond, is at the center of the mission of colleges and universities.

Throughout much of the history of higher education in the United States, colleges and universities were granted relative autonomy in their teaching mission and were viewed favorably by society in general. However, in the latter decades of the twentieth century and continuing into present day, higher education stakeholders called into question the efficacy and effectiveness of the teaching taking place on college and university campuses (Arum and Roksa 2011; Colbeck 2002; Cross 1990; Drezner et al. 2018; Duderstadt 2001; Fairweather 2002; Lazerson et al. 1999). Recent public opinion polls have highlighted this concern, such as the Pew Research Center (2017) report, which found that the proportion of the population who believed that colleges and universities were having a negative effect on the country has risen from 26% in 2010 to 36% in 2017 among Americans. The trending view in contemporary American society is that the public increasingly scrutinizes institutions of higher education and their faculty members, especially in terms of the value of undergraduate teaching (Drezner et al. 2018; Newport and Busteed 2017; Pew Research Center 2017).

The rising negative perception around contemporary higher education's commitment to its teaching mission is fueled by a number of factors. One factor is that the faculty reward system prioritizes research over teaching, an emphasis increasingly found beyond research universities as even teaching-centered institutions strive for the prestige and increased rankings associated with research publications and grants (O'Meara 2007). As evidence of academe's lackluster commitment to teaching, critics point out that doctoral programs overwhelmingly emphasize preparation for research over pedagogical training for aspiring and current faculty members (American Academy of Arts and Sciences 2017; Austin 2002; Austin et al. 2008; Lieberman 2005). However, even in this broader context, faculty themselves value teaching: studies of faculty perceptions of the value of teaching found that faculty, especially faculty at research universities, perceive that they value teaching more so than their departmental colleagues, chairs, deans, and central administrators (Blackburn et al. 1980; Lindholm 2003; Wright 2005).

A number of writings, often research-based, have been spotlighted by major media outlets, such as Arum and Roksa's widely read 2011 book, *Academically Adrift*, in which they argue that the majority of today's college and university students are not learning critical thinking skills. Arum and Roksa (2011) drew on the evidence of 45% of their sample (of 2300 students at 4-year institutions) as scoring similarly in their fall freshman and spring sophomore years on the critical thinking assessment, the Collegiate Learning Assessment (CLA). They conclude that limited learning had taken place. Further, Arum and Roksa (2011) reported that more than a third of their participants spent less than 5 h per week studying and that only half were required to write 20 or more pages in their courses.

Aligning with this negative narrative on the effectiveness of college and university teaching are statistics on degree completion that also paint a bleak picture: only approximately 60% of students pursuing a bachelor's degree and 30% of students pursuing a certificate or associate's degree complete their degrees or credentials (American Academy of Arts and Sciences 2017). Moreover, the above statistics mirror societal inequities, with White and Asian, full-time students, and urban students outperforming their Black and Hispanic, part-time, and rural peers on measures of degree completion (American Academy of Arts and Sciences 2017; U.S. Census Bureau 2018). Failing to complete a degree results in student loan debt, oftentimes leaves students in a worse financial situation than before enrolling (American Academy of Arts and Sciences 2017), and carries the setback of reduced future earnings and professional prospects (Tamborini et al. 2015).

Another factor leading to increased public scrutiny is the financial cost of a college or university education, the burden of which has been increasingly placed on the shoulders of students and their families as state government funding of higher education decreases. Statistics on state government funding of higher education highlight a "17% decline in per-student state expenditures from 1991 to 2016" (Pallas and Neumann 2019, p. 19; see also American Academy of Arts and Sciences 2017). With declining state expenditures for higher education, students' borrowing rates have increased, with the average student borrowing more than 25% of the net cost of each year of college, which includes tuition and residential expenses (American Academy of Arts and Sciences 2017).

In response to declining views on the value of higher education, stakeholders emphasize the need to focus on the quality of undergraduate education provided to all students, especially in light of increased access to students of increasingly diverse demographic backgrounds and highly varying prior experiences. In its 2017 report, the American Academy of Arts and Sciences called for attention to quality in college teaching and learning by writing:

The breadth and diversity of today's undergraduate population represent a great national achievement, but only if we can ensure that all students receive the rigorous knowledge and preparation they seek when they enroll – the education they need to succeed in their personal, professional, and civic lives. This is, in fact, a critical test for the American commitment to education, as the decades-long effort to welcome more students from

different backgrounds, and to accommodate a more varied set of student expectations, has been so successful that colleges and universities, policy-makers, business and philanthropy leaders, and students and their families are now compelled to adjust to this next national challenge. (p. 1)

In sum, American society has shown signs of losing faith in the postsecondary system as regards teaching improvement (American Academy of Arts and Sciences 2017; Arum and Roksa 2011; Pallas and Neumann 2019). It is then no surprise that the public increasingly demands that United States' institutions of higher education be held accountable for student learning and demonstrates a return on students' investment in a postsecondary degree (Seifert et al. 2014).

With rising criticism of the value of higher education, government entities (i.e., state and federal policymakers), governance and accreditation bodies, and institutional administrators enacted policy remedies, namely by implementing new legislation and by issuing a number of reports and mandates, and legislation aimed at teaching improvement that would ultimately be tied to higher education funding and/or oversight. These government responses, and the concerns underlying them, are not new. Starting in the 1990s, state governments implemented legislation that focused on directing faculty within their teaching responsibilities. As one example, the Ohio state legislative mandated that faculty at 4-year public institutions increase their time spent on teaching by 10% (Colbeck 2002; Fairweather 2002; Fairweather and Beach 2002), thereby implying the belief that faculty members' increased time on teaching would, in turn, result in better teaching.

Another government action, the 2006 report by the *Spellings Commission on the Future of Higher Education*, sparked what is oftentimes referred to as the accountability or assessment movement, which called for institutions of higher education to demonstrate the value-added to students, specifically by identifying and assessing student learning outcomes. Student learning outcomes are observable and measurable statements that outline what students will know or be able to do when they have completed a course or a program (Millet et al. 2008; Reder 2007) and assessment is the “the systematic collection, review, and use of information about educational programs for the purpose of improvement of student learning and development” (Palomba and Banta 1999, p.4).

The Spellings Commission spurred regional accreditation bodies, the external agencies tasked with determining if educational institutions or programs meet applicable standards, to shift to outcomes-based assessments and accreditation. This new emphasis required institutions to define and measure a variety of student and institutional outcomes, such as student learning, student engagement, employability of graduates, and also to “demonstrate a continuous quality improvement mechanism in which measured outcomes would drive changes in institutional policies and practices” (Pallas et al. 2017, p. 3). Moreover, with outcomes-based accreditation, and the accountability movement more generally, higher education saw a rise in information collection through a variety of surveys and rubrics, including the National Survey of Student Engagement (measures first-year students and seniors on empirically confirmed good practices), the Collegiate Learning Assessment (measures problem-solving,

quantitative reasoning, and critical reading skills), and the American Association of Colleges and Universities' Valid Assessment of Learning in Undergraduate Education rubrics (measures employer-and-faculty determined learning outcomes) (Council for Higher Education Accreditation 2004; see also Pallas 2011).

Despite the policy-driven initiatives that have taken place, higher education scholars and stakeholders question whether or not, and in what ways, have these responses impacted teaching and student learning. The critiques focus on three key areas: (a) the definition of desired outcomes for student learning vis-a-vis good college teaching, (b) the origin and nature of teaching improvement policies, and (c) the tendency towards evidence of policy effectiveness.

In terms of defining outcomes for student learning or good college teaching, to date, teaching initiatives lack a deep, consistent understanding of what learning at the postsecondary level means and the specific conditions that promote it (Angelo 2001; Pallas and Neumann 2019; Pallas et al. 2017). Scholars also stress that limited understanding about teaching, learning, and assessment, on the part of the government, the public, the media, and postsecondary education stakeholders themselves, can result in assessment processes hindering, rather than supporting, teaching, and learning (Neumann 2014; Neumann and Bolitzer 2014). In this vein, Pallas and Neumann (2019) write, "...we have not developed a common vocabulary for describing good undergraduate teaching practice or a shared base of professional knowledge that allows us to identify it when we see and hear it in action" (p. 51).

The origin and nature of policy-driven initiatives for teaching improvement is a second area of concern. In a review of US school reforms, found that successful reforms are seen as solutions to a recognized problem and provide support in implementing the reforms, both of which are largely absent in much of the policy-driven measures discussed to date. Agreeing with Cohen and Mehta, critics highlight that policy instruments are often prescriptive in nature and driven from the top-down with limited support for implementation. As such, the people who design and oversee teaching and assessment policies tend to be distant from higher education classrooms or learning spaces, and are therefore not engaged nor responsible for implementing the instructional change that they themselves have created (Pallas et al. 2017; Webster-Wright 2009). Arum and Roksa (2011), the authors of the previously discussed book that questioned the value of higher education in terms of students' critical thinking skills, warned that the accountability movement could reduce the role of faculty within the academic core of higher education. By overlooking the voices of those responsible for teaching, Linda Darling-Hammond (1997), a K-12 educational researcher, warns that "bureaucratic solutions to problems of practice will always fail" (p. 67).

A final critique questions the evidence of the effectiveness of policy-driven initiatives. In a review of reform efforts for college teaching and learning between 1980 and 2010, Steven Brint (2009), a sociologist, noted a paucity of evidence of teaching improvement as a result of policy and programming initiatives. Although scholars recognize that the accountability movement has shifted the attention of colleges and universities towards assessment of student learning outcomes and student engagement, this shift is considered more in the vein of mandated compliance reporting on an

institution's performance (i.e., retention rates, graduation rates) rather than full faculty buy-in. Further, scholars highlight that little empirical evidence exists that directly examines improved teaching practices and enhanced student learning (American Academy of Arts and Sciences 2017; Pallas and Neumann 2019; Pallas et al. 2017). Moreover, much of the research that does exist is critiqued for exaggerated claims due to a lack of methodological rigor or sophistication (see Seifert et al. 2014).

With the above critiques in mind, we suggest that policy-driven approaches are limited in their scope and effectiveness in fostering improved teaching and learning in higher education. Nonetheless, the accreditation and assessment requirements remain. How, then, do institutions respond to these external demands to improve teaching? They do so largely through programming and practice interventions, which we discuss next.

Programming Approaches to Teaching Improvement

Alongside policy-driven adjustments to address concerns around the effectiveness of teaching in higher education, another approach, one we refer to as a programming approach, focuses on the pedagogical training and professional development of faculty members, typically by developing teaching-related programming through campus-based teaching centers or initiatives from disciplinary organizations and foundations.

Starting in the mid-1970s, colleges and universities established campus-based teaching centers or programs, and subsequently, a vast majority maintains a teaching center or program today. By definition, teaching centers are formally organized units within colleges and universities with the key responsibility of enhancing student learning by providing pedagogical theory and practice support to faculty (Lieberman 2005; Tiberius 2002). Just as higher education institutions are varied, so too are teaching centers in size, financial backing, and staffing, with many teaching center directors carrying the additional burden of fundraising for their centers. Typically, campus-based teaching centers provide programming that universally applies across multiple disciplines (topics covered can include classroom management, technology, grading, student engagement). However, some well-resourced institutions have discipline-based or specialized teaching centers and programming (e.g., instructional technology). Common programs offered include workshops on specific pedagogical topics, opportunities to participating in learning communities around teaching improvement, mentoring and individual consultations, repositories for publications and teaching-related resources, seed money, grants, or awards for teaching excellence or innovation, and assessment support (Beach et al. 2016; Plank and Kalish 2010). By the 1990s, some campus-based teaching centers expanded their scope beyond professional development for teaching to include initiatives around assessment, mission, developing scholarship to support teaching and learning, instructional technology support, and leadership development, to name a few (Haras et al. 2017; Lieberman 2005). With a broadening scope, some scholars and practitioners highlight that campus-based teaching centers face tensions around their mission and concentration areas.

Alongside the rise of campus-based teaching centers, organizations and programs focused on the field of professional development also emerged. The largest teaching-improvement related organization, the Professional and Organizational Development Network (POD), was founded in 1976 and today claims more than 1300 network members. POD's mission has three key prongs: (a) offering publications, conferences, consulting and networking to its members, typically around teaching improvement and the scholarship of teaching, (b) serving as an advocacy arm for informing and persuading educational policymakers and leaders of the value of professional development, and (c) working with assessment efforts related to the accountability demands for student learning outcomes.

Beyond POD, other programs have been developed to support the professional development of teachers, including the Science Education Initiative, created by Carl Wieman of the University of British Columbia. Portrayed in the literature as a highly effective program, the Science Education Initiative promotes teaching effectiveness in science education by establishing a postdoctoral fellowship that is embedded in an academic department and focused on combining disciplinary knowledge with teaching expertise. Further, the program determines what students should learn and scientifically measures what they are learning (Wieman 2017; see also Pallas et al. 2017).

Foundations and disciplinary associations that are grounded in specific subject matter expertise also started to assume leadership roles in teaching improvement over the past few decades (Arum et al. 2016). Although still not commonplace, some disciplinary associations have provided teaching support in a number of ways, including (a) establishing learning outcomes for foundational subject matter knowledge in a discipline, (b) researching instructional and assessment practices for fostering students' learning within specific disciplines, and (c) disseminating research-based teaching practices within particular disciplines and fields, oftentimes through journals and conferences. The role of disciplinary associations in teaching improvement is evident in workshop offerings on teaching that are now a mainstay at annual meetings historically reserved for traditional research presentations. For example, the Biology Scholars of the American Society for Microbiology was established to support evidence-based teaching practices in microbiology and biology education, as well as to produce a teaching-related journal, the *Journal of Microbiology and Biology Education*.

The literature on the effectiveness of teaching centers and teaching-related programs highlight indicators of effectiveness, for example, by claiming a cultural shift from traditional, transactional instructional strategies to more intentional approaches focused on student learning and engagement, thereby indicating a growing culture of teaching and learning improvement on campuses (Cook and Kaplan 2011; Lieberman 2005; Lieberman and Guskin 2003; Reder 2007). Moreover, an influential study in the field of professional development, The Tracer Project, found that faculty participating in professional development related to teaching and learning changed their teaching practices in ways that improved student learning, particularly around faculty learning how to design course assignments that more effectively facilitated students' critical thinking skills and how to expect more from student work (Condon et al. 2016).

Despite the aforementioned highlights, critics question if the programming approach is the most effective approach to teaching improvement, and these critiques center on three key areas of concern. First, campus-based teaching centers and programming are oftentimes criticized for following a format of episodic information presented in a didactic manner that is detached from actual practice (Gravani 2007; Webster-Wright 2009). For example, critics highlight that much of the teaching-related programming on higher education campuses focuses on generic skills that appeal to a broader audience of faculty members, such as general classroom management issues, technology in the classroom, leading discussions, and engaging students. Such programs are considered as devoid of attention to substantive learning grounded in a discipline or field (Colbeck 2002; Light and Cox 2001; Palmer 1998; Pallas et al. 2017; Shulman 1987). By focusing on prescriptive (“how to teach”) approaches to helping professors improve their teaching, the influence of discipline/field (Becher 1989), the complexities of teaching (Palmer 1998), the career stage (Kalivoda et al. 1994), and the identities of the teachers (Hansen 2001; Palmer 1998) are largely ignored. Further, scholars of professional development question if the discourse around teaching improvement purport a deficiency approach, rather than viewing professionals as self-directed learners (Webster-Wright 2009).

Second, programming for teaching improvement is viewed as insufficient, largely focused on short-term solutions rather than interventions likely to impact larger structural and cultural issues in higher education. Critics question if teaching centers and teaching-related programming are simply band-aids for larger problems that concern faculty workloads, reward structures, departmental cultures, and rising contingent faculty appointments (i.e., nontenure track faculty, adjunct faculty, and contingent faculty). In agreement, Angelo (2001) noted that much of the faculty resistance to teaching initiatives is grounded in concerns that research productivity is legitimized and rewarded in higher education, while teaching effectiveness is not. Further, although teaching improvement programming has been, of recent, integrating nontenure track faculty and instructors’ needs, there remains concerns that teaching improvement programming is limited for contingent faculty who now make up approximately 70% of the faculty/instructors in US higher education (Curtis 2014; see also Ginder et al. 2018).

Third, just as policy-driven approaches lack empirical evidence of effectiveness, a similar concern is voiced about the programming approach. Critics argue that the vast wealth of literature on the effectiveness of campus-based teaching centers and teaching-related programs consist of post-program evaluations completed by participants; critics also note that most of the evaluations lack robustness and sound assessment designs. Other criticisms of the programming approach is that its accompanying literature on the Scholarship of Teaching and Learning often takes the form of personal reflections, anecdotal accounts, and/or reports written by those responsible for designing or implementing the programs, thereby signaling potential bias in the reporting. A POD survey of teaching center directors found that directors acknowledged their limitations for assessing their centers’ work due to training, time, and resource restraints (Beach et al. 2016). However, we point out that a number of programs have broadened their empirical analysis of their program evaluation as of late. For

example, a number of empirical studies have been conducted via the National Science Foundation-funded CIRTl program, drawing on a wide range of methodological approaches including: campus-wide data, use of needs assessments, use of baseline and random sampling surveys, adoption of validated evaluation models, and use of longitudinal studies (see Austin et al. 2008; Barger and Webb 2006). Such empirical studies represent significant progress towards rigor in the Scholarship of Teaching and Learning. Scholars have urged their peers to expand this work beyond participants' perceptions to studies of impact on student learning, to name one needed angle (Beach et al. 2016; Seifert et al. 2014).

Summary: Policy-Driven and Programming Teaching Improvement Efforts

The success of higher education's response to critiques of teaching effectiveness and to externally driven accountability demands is unclear. In sum, teaching improvement efforts in higher education have a complex history, with many changes occurring since the latter decades of the twentieth century. Mandates from the US government, coupled with public sentiment and scholarly critiques questioning the effectiveness of the status quo in college and university teaching, resulted in top-down, external mandates requiring institutions to document student learning outcomes and value added of a college/university education. Grounded in the reality that it was no longer enough to simply deliver subject matter content, colleges and universities increasingly responded through assessment initiatives and the development of campus-based teaching centers and programming. With mixed results currently and many unanswered questions, it remains to be seen if these efforts can be coordinated and if, over time, empirical research on them yields evidence of their effectiveness.

We next turn to section "[Viewing Teaching Improvement Through the Lens of Faculty Learning](#)," which focuses on a possible pathway, that of the lens of faculty learning, for moving beyond policy-driven and programming approaches to teaching improvement.

Viewing Teaching Improvement Through the Lens of Faculty Learning

With the previously discussed critiques of the policy-driven and programming approaches in mind, we argue that an important next step is to analyze teaching improvement through the lens of faculty learning. As emphasized throughout this chapter, we argue that teaching improvement efforts have overlooked the faculty perspective, in particular neglecting what it is that faculty are called to learn as they strive to improve their teaching. In this section, we pursue this pathway by first reviewing the literature on learning, faculty learning, and professional learning. Then we turn to the content – or the *what* – faculty are asked to learn by highlighting four

conceptualizations of good teaching. Lastly, we find commonalities about what needs to be learned by faculty within the four conceptualizations of good teaching.

Defining Faculty Learning

Our first step in this section is to define learning, specifically the faculty learning that occurs within the context of college and university teaching. Historically, scholars and practitioners of higher education have concentrated on students' learning and experiences rather than on faculty learning about or in their teaching, and as a result, the definition of faculty learning is ambiguous (Neumann 2005, 2009; Webster-Wright 2009) and a more nuanced understanding about what it means, in depth, is warranted (Lattuca 2001, 2002; Menges and Austin 2001; Neumann 2005; Webster-Wright 2009).

The Oxford English Dictionary defines learning as: "to acquire knowledge or skill as a result of study, experience, or teaching." Together with Neumann's (2005) definition above of learning as "changed cognition," we suggest that in order to learn something new or something familiar in different ways, a learner needs to reflect on, question, and reformulate what they assume about knowledge (e.g., ideas, perspectives, information) and related skills (see Bransford et al. 2000; Dewey 1902, 1916; National Academies of Science, Engineering, and Medicine 2018; Neumann and Bolitzer 2014).

For Neumann (2005), learning is comprised of three essential elements: (a) the subject matter, (b) the learner, and (c) the context. First, in terms of the subject matter, Neumann argues that learning takes place around something, or the "what" is to be learned or grappled with (see also Dewey 1902, 1916; Palmer 2007). Second, Neumann asserts that learning cannot be separated from the person doing the learning, as learning is a unique and personal experience, oftentimes drawing on previously held beliefs, assumptions, or mental models (see also Bain 2004; Krieger 1991; National Academies of Science, Engineering, and Medicine 2018; Neumann 1998; Webster-Wright 2009). As such, learners bring prior knowledge, gleaned from their backgrounds and experiences, into a new learning situation (Bransford et al. 2000; Gonzalez et al. 2005; National Academies of Science, Engineering, and Medicine 2018; Neumann 2005; Shulman 2004). Lastly, Neumann highlights that learning occurs within contexts that, in turn, shape learning (Schwab 1983; Wenger 1999; Wortham 2006).

How might we connect the above definition of learning to faculty members learning about their professional responsibility of teaching? Despite recent, albeit limited, programming efforts on pedagogical preparation for aspiring faculty members a void remains in preparing or transitioning aspiring faculty into their roles as teachers (Pallas et al. 2017). "...as of this time," reflect Pallas and Neumann (2019), "no one takes systematic responsibility for preparing college teachers – neither the graduate schools from which they emerge, nor the institutions that hire them to teach" (p. 136). Because of the dearth of teaching preparation and the limited, yet growing, literature on faculty learning in and about their teaching, we next turn to a

relevant literature on professional learning, derived from the fields of professional development and K-12 education, as a potential pathway for connecting learning and for learning in and about teaching.

Within the extant literature, professional learning is defined as obtaining and expanding knowledge and skills that enhance individuals' capacities to effectively perform the responsibilities related to their careers, as well as to engage in critical reflection that fosters continuous improvement (Webster-Wright 2009). Several actions foster professional learning. However, we will highlight two that are most relevant to this chapter's purpose: engagement with authentic problems of practice and critical thinking and reflection.

Scholars of professional learning highlight that professionals learn through engagement with "authentic problems of practice," in which they are called on to identify an issue in their work, reflect on the issue, determine appropriate changes to address the issue, and assess the effectiveness of the changes (Webster-Wright 2009, p. 703; see also Lieberman and Miller 2001). In speaking to problems of practice, Donald Schön (1983) writes about the "messy swamp of practice" (p. vii), which signals that the knowledge and skills applied in theory or laboratories need to stand up to the test of complex, real-world contexts. In agreement, adult learning theorists highlight that the learning that takes place in professional settings is often informal, for example, by seeking new knowledge/skills that address a specific concern or task to complete (Tannenbaum et al. 2010; Webster-Wright 2009). Therefore, efforts to enhance professional learning are most effective when grounded in practice and guided by individuals' motivations to learn about and in their practice (National Academies of Science, Engineering, and Medicine 2018).

In order to maximize learning through authentic problems of practice, individuals are called on to engage in critical reflection, defined as analyzing espoused and enacted practices in ways that inform future actions (Dewey 1916; Schön 1983; Rodgers 2002). Critical reflection propels faculty to question and challenge their assumptions in ways that, hopefully, foster changes in their teaching practices (Brookfield 1987; Freire 1974; Katz et al. 2005; Murrell 2001; Webster-Wright 2009). Through critical reflection, faculty are confronted with their taken-for-granted assumptions, and in turn, develop new and different ways to articulate, implement, and evaluate their thinking and choices in their teaching practices (Brookfield 1995). In short, critical reflection links thinking and action (Boud et al. 1985; Schön 1983, 1987).

According to an extensive literature review conducted by the National Academies of Science, Engineering, and Medicine (2018), critical reflection is considered a metacognitive skill, defined as "the ability to reflect on or monitor one's own cognitive processes," and a self-regulatory skill, which indicates the "capacity to understand and direct one's own learning" (National Academies of Science, Mathematics, and Medicine 2018, pp. 72–73). The same literature review found that both metacognition and self-regulatory skills are significant to learning, in large part because learning is maximized when learners direct their own learning (National Academies of Science, Engineering, and Medicine 2018). Although studies on how to facilitate metacognitive and self-regulatory skills remain limited, studies have shown that these skills, as well as critical reflection, can be learned through practice

and feedback (Dewey 1933; National Academies of Science, Engineering, and Medicine 2018; Rodgers 2002).

In summary, learning is viewed as changed cognition, through which individuals obtain new knowledge and skills or come to view and understand prior knowledge in new ways. Within learning, three elements play significant roles: the subject matter to be learned, the prior knowledge and background of the learner, and the context in which the learning takes place. When placed in the context of faculty learning in and about their teaching, the literature on professional learning guides us to think about faculty learning through authentic problems of practice and critical reflection that fosters metacognition and self-regulatory skills.

In order to apply the lens of learning to teaching improvement, we must first ask what it means for teaching to be improved, or in other words, *what* is to be learned if teaching is to be improved. Following an extensive review of the literature, we outline four commonly highlighted conceptualizations of what good teaching would look like. The four selected conceptualizations include: student-centered, pedagogical content knowledge, culturally relevant pedagogy, and convergent teaching, which we elaborate on next.

Conceptualizations of Good Teaching

A few notes about the four conceptualizations of good teaching are in order. First, the following conceptualizations of good teaching are presented through different models; however, we acknowledge that many of these conceptualizations are more interrelated than presented in the following sections. Second, conceptualizations of good teaching can no longer solely focus on what goes on in traditional college and university classrooms, as distance education has rapidly increased over the past two decades, especially at the graduate level (Ginder et al. 2018). Distance education, also commonly called online learning, is defined as synchronous or asynchronous instruction that uses technology, such as the Internet, to teach students who are physically separated from the teacher/faculty. Third, the extant literature on teaching improvement emphasizes undergraduate teaching, yet, we argue that many of this chapter's models of good teaching practices speak to graduate education as well. Fourth, any discussion of faculty learning about and in their teaching needs to consider both tenure-track and nontenure track faculty. Nontenure track faculty (i.e., adjunct, contingent faculty) are hired on a short-term or contractual basis for the primary purposes of teaching and account for at least half of all instructional faculty across all types of undergraduate institutions, with a range of 50% of the faculty at public research universities and more than 80% at community colleges (American Academy of Arts and Sciences 2017). As we examine faculty learning in conceptualizations of good teaching, we acknowledge that nontenure track faculty face unique challenges in their teaching and in their learning about teaching (e.g., lack of office space or time on campus, no compensation for course preparation or professional development), and that these challenges are rarely addressed in institutional policies on teaching improvement (Kezar and Sam 2011).

Traditionally, teaching has been modeled as a unidirectional action whereby an expert (the teacher) distributes knowledge and skills to a novice (the learner), typically in the format of lectures that conclude with testing the material presented (Barr and Tagg 1995). This teacher-centered model has at times been referred to as the “sage on the stage” and holds to the notion of knowledge as an objective, transferable object (Webster-Wright 2009). Paulo Freire (2000), a renowned educator and philosopher, coined the phrase, “banking model,” to depict the one-directional, top-down approach of depositing knowledge into students’ minds and withdrawing information through testing. As such, students are depicted as knowledge deficit and professors are depicted as knowledge providers (Webster-Wright 2009). Faculty members are responsible for the preparation of subject matter content (i.e., lectures, handouts, slides) and assessments (i.e., tests, quizzes), while the onus for learning rests on the learner (Barr and Tagg 1995). In this model, good teaching is demonstrated by a masterful lecture that highlights the faculty member’s subject matter expertise. Despite the dominance of the teacher-centered model throughout the history of US higher education, it has not been without its critics, especially in more contemporary literature. In many ways, the following four conceptualizations of good teaching express the critiques and offer responses.

Student-centered models of teaching. In the first half of the twentieth century, John Dewey (1933) noted that learners are integral to the experience of learning and should not be treated as spectators in their own learning. In contrast to the teacher-centered model previously described, student-centered models reflect a constructivist framing, whereby students learn by actively creating and recreating their own previously held mental models of the world, or portions thereof, rather than by receiving and copying information from the world (Angelo 2001; see also Freeman et al. 2014). In agreement, higher education scholars, Barr and Tagg (1995), wrote an influential article detailing a paradigm shift from colleges and universities being places that “provide instruction” to places that “produce learning” (p. 13). According to Barr and Tagg (1995), the purpose of education, in the “learning paradigm” is “not to transfer knowledge but to create environments and experiences that bring students to discover and construct knowledge for themselves, to make students members of communities of learners that make discoveries and solve problems” (p. 15). As such, proponents of student-centered teaching ask this foundational question to faculty members: “Do you know what your students are learning?” which differs from the question: “Do you know what you are presenting?”

Higher education scholars and practitioners have offered instructional strategies for putting the student-centered model into practice. In 1987, Arthur Chickering and Zelda Gamson laid out several principles of good practices in undergraduate education that move beyond the distribution of knowledge vis-a-vis lecturing, instead promoting cooperation among students, active learning, prompt feedback to students, time on task, high expectations, and respect for diverse students and ways of knowing. Over the years, scholars have conducted numerous studies on Chickering and Gamson’s good teaching practices, finding that “various measures of the good practice dimensions are significantly and positively linked to desired aspects of cognitive and non-cognitive growth during college” (Pascarella 2006, p. 254). However, other scholars

note these studies are limited by their study designs, in that they consider practice in isolation or as situated only in a single site (Seifert et al. 2014).

More recently, George Kuh, in collaboration with the Association of American Colleges and Universities (2008) recommended infusing higher impact practices in undergraduate education. High-impact practices require use of active learning activities that promote student engagement in first-year seminars and experiences, core courses, learning communities, writing-intensive courses, collaborative assignments and projects, undergraduate research, diversity and global learning, service learning, internships, and capstone courses and projects (Kuh 2008). According to Kuh (2008) and others, high-impact practices have been correlated with positive educational benefits for students from a wide range of backgrounds, although students of color and students from low-income families are less likely to participate. Moreover, studies indicate that one of the main benefits of high-impact practices is student engagement, defined as the degree of interest, attention, motivation, and active participation of students in their learning environments. Colleges and universities assess levels of student engagement through the National Survey of Student Engagement (NSSE) and the survey results remain a significant data source in accreditation processes.

To summarize, in student-centered teaching models, good teaching is conceptualized as taking place when the learner is at the center of the learning process with the faculty member guiding their learning through effective learning opportunities. Although numerous studies have demonstrated that student-centered models, such as active learning, result in better academic outcomes for students over traditional teacher-centered models (i.e., lecturing) (see meta-analysis by Freeman et al. 2014), other scholars have critiqued the model around concerns of lacking course organization, education serving as entertainment, and prioritizing student engagement over student subject matter learning. The first concern, the lack of course organization, refers to faculty capitulating their responsibility for structuring the course in the name of allowing students greater power and engagement in the classroom. The second critique speaks to a narrative that education has become a form of entertainment, with student enthusiasm being the critical focus of a course. Related to the other two critiques, the third critique is a concern of prioritizing student engagement at the detriment of subject matter learning (Pallas et al. 2017; see Neumann 2012).

In response to concerns that the pendulum on the student-centered model swung a bit too far away from the significance of subject matter and the role of the faculty member, another model of teaching, that of pedagogical content knowledge, for rebalancing that gap, which is the focus of the next section.

Pedagogical content knowledge-driven models of teaching. Whereas the work of Chickering and Gamson and Kuh focused on teaching practices that can be universally applied across courses, other scholars conceptualize good teaching as integrating subject matter and pedagogy. Starting in the 1980s, Lee Shulman of the Carnegie Foundation for the Advancement of Teaching and Learning coined the term, pedagogical content knowledge, which emphasizes that teachers design learning experiences grounded in an understanding of how particular students learn a specific subject matter in a particular setting (Shulman 1987, 1999, 2004).

Pedagogical content knowledge combines subject matter knowledge (the discipline-based content that comprises a discipline) and general pedagogical knowledge (the practices that a teacher uses to manage a classroom and establish an effective learning environment) so that faculty members develop effective learning opportunities for students. Neumann and Bolitzer (2014) write, “. . . in learning the onus is not and cannot be only on the learner. To learn, a person must have an opportunity to do so, ideally with a teacher (or teacher figure) who deeply understands the learner and the stuff being learned, and who creates bridges between the two” (p. 98). Although Shulman was writing for a K-12 audience, higher education scholars have since written about the value of pedagogical content knowledge for college and university student learning.

In sum, good teaching is conceptualized, in part, as faculty members’ mastery of a discipline, including a discipline’s core ideas, structure, and inquiry practices (Bruner 1960; Goldman et al. 2016; National Academies of Science, Engineering, and Medicine 2018; Pallas and Neumann 2019). “The teaching and learning of structure, rather than simply the mastery of facts and techniques,” writes Jerome Bruner (1960), “is at the center of the classic problem of [knowledge] transfer” (p. 12). With mastery of a discipline, good teaching calls on faculty members to design pedagogically sound learning experiences that build students’ capacities to think like experts in the discipline and “engage in the type of deep learning that will enable them to go beyond the memorization of facts” (National Academies of Science, Engineering, and Medicine 2018, p. 143).

Although pedagogical content knowledge addressed critiques that subject matter was missing in student-centered teaching models, this model has faced criticisms as well, particularly around overlooking the role of students’ backgrounds and communities in their learning and assumptions about what counts as legitimate or established knowledge within a discipline. In the next section, we examine the model of culturally relevant pedagogy, which addresses the role of students’ prior knowledge and communities in their learning, and critiques power structures in formal schooling and disciplines.

Models of teaching grounded in culturally relevant pedagogy. Over the latter decades of the twentieth century and early twenty-first century, educational researchers have increasingly questioned if models of good teaching overlook students’ backgrounds and prior learning. Recently, a National Academies of Science, Engineering, and Medicine (2018) literature review of the learning sciences noted: “School failure might be partly explained by the mismatch between what students have learned in their home cultures and what is required of them in school” (p. 21). This mismatch is particularly relevant in light of changing student demographics in higher education. Between 1976 and 2016, the percentage of domestic undergraduate students self-identifying as white dropped from 83% to 56%, while students identified as Black, Latinx, Asian, or two or more races increased (American Academy of Arts and Sciences 2017, see Table 306.10).

In an effort to address concerns that teaching models, including pedagogical content knowledge, are sidelining the role of students’ backgrounds and prior cultural knowledge in their learning, educational researcher Gloria Ladson-Billings

(1995) introduced the concept of culturally relevant pedagogy at the K-12 level, a concept that has since been applied to higher education. Culturally relevant pedagogy refers to teaching practices that elevate and relate students' cultural knowledge and experiences to their learning, especially in ways that facilitate student academic achievement, cultural competence, and ability to question power structures in society (Ladson-Billings 1995; see also American Academy of Arts and Sciences 2017).

Culturally relevant pedagogy is often referred to as an asset-based model, meaning that it serves as a counternarrative to deficit notions around students' communities and background knowledge, especially underrepresented students (National Academies of Science, Engineering, and Medicine 2018). The concept of funds of knowledge does the same, for example, by recognizing the wealth of knowledge (i.e., understandings, skills, resources) available within students' families, communities, and personal background. Specifically, Luis Moll and colleagues define funds of knowledge as "the valuable understandings, skills, and tools that students maintain as part of their identity" (National Academies of Science, Engineering, and Medicine 2018, p. 142; see also Gonzalez et al. 2005; Moll et al. 1992). A key goal of asset-based teaching models is to engage students "from non-dominant backgrounds by guiding them to see connections between their own cultural experiences and the disciplinary ideas and ways of thinking being taught" (National Academies of Science, Engineering, and Medicine 2018, p. 141; see also the work of Gutiérrez 2008 on disruptive pedagogy or third spaces in National Academies of Science, Engineering, and Medicine 2018). In other words, culturally relevant pedagogy strives to validate and leverage students' prior, cultural knowledge in order to reduce the dissonance between home and school (Ladson-Billings 1995; Gonzalez et al. 2005; Moll et al. 1992; National Academies of Science, Engineering, and Medicine 2018), and foster students' capacity to address social injustice and oppressive educational systems (Ladson-Billings 1995). In sum, good teaching in asset-based models, such as culturally relevant pedagogy, requires an awareness and appreciation of students' cultural backgrounds. With this awareness, faculty members can then design learning experiences that integrate the prior knowledge shaped by students' backgrounds and communities with new subject matter knowledge.

Similar to the other models of good teaching, critics question culturally relevant pedagogy around two key premises: first, that it de-emphasizes the role of subject matter and second, that prior knowledge can also hinder learning when fast-held mental models are maintained through bias and existing schema, thereby potentially resisting new problems, processes, and knowledge (National Academies of Science, Engineering, and Medicine 2018). In our final conceptualization of good teaching, we introduce the convergent teaching model, which addresses the tension of aligning subject matter and students' prior knowledge and backgrounds.

Convergent teaching. Building on the conceptualizations of good teaching in pedagogical content knowledge and models of culturally relevant pedagogy, Pallas and Neumann (2019) introduce convergent teaching, which strives to integrate students' backgrounds and a discipline's subject matter. Pallas and Neumann (2019) define convergent teaching by noting that they "use the term 'convergent' primarily to convey a teacher's simultaneous and enveloping attention to subject matter, the

learner, and the context or milieu in which learning takes place. ‘Convergent’ also conveys joint attention to cognition, emotion, and identity as attributes of individual learners” (p. 58). Convergent teaching is conceptualized through three elements: (a) targeting core ideas (i.e., identifying foundational content of a discipline or field), (b) surfacing students’ prior knowledge vis-à-vis their contexts (i.e., locating students’ prior knowledge from their cultural, personal, and academic background), and (c) navigating prior knowledge and new knowledge (i.e., identifying linkages and working through the differences between prior knowledge and new knowledge, ideas and perspectives (Pallas and Neumann 2019).

Elaborating on the three elements comprising convergent teaching, Pallas and Neumann (2019) highlight that targeting includes both the selection of a discipline’s core ideas (i.e., the building blocks of a subject matter) but also the structuring of course materials, activities, and assessments in ways that bridge prior and new knowledge for students. Relatedly, the second element of surfacing calls on faculty members to “unearth. . .students’ prior knowledge for learning,” (p. 4-1) and heighten awareness for students around how their prior knowledge helps or hinders their new learning (see also Bain 2004). Lastly, the element of navigating calls on faculty members to create learning experiences that build bridges between students’ prior knowledge and new knowledge, including alternative perspectives. “The teacher must be deeply knowledgeable about the subject’s core ideas,” writes Pallas and Neumann (2019), “and be willing and able to imagine them in different ways” (p. 75).

In sum, good teaching in the convergent model is depicted as faculty members creating learning environments that are grounded in core disciplinary ideas and in an awareness of how students’ backgrounds and prior knowledge (cultural, personal, and academic) shapes and connects to new knowledge acquisition. An example of convergent teaching in practice was provided by Neumann (2012) in her presidential speech at the annual meeting of the Association for the Study of Higher Education in which she highlighted a philosophy professor who connected *The Matrix* (a popular movie, well known to students in class and thus an aspect of their prior knowledge) to Cartesian doubt, the topic they were studying. By bridging (i.e., navigating) a movie premised on humans living in a dream-like state governed by computers (i.e., surfacing) and a seminal philosophical concept that questions our senses as accurate sources of knowledge (i.e., targeting), the philosophy professor demonstrated a conceptualization of good teaching.

Applying Faculty Learning to Conceptualizations of Good Teaching

In the above sections, we provided four conceptualizations of good teaching presented in the extant literature; we argue that conceptualizations of good teaching are, in part, the “what” of faculty learning that should be central in teaching improvement efforts. But what exactly are faculty asked to learn within these four conceptualizations of good teaching? In response, we highlight three overlapping areas of learning common among the four conceptualizations, which include bridging subject matter expertise and teaching practices, building faculty relationships with students and colleagues, and

forging new professional identities, which we elaborate on next. As a note, these three overlapping areas of learning are not exhaustive, but the literature features them prominently.

Bridging subject matter expertise and teaching practices. *In conceptualizations of good teaching, faculty learn how to bridge their own subject matter expertise with teaching practices that best facilitate their students' learning.* This is not a new idea and yet remains elusive in many undergraduate and graduate courses. In this view, subject matter expertise is not simply a means to an end. Instead, mastering a subject matter is a way for faculty to better understand the core ideas, structures, and ways of thinking in their discipline, all the while considering how then to best facilitate a specific group of students' learning a specific subject matter (Pallas et al. 2017). In other words, faculty members need to learn how to negotiate and align a body of knowledge (i.e., subject matter) with an ever-changing group of learners (Reder 2007), especially as learners grapple with the tension between new knowledge or perspectives that might conflict or augment previously held knowledge (Bain 2004; see also Heasley et al. 2018). To this idea, Neumann (2004) writes:

A scholar may hold onto her subjects of study through memory that spans her career, but the new and changing contexts within which these subjects are instantiated will force her to think about them in different ways through time. The subjects will change and she will learn as long as the memory of subject remains meaningful to her, and as long as context itself is part of her thought. (p. 24)

The literature on conceptualizations of good teaching is clear here: subject matter matters in the learning experience, but it is not sufficient in and of itself to improve teaching. Instead, if faculty members strive toward good teaching, learning how to apply subject matter expertise to pedagogical and contextual considerations is of utmost importance.

Building relationships with students and colleagues*In conceptualizations of good teaching, faculty need to learn how to build relationships with their students and colleagues.* The American Academy of Arts and Sciences 2017 Report highlights that the primary factor in a quality education is the “teaching and learning relationship between faculty and students,” noting that these relationships result in “increased retention and completion rates, better grades and standardized test scores, and higher career and graduate school aspirations” (p. 12). Therefore, faculty learning cannot be separated from the relational aspects of teaching. In her research on post-tenure faculty, Neumann's (2009) participants viewed connecting with students around subject matter as a source of learning and a space for their own passionate thought about their disciplines.

If faculty want to build relationships with their students for the sake of teaching improvement, what might need to happen? A first component of faculty learning is gaining awareness of their students' backgrounds (e.g., family, community, schooling), as these contexts shape students' prior, current, and future learning. Beyond gaining awareness, faculty also need to learn how to shift from deficit- to asset-based thinking in terms of their students, with the goal of coming to see students' cultures and past

experiences as resources or tools for learning subject matter content. Relationship-building for awareness and asset-based thinking is particularly important in light of the differing backgrounds that often exist between faculty and students, as well as the fact that many faculty members teach at institutions that differ from those that they attended (see Terosky and Gonzales 2016). Some examples of practice for how faculty might broaden their awareness of students' background include: interviewing students, talking with students over coffee, collecting written information or reflections on students' past experiences, attending student-run cultural events, regularly asking students after class what they are learning, and/or creating learning opportunities that allow for students to integrate their own personal experiences with their classroom learning. All of these examples can establish links between students' funds of knowledge from their outside-of-school experiences with the conventional knowledge inside-of-school (Moje et al. 2004).

Building on this idea of linking outside-and-inside of school knowledge, Ladson-Billings (1995) asserted that effective relationships between teachers and their students were a key to linking students' identities and cultural knowledge to subject matter learning. Pallas and Neumann (2019) elaborated on this idea: "A teacher who is familiar with students' prior knowledge can intercede, helping them to... [leverage prior knowledge for new knowledge]" (p. 89). As such, faculty members not only need to focus on how to teach core subject matter ideas to students but they also need to attend to students' prior knowledge, including how they respectfully guide students through times when new and prior knowledge conflict. By being aware of who their students are, faculty members are more likely to learn where their students might struggle with new knowledge or where there might be natural connections between students' backgrounds and core ideas in a discipline. Through this form of faculty learning, faculty are better equipped to see their subject matter through others' eyes, and then to develop the appropriate learning environments to help learning materialize.

In addition to relationship-building with students, faculty also need to build relationships with colleagues around teaching improvement, as past research shows the significance of intellectual collegiality (Brint 2009; Lindholm 2003; Neumann 2009; Ponjuan et al. 2011). Unfortunately, many faculty face what Shulman (1993) refers to as "pedagogical solitude," whereby their teaching practices remain isolated from collegial support for growth (p. 6; see also Reder 2007).

Forging new professional identities. *In conceptualizations of good teaching, faculty learn how to forge new professional identities.* "Identity is a person's sense of who she is. It is the lens through which an individual makes sense of experiences and positions herself in the social world" (National Academies of Science, Engineering, and Medicine 2018, p. 126). In expanding beyond teacher-centered practices, faculty members do need to grapple with their professional identities in two key ways. First, the four conceptualizations of good teaching require a paradigm shift that focuses teaching on what the student does rather than on what the faculty member does (Angelo 2001). The roles of "guide on the side," or coach, are new and unfamiliar for many faculty members and therefore require learning and adjustments, on the part of the faculty member, about their new professional identity (Angelo 2001, 1997; Rodrigues 2005; Terosky and Heasley 2015; Webster-Wright 2009); the same

could be noted for students as they move from passive to active learning models. Second, another professional identity shift is the notion that teaching improvement is possible, that good teachers are not born but instead faculty members can develop qualities that improve teaching by being resourceful, creative, and committed (Pallas and Neumann 2019; Terosky 2005). They can be learners in their own teaching (Neumann 2009).

As noted earlier, improving teaching calls on faculty to learn in complex and multifaceted ways. Yet, learning goes hand in hand with change as well, which is the focus of our next section.

Viewing Teaching Improvement Through the Lens of Change

At the outset of this chapter, we suggested that faculty perspectives must be given more weight if efforts to improve teaching are to gain traction with faculty members themselves and if they are ultimately to be effective. In the prior section, we claimed that a stronger faculty-centered perspective on teaching improvement requires faculty to *learn*. In this section, we add to this conception of teaching improvement as a learning endeavor by suggesting that attempts to ask faculty to improve their teaching are ultimately requests that ask faculty to *change*. That is, faculty have been teaching using a set of practices (or sets of practices) prior to engaging in given teaching improvement efforts, and those efforts ask them to change their prior practice. Typically, those individuals (whether within an institution or outside it) who design and implement such efforts – whether policy-driven or programmatic – have not taken into consideration this idea that what they are asking of faculty is to change their teaching practice. What would it look like, then, if our model of what it takes to improve teaching incorporated the idea of change as well? This section attempts to answer that question. (This section does not focus on faculty who are internally driven to improve their own teaching, as many may be, but rather focuses on those responding to external impetuses for change, as the teaching improvement efforts we discuss originate outside of the individual faculty members. This does not intend to minimize the efforts that some faculty make to change or improve their own teaching.)

First, we define what we mean when we use the word change and ground that definition in the scholarship of the fields of philosophy, sociology, and psychology. Next, we consider how individuals, and especially faculty, tend to respond to change. We then look to understand why changing one's teaching might be particularly challenging. We follow with a review of strategies for addressing resistance to change.

Defining Change

Teaching improvement efforts are, by their very nature, opportunities for faculty to change their teaching. The Oxford English Dictionary defines change as “the action

or process of making something different.” We suggest that teaching improvement efforts ask faculty to make their teaching different, and thus that these efforts should incorporate perspectives on how individuals experience external requests that they engage in change. In defining the concept of change for the purposes of this chapter, below, we look not only to higher education but also to its common use and to the philosophical and organizational behavior literatures.

An important caveat: we do not, in this chapter, seek to understand teaching improvement in the form of organizational or institutional change. Our focus is on the experience of faculty members’ own experiences of teaching interventions: an experience that, we contend, asks them to learn new ways of teaching (as described above) and to change their teaching practices and associated ways of knowing (as described below). While organizational change is certainly relevant to a broader conversation of teaching improvement efforts, we are not covering it here in order to maintain our focus on the experience of such efforts from the faculty members’ perspective. We do consider evidence below about how individuals behave within organizations, but not how those organizations themselves may change.

Social theorists have long contended that, as long as individuals perceive that improvements to a given situation are possible, pressure for change – for making something different, whether or not it is objectively better – is inevitable (Hegel 1807; Kuhn 1962; Hacking 1989.) Research in the field of organizational behavior has viewed the ways in which people (and, by extension, organizations) change as central to understanding organizational (and, by extension, human) behavior overall (Lewin 1947). Several theories of change exist in the organizational behavior literature: (a) the dialectical theories that grow directly from both the early (Aristotelian) and more recent (Hegelian) philosophies described above; (b) teleological theories, which describe change that is planned in advance with an end goal, *teleos*, set forth at the beginning of the process; (c) evolutionary/biological theories, which follow the belief that change happens in a naturally responsive way to outside pressures, much as Darwinian theories of evolution; and (d) life cycle theories, which describe change as being ultimately dependent on the processes within a given setting (Van de Ven and Poole 1995). Another theory about behavior within organizations, frequently considered to be the most apt description of institutions of higher education, is “organized anarchy.” In a seminal article on the topic, Cohen notes that within these contexts, individuals come together around “a loose collection of ideas than as a coherent structure, . . . operating on the basis of simple trial-and-error procedures, the residue of learning from the accidents of past experience, and pragmatic inventions of necessity; . . .” (Cohen et al. 1972, p. 1).

The study of change in higher education has primarily focused on understanding what change means through the models outlined above as well as more recently on theories of change rooted in social cognition and culture (Burns 1996; Kezar 2001; Levy and Murray 1986; Morgan 1986; Spörn 1999; Van de Ven and Poole 1995), but have not been primarily concerned with how to support individuals through change. In the next section, we look to understand how individuals (including faculty) respond to change.

Individual Responses to Change

The psychological literature suggests that individuals' responses to change are similar to their responses to loss (Marris 2014). Change can be conceived, after all, as a form of loss: the loss of the way things once were. This body of research suggests that individuals who are encountering an external pressure to change (in this case, a pressure from another person or institution to change one's teaching) tend to follow a series of steps much like Kübler-Ross's well-established stages of grief: denial, anger, bargaining, depression, and acceptance.

There is evidence of this in the higher education research, suggesting that faculty (being human) respond to requests from others to change their behavior with an initial inclination to push back on the change and, at times, an eventual acceptance (Becher 1989; Trowler 1998). Thus, changes are rarely "received passively" (Ball 1994), and responses are mediated by psychological, sociological, and cultural factors (Burke and Noumair 2015; Clarke 1996). Personal psychological factors may play a role in individual faculty responses to change. Principally, research suggests that some individuals may be more or less inclined to be receptive to change, while others are more inclined to be resistant to change (Kezar 2001). In related research on faculty, Clarke (1996) found that some faculty are more or less inclined to accept or resist change, whatever form that change takes.

One commonly cited reason for resistance to change that originates with pressure from another person or group is the idea that doing so involves judging past actions in a critical light, which can be experienced as an unpleasant choice. Individuals, particularly those who view themselves as competent and serious, have been found to be invested in believing that their prior choices were good ones (Samuelson and Zeckhauser 1988). Samuelson and Zeckhauser (1988) argue that individuals are biased against information that suggests that past choices were faulty, and as a result, they are willing to rationalize past choices in order to maintain their self-image. As a result, individuals may choose to continue as before rather than judge their past self as wanting.

This holds true in the context of higher education as well. In his study of a significant organizational change in an institution of higher education, Trowler (1998) proposed a model for understanding faculty responses to change. His model on faculty responses was illustrated through two axes, one on receptiveness and one on reactions in relation to the organization in which they work (i.e., whether or not they are generally content or discontent) and whether they are inclined to accept the status quo or to work around it. Trowler (1998) refers to those faculty who are content and accept the status quo as "swimming" (the optimal outcome), those who are content but want to work around or change the policy as "policy reconstructors," those who are discontent and intent on working around or changing the policy as those who "use coping strategies," and those who are discontent but willing to accept the status quo regardless as "sinking." Since its introduction, Trowler's change model has been applied to a wide variety of situations or perspectives, including faculty views on the changing nature of higher education and service (Watty 2006; MacFarlane 2006).

Where faculty might fall in Trowler's quadrants does not happen in a vacuum: faculty responses are dictated not only by their own inclination to accept or reject change and their approach to handling change but also by the extent to which the change presents in such a way that it is consistent with the organizational culture (Bergquist 1992). Change efforts that consider institutional culture are more likely to be adopted, whereas overlooking organizational or institutional culture can derail change efforts (Trowler 1998; Burke and Noumair 2015).

Taken together, research looking at individual responses to change through psychological, organizational, and cultural lenses suggests that the initial response to many demands that an individual change their behavior – regardless of the origin or content – is likely to include some amount of resistance. In the next section, we look to the literature to better understand how these dynamics might look when they are applied specifically to the idea of teaching improvement.

Teaching Improvement as a Particularly Challenging Form of Change

As we have noted throughout this chapter, teaching practices can seem impervious to sustained, effective efforts at improvement (American Academy of Arts and Sciences 2017; Angelo 2001; Pallas et al. 2017). In a classic article about K-12 education, Cohen (1988) speaks to this concern by questioning why teaching is so resistant to change and concludes that there may be something inherent to teaching that makes its practitioners more resistant to change than individuals might be in general. What might this inherent resistance comprise of? In addition to the previously discussed barriers to change, such as the perception of loss, the refusal to judge one's prior actions as less than optimal, and interactions with cultural and organizational contexts (Clarke 1996; Samuelson and Zeckhauser 1988; Trowler 1998), the literature also highlights three key reasons that faculty might resist – or at least find it challenging – to change their teaching. The three reasons include: scholarly identity, disciplinary norms, and institutional contexts, which we discuss next.

Scholarly identity. One of the key areas of resistance to change in teaching rests, in part, with faculty members' strong sense of scholarly identity. We define scholarly identity by first breaking down the word, identity. In section "[Guiding Terms and Theoretical Framework](#)," we defined "identity" broadly as "a person's sense of who she is" (National Academies of Science, Engineering, and Medicine 2018, p. 126). In this section, we look beyond faculty research on identity to consider how the idea has been construed more broadly, particularly in psychological theory, given the extent to which these traditions bear on historical conceptions of what it may mean to change. In the field of psychology, the idea of identity is roughly equivalent to one's image of oneself in the world (Erikson 1959; Marcia 1966). Early modern theories of identity are largely based on the work of Erik Erikson (1959), who postulated that identity was comprised of a core self (the "ego"), individual characteristics ("personal identity"), and the roles one inhabited ("social identity"). Building on Erikson's work, other scholars suggested that individuals explore different facets of identity before committing to some more

strongly than others (Marcia, 1966). Sociological ideas of identity have built on the above psychological theories. Pierre Bourdieu's theory of *habitus*, or the ways in which an individual's prior experiences, including their social origins and their experiences in the fields they have inhabited, are reflected in the way they present themselves and are viewed by others. Bourdieu's (1977) ideas, then, suggest that what Erikson viewed as personal and social identity are themselves mediated by an individual's past experiences and access to cultural capital. Taken together, a definition of identity relevant to this lens of change suggests that individuals have had certain experiences within certain contexts and that they have committed to a sense of self that is a function of those experiences and contexts, and that the way they present themselves is then read by others through lenses mediated by their own contexts and experiences.

Building on the above work around identity, we define scholarly identity as the intersecting and complex (and constantly changing) perspective that faculty members hold of themselves, at the point of tension between their own academic interests and the contexts (professional, institutional, and intellectual) within which they do their work (Neumann 2005). Faculty members' professional responsibilities are carried out, traditionally, through three, ideally interrelated, strands of work: the creation of new ideas or evidence (research); the sharing on of existing ideas or evidence (teaching); and work in support of one's institution, field, or community (service) (Schuster and Finkelstein 2006). Historically, of these three strands, research has been accorded the highest value in the academy. Although institutions claim a commitment to the role of teaching in tenure and promotion processes for tenure-line faculty, there is substantial evidence suggesting that most decisions are made primarily on the basis of demonstrated achievement in research (as shown through peer-reviewed publications and, in some fields, successful acquisition of external funding to support research projects). Faculty compensation for those in tenure-line positions is also tied most closely to research achievement, whether explicitly (because faculty can pay themselves through research grants) or implicitly, because institutions tend to value research achievement highly (Fairweather and Rhoads 1995). This is true regardless of whether an institution has historically purported to value teaching highly or not (Fairweather and Rhoads 1995; O'Meara 2007). (We attend here to tenure-line faculty because, even as contingent faculty make up an increasing proportion of the faculty workforce in higher education, the relative devaluing of teaching we discuss here is most prominent for tenure-line faculty in R1 institutions; Fairweather and Rhoads 1995.)

Given that research has typically played a far more important role in determining faculty members' career success than does teaching or service, faculty report higher levels of pressure and motivation to maintain a primary focus on their research. Although this contributes, certainly, to the pressures described at the outset of this chapter of faculty feeling like they have neither the time nor the know-how to teach effectively (or to learn to do so), it creates another dynamic as well. Because faculty are so focused on their research (whether for internally motivated reasons or external pressures, or likely a combination of both), their scholarly identity becomes more closely tied to their research practice than their teaching practice. We might say, then,

drawing on Erikson's ideas of identity development, that they have "committed" most strongly to this aspect of their identity. This commitment – taken together with Samuelson and Zechauster's argument around negatively judging one's prior choices – may contribute to making changes in teaching particularly hard. If faculty have committed to focusing more on their research activity and less on their teaching, they may experience a request to improve their teaching as a demand that they judge that prior choice in a negative light or which they determine detracts from their dominant scholarly identity that is grounded (and rewarded) in research activity. No amount of providing extra time, motivation, or technical skill is likely to help overcome the aversive nature of that request, thereby cementing their scholarly identity as a significant barrier to changing their teaching practice.

Disciplinary norms. A second key area of resistance to changing one's teaching is disciplinary norms. Their individual identity as researchers, first and foremost, is only one way that faculty members' scholarly identities may serve as a barrier to such change. Their scholarly identity within their discipline may be yet another – related, yet distinct – barrier. Faculty carry out their work – research, teaching, and service – in the context of their academic discipline or field (Becher 1989). Becher (1989) acknowledged that faculty have been shown to have an almost tribal loyalty to their fields, and their scholarly identity is tied not only to their own scholarship but also to the norms and values of their discipline. This plays out in two ways when it comes to stymying teaching improvement-related change. First, faculty have a commitment to observing and, at times even preserving, the norms of their discipline. Fairweather (2002) speaks to the power of disciplinary norms:

Department chairs often see themselves as preservers of the discipline, ensuring that dominant mores continue. In the modern college and university, valued faculty behaviors focus on research and publication and on minimizing the time devoted to undergraduate instruction. The very structure which ensures maintenance of the disciplines works against faculty involvement in teaching and learning and against developing a more successful undergraduate curriculum. (p. 105)

That is, there is a disciplinary commitment to prioritizing research which, in turn, strives for faculty within that discipline to commit themselves most fully to the proliferation of new scholarly knowledge in that discipline at the cost of a focus on teaching.

The disciplinary disincentive works through another mechanism as well: since so few disciplines or fields have historically prized teaching, focusing on one's teaching may be experienced as being disloyal to one's tribe and, indeed, may make faculty feel like focusing on their teaching may risk alienation within their field. In a recent study of biology faculty, Brownell and Tanner (2012) noted:

If a scientist has a professional identity that does not encompass teaching at all, or if a scientist has a professional identity he or she feels could be put at risk in his or her discipline and among his or her peers by embracing innovative approaches to teaching, then professional identity becomes a critical barrier in efforts to promote widespread change in . . . education. (p. 341)

Thus, disciplinary communities (including academic departments within colleges and universities, but also broader instantiations of disciplines) may serve to reify norms associated with existing scholarly identities, thereby increasing faculty members' resistance to changes that may require a shift in those identities (as focusing more on teaching might do in traditionally research-oriented fields. Tagg argues that, given this dynamic, departments are unlikely to be productive places for teaching improvement-related change to happen (Tagg 2012), suggesting instead that extra-disciplinary structures – including communities of practice, which have been demonstrated to have a positive role in encouraging faculty to pursue changes to their teaching – may be more successful locations for engaging in this work (Trowler and Knight 2000).

In sum, the situating of faculty careers (and scholarly identities) in the contexts of the norms of established fields and disciplines may serve as yet another barrier to teaching improvement. In addition to judging their prior selves in a negative light, as moving their focus from research to teaching might require, faculty may fear that their disciplinary peers would judge them negatively as well. Again here, efforts that call for more time or more skill development among faculty – as so many interventions aimed at improving teaching have done – have done little to help faculty manage the difficulty associated with change.

Institutional contexts. Finally, faculty members' scholarly identities develop within the institutions in which they are employed. There are at least two ways that this association between one's identity and one's institution may further serve as a barrier to change in the form of teaching improvement: first, as a possible attack on the autonomy faculty have historically been accorded and, second, as an affront to their commitment to institutional "sagas," defined as stories that members of institutions tell themselves about what matters to a given institution (Clark 1972). Let us elaborate on both next.

Faculty have historically been accorded significant autonomy within the context of colleges and universities (Schuster and Finkelstein 2006). For example, the Association of American Universities (2013) notes:

The traditional concept of shared governance encompasses the joint efforts of the governing board, administration, and tenured faculty to govern a university internally. . . the division of responsibilities among the board, the administration, and the faculty remains broadly similar across institutions. Led by the president, the administration oversees the operation of the university, making the day-to-day decisions and implementing institutional policies. The faculty holds the primary responsibility for matters related to education and research, such as setting the curriculum. (p. 2)

Similarly, in a statement about shared governance, the American Association of University Professors (1990) asserts: "The faculty has primary responsibility for such fundamental areas as curriculum, subject matter and methods of instruction, research, faculty status, and those aspects of student life which relate to the educational process" (p. 5). Given these institutional norms, any demands (or even softer requests) that pertain to issues of education, instruction, and the like that originate outside of the faculty – as so many teaching improvement initiatives do (Pallas et al.

2017) – are likely to be experienced as threats to faculty members’ autonomy in academic affairs. This is yet another way calls for teaching improvement may be experienced negatively by faculty, in part, because these calls demand a need to change a part of their identities to which they have previously committed – in this case, that of individuals with the autonomy to determine academic-related decisions.

In addition to being committed to their own autonomy over educational aspects of their work, faculty have – like other members of the institutions in which they work – frequently bought into the organizational sagas that develop internally over long periods of time (Clark 1972). Clark (1972) describes sagas as “a collective understanding of a unique accomplishment based on historical exploits of a formal organization, offering strong normative bonds within and outside the organization. Believers give loyalty to the organization and take pride and identity from it” (p. 178). In the modern era, colleges and universities have, as we have noted above, traditionally built their cultures – their sagas – far more around research than teaching (Umbach 2007). Thus, it is possible that faculty will experience requests to move their focus away from research into teaching as yet another request to change their established scholarly identity, in this case as it comes through their loyalty to their organizational sagas. Through both a commitment to faculty autonomy and organizational sagas, faculty may perceive calls for improving their teaching as demands to change their scholarly identity – a change which, for the reasons given above, is likely to be difficult to achieve with interventions that propose additional time, resources, or skills.

In a piece about why faculty are resistant to teaching improvement efforts, Tagg (2012) proposes a possible mechanism that we think is worth outlining here. Briefly, he draws on research from social psychology and economics to theorize about why faculty might resist change. He uses three theories in particular to make the argument that individuals are more likely to take a risk – to change, for example – in an attempt to avoid a loss than they are to do so for a possible reward or upside. To support his claim, Tagg (2012) first outlines Kahneman and Tversky’s (2000) work on human behavior that found that individuals are more reliably willing to take risks if there is a potential loss, and less willing to take risks for the chance of a gain. That is, downside risks seem to be more motivating than upside risks; people are less likely to take risks for the possibility of a good outcome than they are to avoid the fear of a bad one. Tagg adds that the idea of loss aversion, well documented in the social psychology literature (Kahneman et al. 1991; Thaler 1980), supports this idea, adding that research on loss aversion suggests that individuals are so motivated to avoid a loss that they will fight to protect what they have, even if it is objectively less valuable than what they could get if they risked the loss. Finally, Tagg (2012) cites research on the so-called endowment effect, which suggests that individuals value more highly the things they already have than things they either did not get or have not yet gotten (Ariely 2008). Tagg (2012) applies the endowment effect to drive home his point: individuals will work hard to maintain the status quo (see also Kahneman et al. 1991), and this bias towards the status quo is, he argues, a “pervasive bias against designed change” (p. 5). In short, Tagg articulates that the status quo in higher education, including the elevation of research productivity, subject matter expertise, and autonomy in teaching decisions, work against

proposals to improve teaching and learning. Speaking to this concern, Tagg (2012) writes: “Most faculty, when they hear of proposals for serious educational change, fear loss, even if they cannot articulate exactly what they might lose” (p. 8).

With these challenges in mind, we ask: How might higher education stakeholders better support faculty as they make changes to their college and university teaching? To answer, we next turn to an interdisciplinary literature focused on effective practices for promoting change.

Effective Practices for Promoting Change

The behavioral change literature suggests that about one-quarter of attempted changes are ultimately successful (Jick and Sturtevant 2017), and there is a field (change management) that is dedicated to studying what makes changes likely to succeed. There is evidence to suggest that attending to evidence about what works to support change (and to limit resistance to change) does have an impact on the ultimate outcome of the intended change (Collins 2005). But there is also substantial evidence to suggest that there is not a single pathway to guarantee success, and that many factors must go into the selection and implementation of an appropriate process (Birnbaum 1988; Bolman and Deal 1991).

Kezar (2011) has studied change in the field of higher education and comes to some similar, if more specific, findings about what is likely to seed successful attempts to engage in change efforts in colleges and universities. In her comprehensive overview of organizational change in higher education, she calls attention to several key priorities. Among other principles, Kezar (2011) highlights that the culture of the institution (as understood through the ideas of both Bergquist and Tierney) matters when designing change. She notes that there must be opportunities for engaging with key ideas underlying the change, and that those opportunities for engagement must allow for participants to “develop new mental models and sensemaking” (p. 118). Moreover, Kezar (2011) argues that shared governance or collective decision-making – in other words, some mechanism for allowing faculty to retain their authority over areas traditionally within their purview – is important.

Other studies of change in higher education have reinforced this last idea in particular: that faculty must have a sense of control, authority, or agency over change if that change is to gain traction (Kotter 2012; Trowler 1998). For example, in a study of attempts to ask faculty to implement student learning assessments, provosts indicated that faculty willingness to support the initiative was a primary challenge and that faculty needed to be in the lead for the initiative to be successful (Kuh and Ikenberry 2009). In another example, in this one study of a large-scale institutional change effort within a school of education, Wong and Tierney (2001) found that empowering faculty – giving them a sense of ownership or a sense that they have initiated key work – was critical to making change happen in an area that required the investment of significant time and effort from those faculty. They also indicated that situating the work within the academic field – such that participating faculty believe that their change efforts, even if institutionally located, have the potential to

contribute to their scholarly communities – is important to gaining faculty support for the change efforts. Frost and Teodorescu (2001) note a similar pattern specifically in the area of efforts to improve teaching practice in higher education. They describe failed efforts involving administratively driven, top-down, centralized initiatives to change teaching, and significant success when similar interventions were attempted within faculty-directed projects. These patterns reinforce the differences between what we see when faculty are themselves motivated to learn new approaches and skills in their teaching and those who are resistant to change in the form of teaching improvement efforts that originate externally.

In sum, there is evidence, then, that there are strategies that can improve the likelihood that efforts to change individual behaviors within institutions will succeed, that these strategies must be grounded in institutional cultures and norms, and that faculty must be allowed to lead efforts within those areas that they view as within their purview.

In the next section, we offer an example of how faculty learning and resistance to change can impact efforts to advance a particular kind of change related to teaching improvement: the use of technology in college and university teaching. We present this example to offer a sense of how the more abstract arguments we have made could play out around a common institutional change effort.

Technology in Teaching: An Example in Practice

Over the last two decades, higher education has seen a heightened market demand for incorporating technology into teaching in higher education (Allen and Seaman 2013; Coombs 2001), whether the teaching is face-to-face, online, or hybrid. As noted in section “[Overview of Chapter](#),” most teaching improvement efforts have followed the programming approach of institutionally located, professional development sessions (Herman 2012; Puzziferro and Shelton 2009), and uphold the notion that if faculty simply gain technology skills, they will, in turn, increase their use of technology in their teaching (Shapiro and Cartwright 1998). However, several scholars point out that professional development approaches to teaching with technology, and ultimately success in this area, have been limited. For instance, Nicolle and Lou (2008) found that early successes with technology adoption were biased toward technologically savvy faculty members and that widespread adoption may be hard to achieve. We suggest that viewing these attempts to help faculty improve their technologically driven teaching through the lenses of learning and change may help explain why there has been limited success.

A study by Terosky and Heasley (2015) that examined faculty members’ perspectives on online education found that although participants appreciated assistance with the technical aspects of online education (e.g., how to use the course management system, how to apply various online tools for teaching), they expressed greater philosophical and psychological concerns around grappling with their identities as teachers in this new format. Unfortunately, the participants’ university primarily offered technical professional development, thereby

neglecting an opportunity to engage more deeply with faculty around the purpose and quality of online education, as well as potential threats to the professional identities of online educators. That is, the university offered neither an opportunity for faculty to approach the initiative at hand – increased use of online education – as a learning endeavor (wherein they could have thought substantively about new ways to teach in a positive way) nor did university leaders recognize that they were asking faculty to change their practice in ways that are likely to challenge their identities – scholarly, professional, and otherwise. Scholars who study professorial careers note that much of faculty resistance is rooted in faculty professional/scholarly identities. A common mistake, found Terosky and Heasley (2015), is failing to first recognize and address these identities and resistance of faculty prior to launching teaching improvement reforms (Glass 2012), especially if the goal is to support faculty in “conceiv[ing] of their roles in fundamentally new ways” (American Academy of Arts and Sciences 2017, p.4).

The studies by Nicolle and Lou (2008), Terosky and Heasley (2015), and Glass (2012) point to a broader pattern in the literature: a tendency to ask faculty to adapt to changes made without their input, and without support to allow faculty to meaningfully learn about how to incorporate those changes (for example, needing faculty to “adapt” their “attitudes and practices”) rather than rethinking the technological possibilities in such a way that they might address faculty scholarly identities, disciplinary norms, and institutional cultures (see also Jacobsen 1998). In contrast, research on what has worked in changing faculty behaviors around the use of technology in teaching highlights three successful practices, aspects of which are aligned with our previous discussion on effective strategies to promote change. First, it is important to begin this work with an understanding of faculty identity, culture, norms, and autonomy. Although priorities of teaching with technology frequently begins with administrative prioritization (Hollands and Tirthali 2014; Young 2004), faculty are more likely to respond positively if the work addresses their values (Glass 2012) and even more so if it originates within their faculty peer community (Terosky and Heasley 2015; see also O’Meara and Terosky 2010; Terosky and Gonzales 2015; Terosky et al. 2014). Second, there may be value to grounding technology use around pedagogy and subject matter, rather than focusing in on the technical aspects (Terosky and Heasley 2015). Finally, several relatively successful attempts to engage faculty in the use of technology in teaching have involved communities of practice, in which faculty learn from their colleagues, especially from self-selected networks, whether within institutional, disciplinary, or practice-based groups (Terosky 2019; Terosky and Gonzales 2015 for discussions around communities of practice or scholarly networks).

In review, we draw in this section on an interdisciplinary literature (i.e., developmental and social psychology, behavioral economics, sociology, philosophy, and education) to suggest that – in addition to the general difficulty that individuals have with change – when administrators and others ask faculty to improve their teaching practices, the faculty may respond to such requests to change with some amount of difficulty or resistance. We suggest that these challenges relate to aspects of faculty members’ scholarly identities, including upholding past choices, conforming to the

norms of their discipline, and committing to their institutional norms. The case of integrating technology into college and university teaching served as an example of how this challenge manifests in practice.

In the final section below, we turn to the future by considering an agenda for recommended research on teaching improvement through the lenses of learning and change.

Implications for Future Research

“Quite simply, students learn more and fail less when faculty members consult and utilize a large and growing body of research about effective teaching methods. . .” (American Academy of Arts and Sciences 2017, p. 12). In this chapter, we have suggested that – while the importance of improved teaching is recognized throughout higher education and beyond, and while many efforts have been made to support improved teaching – these efforts are generally not rooted deeply or broadly enough in faculty members’ perspectives. Further, we have suggested that in considering teaching improvement from a perspective that speaks to faculty members’ experiences and identities, we can see the extent to which teaching improvement requires both learning and changing – neither of which are easy to do. We suggest that the paucity of such considerations in teaching improvement research and efforts, along with their relative complexity, may help explain the sluggishness with which teaching improvement has occurred in higher education.

In this section, we highlight four areas in need of research toward advancing knowledge on teaching improvement in higher education through the lenses of learning and changing, both grounded in the idea that the faculty perspective is important. The four areas include: (a) centering the faculty in research on teaching, (b) enhancing theoretical and methodological frameworks in the teaching literature, (c) building on conceptualizations of good teaching and the faculty learning required, and (d) expanding understanding of resistance to change in teaching and reframing teaching improvement efforts for success.

Centering the Faculty in Research on Teaching

...we assert that it is the faculty and only the faculty who can bring [convergent teaching] to life. Only the faculty, as specialists in their fields, can imagine and experiment with new ways to target, carve out, and sculpt disciplinary knowledge and subjects so as to respond effectively to features of students’ prior knowledge that promise to advance their learning. Faculty are central to all approaches to teaching improvement. (Pallas and Neumann 2019, p. 125)

In this quote, Pallas and Neumann speak to the notion that faculty lie at the heart of teaching improvement, and yet the extant literature, as well as past policy and programming efforts, typically examine teaching and learning from the perspective of faculty productivity and through use of student metrics, rather from faculty

members' insights and experiences (Pallas and Neumann 2019; Reder 2007). We note that those insights should reflect the knowledge and thinking of both tenure-track and nontenure-track faculty. Consequently, scholars and practitioners overlook opportunities to listen to and learn from the very professionals charged with teaching on today's campuses. Putting the perspective of faculty at the center of future research is greatly needed, in part, because of the high degree of autonomy that characterizes the academic profession, especially for individuals in tenure-track positions; with autonomy comes the potential of faculty members significantly shaping the teaching responsibilities of their work.

In hopes of advancing the viewpoint of faculty in future studies, we recommend a stream of needed research on faculty agency in teaching. Faculty agency can be defined as "individuals garner[ing] power, will, and desire to create work contexts conducive to the development of their thought over time" (Elder 1998, pp. 964–965). Past studies on effective professional development found that faculty agency serves as a positive aspect of faculty growth and learning, particularly when compared to faculty experiences within top-down, administratively driven interventions (Neumann 2006; Terosky et al. 2014). In agreement, research from the fields of learning sciences and psychology also found that learning is maximized when individuals are directing their own learning and assuming agency (National Academies of Science, Engineering, and Medicine 2018). Research from organizational science and related literatures highlight that employees rely on informal learning opportunities to gain knowledge, resources, skills, and networks necessary to perform specific job responsibilities (Boud and Middleton 2003). A study of 400 employees across a range of professions found that adults preferred self-initiated learning for their on-the-job needs and often sought out informal networks of co-workers and peers to obtain the needed knowledge (Tannenbaum 1997). Another study of more than 800 employees (18–65 years old) from various industries found that autonomy had a positive relationship with self-reported learning around professional/work responsibilities (Raemdonck et al. 2014).

Although our understanding of faculty agency and workplace learning has increased significantly over the past two decades, applications to understandings of faculty work and especially to teaching improvement are limited. The majority of studies on faculty agency examine its role in career advancement or research, rather than in the realm of teaching practice. Similarly, the bevy of studies on workplace learning does not directly consider higher education and its faculty, nor does this body of research home in on the unique context of teaching and the challenges to improving teaching as outlined in this chapter. As such, we recommend that future studies on faculty members' sense of agency in their teaching improvement, especially how they learn and change their teaching practices, are warranted.

With this in mind, we ask: What is an agenda for future research on college and university teaching improvement that better centers the perspectives of faculty? Although a recommendation that we need more research specifically on the faculty perspective on teaching might sound commonplace, studies that gather, analyze, and communicate their viewpoints are underdeveloped. Some important questions that remain unanswered are: (a) How does professional learning and growth unfold in careers characterized as cognitively challenging, and how can appropriate levels of

worker autonomy toward enhancing both, be generated? (b) How do adult professionals regulate their own learning in the workplace, given that most of the research on self-directed learning is on K-12 students or from laboratory studies (National Academies of Science, Engineering, and Medicine 2018)? (c) What role does agency play in faculty learning about teaching improvement and faculty willingness to change teaching practices?

Enhancing Theory and Method for Future Research on Teaching in Higher Education

A critique of the current literature on teaching and learning in higher education is that it lacks theoretization and empirical support around teaching and its impact (Seifert et al. 2014). We noted further that, in the 1980s, Ernest Boyer (1980) advocated that multiple forms of scholarship be recognized for tenure and promotion purposes. One form of scholarship, that of the scholarship of teaching and learning (SoTL), or applying the inquiry process common in traditional research to one's teaching practices, grew in interest due to Boyer's work (Glassick et al. 1997). However, scholars note that SoTL has not fully achieved its goals. Critics argue that many studies of SoTL, and other teaching-related and professional development research, focus on anecdotal descriptions and evaluations of programs geared toward technical skills rather than theoretical analysis (Webster-Wright 2009). Along those lines, the Association for Interdisciplinary Studies (AIS) conducted a literature review on interdisciplinary teaching activities, critiquing the available literature on the grounds that much of it was not peer-reviewed or widely available (in Neumann and Bolitzer 2014; see also Seifert et al. 2014).

We have shown in this chapter that multiple disciplines can contribute to the shaping of definitions of learning, teaching, and teaching improvement. We suggest that this line of work be expended, thereby strengthening the theoretical underpinnings of this work through links to longstanding theoretical perspectives across fields.

In response to concerns around the theoretical and methodological approaches to research on teaching and learning in higher education, we urge that future research be grounded in the long-accepted process of blind peer review by critical readers. We advocate for research that draws on rigorous methodologies, including longitudinal analysis and the use of novel qualitative and statistical approaches that allow for findings that can, in the words of Lee Shulman, "withstand careful scrutiny" (Shulman 1981, p. 6) by future scholars.

To this end, we suggest questions for future consideration. First, how might the study of teaching practices and learning processes and results best be studied in tandem? That is, to what extent can the study of teaching practices be coupled to the study of learning in any systematic way? And second, how can teaching improvement best be examined and measured? How can it be documented and analyzed, within and, if appropriate, across disciplines and institutional contexts? These questions call for experimentation with and testing of methodological approaches,

research on the outcomes of various teaching improvement efforts or interventions, and further study of cognitive processes in the context of teaching and learning. (Of course, all of these questions need to be considered within the contexts disciplines and fields, as well as within contexts of interdisciplinarity where pertinent.)

Building on Conceptualizations of Good Teaching and the Faculty Learning Required

...we think it odd that teaching remains peripheral in debates about the future of US postsecondary education. Clearly the debates address costs, the value of the college degree, economic impact, and the usefulness of what students learn, but teaching, as a distinctive and complex professional activity and as the lifeblood of American postsecondary education, gets little attention, even though every enrolled student will be exposed to it. (Pallas and Neumann 2019, pp. 2–53)

In their quote, Pallas and Neumann highlight the dearth of studies on teaching that address definitions of good teaching and how faculty learn about and change toward good teaching. Good teaching remains undefined, understudied, and misunderstood (Pallas et al. 2017). Even when a solid body of relevant research does exist – for example, research on effective K-12 teaching practices – institutions of higher education oftentimes give little attention to their findings and implications for theory and practice (American Academy of Arts and Sciences 2017).

In recent years, academic and business-related bodies, as well as scholars of higher education, have called for a more direct analysis of good teaching within the context of higher education courses. For example, The American Academy of Arts and Sciences released a report in 2017 focused on defining a good education by asking: “What kind of education is worth students’ commitment of time and their investment of scarce resources?” (p. 8). Taking account of rapid changes in technology, shifting demographics, and globalization, the Academy (2017) responded that a good education “must encourage and develop intellectual resilience and flexibility,” along with “scholarly knowledge, practical skills, and personal dispositions” (p. 8). Other national surveys, such as the National Association of College and Employers’ Job Outlook 2016 Survey, the Bloomberg Job Skills 2016 Report, and the 2016 Business Roundtable Jobs Survey, align with the Academy’s findings, noting that a good education should emphasize not only technical skill development but also problem solving, communication, and collaboration. In short, a quality education prepares students for change, even as it, too, changes in seeking to meet this aim.

Despite the recent attention to defining good teaching and, more broadly, education, extant reports and surveys generally stop short of explaining how to enact such definitions of and what faculty need to learn and change in order to realize them. Moreover, this same literature tends to speak in general terms, with little attention to discipline, students’ backgrounds, or faculty learning needs, thereby facing the same criticisms as the policy-driven and programming lenses discussed at the beginning of this chapter.

Not receiving the same attention as these reports and national surveys are conversations around the conceptualizations of good teaching presented in this chapter and beyond. As such, we recommend a future research agenda that studies the following questions: (a) How and in what ways do faculty react to or perceive the emerging scholarly and practitioner literature (K-12, higher education, learning sciences, and beyond) on good teaching? (b) How might we build on, and assess, existing conceptualizations of good teaching so as to ensure they lead to best practices? (c) How do faculty learn, both theoretically and practically, how to enact good teaching? And how might institutions support faculty in their learning? (d) How might scholars investigate faculty members' professional learning in their teaching, with an emphasis on their everyday practices, perspectives, and range of experiences (Webster-Wright 2009)?

Expanding Understanding of Resistance to Change in Teaching

Earlier, we noted that research from across various fields indicates that individuals are likely to resist change because they may experience it as a rendering of judgment (perhaps negative) around their past thoughts, decisions, and actions (Kotter 2012; Trowler 1998). This is borne out in research on faculty development, where faculty members may resist changing their approaches to their work because doing so involves admitting to themselves that they may not have made ideal choices in their past practice (Tagg 2012). (It is possible, of course, that the affordances and constraints of past times would have created different choice opportunities and/or led to different choices.)

We suggest that studies examine how to frame teaching improvement efforts not as a criticism of people's past practices but rather as opportunities for them to continue to learn – from their own work and that of others, especially those they respect in their disciplinary and other professional contexts (Peterman 1993; Sunal et al. 2001). We noted above that teaching-related change may meet particularly strong resistance because there is little perceived downside risk to maintaining the status quo, and because the possible positive outcomes may not be easily evident: how might a faculty member know, for example, if changes to their teaching have had a positive result? This suggests not only a need for better research about the outcomes that may come from improved teaching practice, but also about how faculty members respond to change in their teaching – especially when that change is occasioned by external teaching improvement efforts coming from sources beyond themselves or their close peer communities.

Given this relative lack of research about how faculty members experience the changes asked of them by teaching improvement interventions, we suggest four future directions for research. We state these as questions: First, to what extent do faculty think of teaching improvement efforts as requests to change their behavior, and what might it mean to them (and to their teaching) to view it through this lens? Second, to what extent might approaches from other fields that have been demonstrated as supporting behavior change be experienced by faculty positively and,

relatedly, to what extent might that then have positive impacts on teaching and learning outcomes? Third, how might institutions (whether colleges and universities or professional organizations that engage in teaching improvement efforts) improve their approaches to teaching improvement interventions differently if viewed through the lens that they are asking faculty members to change? One specific direction for this might be to study the many faculty who are internally motivated to improve their teaching about how to better engage faculty in opportunities for teaching improvement that originate from external sources? Finally, might there be a way for faculty – who generally view learning as a positive practice, but who meet change with resistance – to view teaching-related change as an opportunity to learn and, in so doing, greet teaching improvement efforts from a different viewpoint than they have historically?

Concluding Thoughts

In this chapter, we have argued that even though there is widespread agreement that good teaching is important – and that efforts to improve less-than-good teaching are critical – teaching improvement efforts have not had the success that has been hoped for. We suggest that if we ground discussions on this topic in the perspective of faculty, then teaching improvement efforts can be understood as requests for faculty to change and opportunities for them to learn. Through an analysis of the literature on efforts to improve teaching in higher education, we have suggested that faculty may experience such efforts opportunities to learn and to change. We have, in turn, suggested potential pathways for future research that could build on the importance of the faculty viewpoint in undertaking teaching improvement efforts – in particular by allowing for their learning about and in their teaching, as well as their capacity and willingness to change their teaching.

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Evaluation and Decision Making in Higher Education

9

Toward Equitable Repertoires of Faculty Practice

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Abstract

In this chapter, we propose evaluation and decision-making as activities which, properly reconstructed from conventional norms, can be leveraged to change who and what receives access, opportunities, recognition, and status in higher education. We critically review seminal perspectives on faculty evaluation and decision-making, advance a new framework for equitable evaluation and decision-making in higher education, and consider the relevance of this framework in four functional areas of faculty practice: admission of graduate students, hiring, peer review, and curriculum and instruction.

Keywords

Equity · Faculty · Evaluation · Decision making · Admissions · Hiring · Peer review · Curriculum

Evaluation and Decision Making in Higher Education: Creating Equitable Repertoires of Practice

Academia is, in many respects, a status economy organized less around the maximization of financial profit than the maximization of prestige (Hamann and Beljean 2017). In academic organizations, access, recognition, and legitimacy are among the most important currencies, making the activities of evaluating and then deciding who and what “merit” access, recognition, and legitimacy critical cultural processes. Cultural processes reflect, create, and maintain cultures, and in this case, evaluation and decision making tend to reproduce institutionalized inequities within academic organizations. Yet, like any form of work, they can also be leveraged for institutional change and equity. In this chapter, we propose evaluation and decision making as activities which, properly reconstructed, can be leveraged by faculty research, teaching, and service to create fundamental changes in who and what receives access, opportunities, recognition, and status.

Our goals are to critically review seminal perspectives on evaluation and decision making; advance a new framework for equitable evaluation and decision making in higher education; and consider the relevance of this framework in four functional areas of faculty practice: admissions of graduate students, faculty hiring, peer review, and curriculum and instruction. In so doing, we want to highlight three main points:

1. Faculty are gatekeepers and brokers of status within the academic opportunity structure.
2. Faculty evaluation and decision making are cultural processes that reproduce familiar academic structures, and, as such, can perpetuate inequality or foster equity.
3. Faculty evaluations lead to decisions with equity implications for knowledge production.

We acknowledge that faculty often work with administrators to make decisions, both in general and in these specific contexts, but we choose to focus on the contributions of faculty here due to the direct applicability of graduate admissions, hiring, peer review, and curriculum design to the core service, research, and teaching roles of faculty. In turn, drawing attention to faculty decision making in these domains highlights the wide-reaching opportunities that faculty have to shape a more equitable institution of higher education by building capacity for equity-minded knowledge production practices throughout academia.

We situate our analysis of faculty decision making and evaluation activities in Gutiérrez and Rogoff's (2003) conceptualization of "repertoires of practice," which urges researchers to refocus analyses of learning and development from traits of group membership to participation in the practices of cultural communities over time. Rogoff (2003) (as cited in Gutiérrez and Rogoff 2003) define a cultural community as "a coordinated group of people with some traditions and understandings in common, extending across several generations, with varied roles and practices and continual change among participants as well as transformation in the community's practice" (p. 21). Gutiérrez and Rogoff explain that by tethering static notions of identity and culture to learning (i.e., assertions that certain people learn or act in certain ways), one can lose appreciation for learning as a process of engagement with communities' cultural histories and practices over time. Implications of this static approach include a reductive approach to the study of learning and the propagation of deficit-based orientations about ethnically-minoritized students in the US schooling system. Practice in cultural communities, though greatly informed by history, evolves throughout its history. Thus, practitioners (both scholars and educators) need tools to appreciate practice as dynamic, and to rethink and reconstruct current repertoires of practice so that critical cultural engagement enables equity in all of what we do. "An important feature of focusing on repertoires is encouraging people to develop dexterity in determining which approach from their repertoire is appropriate under which circumstances" (Gutiérrez and Rogoff 2003, p. 22). This framework represents a powerful reconceptualization of how education researchers might hold space for complexity in the commonalities and variations in cultural practices observed within educational environments.

In our case, the cultural community under consideration is academe. However, our application of repertoires of practice should not be understood as conflating the experiences of faculty and racially- and/or ethnically-minoritized students. Instead, we utilize repertoires of practice to highlight processes of evaluation and decision making as cultural activities, which are central to faculty participation in academia's

knowledge production practices and which have serious implications for (in)equity. As scholars who are unequivocally invested in being stewards of equity in education, we leverage repertoires of practice as a way to emphasize opportunities for agency and transformation in the domains of admissions, hiring, peer review, and curriculum design – namely through their embedded practices of evaluation and decision making. Overall, we believe this perspective presents a novel opportunity to foreground equity and justice in the study of faculty work.

Distinguishing and Relating Evaluation and Decision Making

The root *val* is Latin for worth, health, and strength, and evaluation refers to the assignment, negotiation, and maintenance of value in social life (Beckert and Musselin 2013; Lamont 2012). Although *val* shows up in higher education discourse about values (e.g., Nash 2019) and validation theory (e.g., Rendón 1994), and there is a long history of research on decision making by higher education administrators, until recently evaluation itself has been left implicit in the research on decision making. One exception to this is theory and research on institutional logics, logics of action, and disciplinary logics which have accounted for the evaluative roots of decision making by governing boards, university publishers, and faculty committees in high-consensus disciplines (Bastedo 2009; Posselt 2015; Thornton 2004).

We contend that for the purposes of attending to equity in higher education, more explicit attention to evaluation is needed. Through both ad hoc judgments and formal systems of review, actors throughout higher education come to assessments of quality and worth that become the basis for decisions that allocate resources of various sorts. The often institutionalized criteria and processes employed in these activities – and their transparency – directly shape the equity of outcomes, making both phenomena of foundational concern for research, policy, and practice aimed at equity. We are beginning to see evidence, however, that criteria, preferences, processes, and biases are root causes of inequities in outcomes for students and faculty alike (Mitchell and Martin 2018; Posselt 2015). It may be precisely because these processes are so engrained that evaluation, in particular, has escaped scrutiny. Like many aspects of culture, our routines and grounds for judgments are embedded and rarely questioned (Lamont et al. 2014; Tierney 2008).

With respect to knowledge production, academic leaders shape organizational futures and boundaries by evaluating students and scholars directly, as well as through decisions that validate some forms of knowledge and methods of knowledge production over others (Lamont 2012). For example, student evaluations of faculty instruction are so institutionalized within many colleges' and universities' faculty reward structure that gender and racial bias in those evaluations became a tacit factor in unequal promotion rates. As we discuss below, the values reflected in practices of evaluation and validation historically have been informed by and have reinforced extant power asymmetries and master narratives developed by white men (e.g., Tate 1997; Aldridge 2006; Yosso 2006), which define criteria for what constitutes legitimate scholarship and who is entitled to create and teach it (Stanley 2007).

It is not only *what* the criteria and processes are that matter for equity in and through evaluation and decision making. Their transparency matter, too, especially as a microfoundation of stratification. Transparency determines how easily social and economic elites within an academic field¹ are able to manipulate their participation in evaluation and decision-making regimes to protect their privileged place – and thus indirectly uphold inequalities and power relations (Swartz 2016). It is common for elites to strive to stay abreast of the evaluation and decision-making apparatus for particular opportunities, in hopes of investing some of their capital – financial, human, cultural, or social – in increasing the odds that they will come out ahead (Bourdieu 1998; Khan 2012).

Evaluation and decision making are consequential, exciting phenomena to study: The stakes can be high (Sagaria 2002), they are multifaceted practices (Thornton 2004), and through them, otherwise tacit preferences and values are laid bare (Posselt 2016). Furthermore, they involve interactions between context and agency, making their outcomes unpredictable (Campbell and O’Meara 2014; Liera and Dowd 2018). From a stratification perspective, a close analysis of evaluation and decision making can draw out cultural foundations of inequities that may be otherwise difficult to see, much less to discuss. It is our contention that through greater attention to *both* the domains in which faculty have power to evaluate and make decisions and to the fundamental opportunities and threats for equity inherent in these practices, we can develop more equitable repertoires of practice for producing knowledge and training the next generation.

Broadly, we hope through this work to ignite higher education researchers’ interest in empirical analyses of these critical cognitive and sociocultural processes as they relate to equity and through knowledge production practices in the professoriate. To that end, we advance a power-analytic framework through which scholars can locate, relate, and “map” common aspects of evaluation and decision making that pose threats and opportunities for equity. These include, as we will discuss in greater detail below, mindfully considering the equity implications of evaluation and decision-making criteria and processes; maintaining awareness of the interlocking threats and opportunities to equity posed by social, political, and cultural forces (within which their judgment is situated); and enacting agency individually and collectively. By routinizing activities such as these within the repertoires of practices used in domains of work where we allocate opportunities and resources, evaluation and decision making can contribute to more equitable work and outcomes.

The chapter is organized as follows: Following definitions of key concepts, we review established frameworks for evaluation and for decision making. Then, to inform the development of new scholarship in this area, we introduce a framework for equitable decision making that builds on prior approaches while centering power, attending to the multiple contexts in which judgments are made, and acknowledging

¹Fields are “arenas of production, circulation, and appropriation and exchange of goods, services, knowledge, or status, and the competitive positions held by actors in their struggle to accumulate, exchange, and monopolize different kinds of power resources” (Oxford 2019).

inherent opportunities and threats to equity that accompany evaluation and decision making. We next illustrate the relevance of this framework and its core components (i.e., criteria, process, outcomes) through discussions of empirical research in four domains of faculty work in which evaluation is nested within decision making: admissions, hiring, peer review, and curriculum design. Corresponding roughly to service, research, and teaching components of faculty work, it is our hope with this chapter to demonstrate how pervasive evaluation and decision making are in scholarly life – and thus, to highlight the necessity of accounting for and investigating them as we develop research agendas about work in higher education’s academic core. The chapter will close with recommendations for ongoing theoretical development as well as empirical opportunities we see. We begin by elaborating definitions for three key concepts that will recur throughout this chapter: equity, legitimacy, and merit.

Equity

We define equity as a social justice imperative that prioritizes institutional responsibility for transforming organizational practices, policies, and culture to support equality of educational outcomes, in particular by race, gender, and socioeconomic status (Bailyn 2003; Bauman et al. 2005; Bensimon 2005; Dowd and Bensimon 2015; Liera and Dowd 2018; Museus et al. 2015). As such, equity is not merely a possible outcome of decision making reached by achieving parity. Rather, equity may be embedded in evaluation and decision-making processes through mechanisms such as institutionalizing perspectives, lived experiences, and knowledge claims from racially minoritized and otherwise marginalized groups. Bensimon (2012) argues that in order to achieve racial equity in higher education, practitioners must develop equity-mindedness, which she identifies as positive race-consciousness, evidence-based awareness that race-neutral practices can disadvantage racially minoritized students and perpetuate institutional racism – regardless of practitioners’ individual racial attitudes. Equity-mindedness demands a willingness to take responsibility for eliminating inequities. Thus, equity-mindedness more broadly suggests commitment to transformational changes that redress intersecting forms of systemic oppression and privilege in the institution of higher education in order to produce lasting, systemic equity.

Ameliorating inequity requires institutional change, which will necessarily entail more power-conscious evaluation and decision-making practices from faculty. The notions of equity and equity-mindedness described above inform our approach to reconsidering decision making in the core scholarly practices of research, teaching, and service (Bauman et al. 2005; Bensimon 2005; Dowd and Bensimon 2015). By examining the threats to equity in decisions and evaluations embedded in these core faculty functions, the use of specific criteria and processes can be thought of as checkpoints – that is, key opportunities for making decisions in the service of equity. As our framework for equity in decision making will explore, faculty have the opportunity to enact racial and gender equity through

admissions, hiring, curriculum and instruction, and peer review by systematically reframing options, contextualizing preferences and judgments, and attending to intersectional power dynamics.

Legitimacy

At the root of the decisions faculty make is legitimacy, defined by Tyler (2006) as:

... a psychological property of an authority, institution, or social arrangement that leads those connected to it to believe that it is appropriate, proper, and just. Because of legitimacy, people feel that they ought to defer to decisions and rules, following them voluntarily out of obligation rather than out of fear of punishment or anticipation of reward (p. 375).

This definition highlights the social construction of legitimacy and the power it holds over those who defer to its rules. For such individuals and organizations, conceptions of legitimacy frame evaluation and decision making by shaping what options and decisions are deemed desirable. Legitimacy is also central to questions about the equity in and through decision making and evaluation, for the authority that comes with decision-making power often motivates deference to the status quo – potentially reifying inequitable practices or power structures (Tyler 2006). Empirical research on legitimacy in academia reveals it enacted as a cultural resource (Gonzales and Núñez 2014), which in turn shapes the preferences of people, institutions, and organizations who make decisions. For example, enacting specific conceptions of legitimacy shapes academia and its knowledge production functions by influencing what gets published and taught and who gets selected via admissions and hiring. Across the academy, legitimacy is a priceless currency.

Legitimacy shapes external behaviors of people and organizations through the internalization of norms into people's cognitive schemas.² These schemas matter deeply for behavior and decision making (Hoffman 1977; Tyler 2006). Those seeking legitimacy are likely to adhere closely to established norms – that is, they are likely to model their own behavior on the behavior of people whom they view as legitimate (Gonzales 2013). Considering the grounds for such judgments and behaviors among professors Gonzales and Terosky (2016), in referencing Deephouse and Suchman (2008), identified four legitimacy schemas:

1. *Cognitive*: Individual sensemaking about what is or is not acceptable
2. *Technical*: Official or legal approval from formal entities

²A related concept is legitimation, defined as the process of being accepted or deemed worthy according to existing norms and placed within a framework through which things are viewed as right (Tyler 2006). As a central and ongoing cultural activity, legitimation shapes both the cognitive and sociocultural functions of faculty, departments, and institutions (Gonzales 2013; Gonzales and Terosky 2016).

3. *Normative*: Legitimacy conferred based on morals, values, and taken-for-granted expectations
4. *Professional*: Endorsement from a professional community that behavior is relevant within professional boundaries

Among these, Gonzales and Terosky (2016) argued professors' notions of legitimacy reflect professional and normative schemas. Across institutional types, faculty conceptualize professional legitimacy in terms of their scholarship and in reference to institutional type/status, while work ethic is a form of normative legitimacy (Gonzales and Terosky 2016).

Gatekeeping decisions such as admissions, hiring, tenure, and promotion manifest the power of professional schemas for legitimacy, and Posselt (2015) illustrated how professors within high-consensus (i.e., strong paradigm) fields like economics, philosophy, and physics used the shared values and language of their disciplines to rationalize PhD admissions decisions to one another – decisions that outsiders might have thought to be discriminatory. In relying on legitimated disciplinary logics, faculty viewed their admissions decisions as legitimate and fair, even when decisions resulted in gender and racial inequities. Additionally, promotion and tenure processes tend to reward faculty whose work fits established, legitimated norms about the number of publications, and the prestige of journals where work is published (Delgado Bernal and Villalpando 2002). Other scholars have demonstrated how narrowly defined ideas of scholarly legitimacy may discount research that is applied or interdisciplinary (Gonzales and Rincones 2012), and faculty from departments and institutions that are viewed as less prestigious (Bell and Chong 2010). Prevailing conceptions of legitimacy thus often drive faculty aspirations and everyday work, and they both arise from and are reinforced in socialization processes (Gonzales and Terosky 2016).

When systems, processes, or institutions are viewed as legitimate, people are more likely to interpret and act in ways that preserve those existing conditions and norms. While legitimacy can provide stability and offer examples to follow or model, it may also reinforce marginalization. Delgado Bernal and Villalpando (2002) detailed the ways knowledge and contributions from faculty of color were constructed as illegitimate in relation to Eurocentric epistemologies exemplified in research and teaching. Similarly, Gonzales and Núñez (2014) argue that the ranking regime of higher education, which is a system of interrelated organizations that set criteria for what is deemed valuable in higher education and knowledge production, creates a hierarchy of value based on narrow criteria deemed legitimate by people whom that same system have deemed legitimate. In addition to standardizing and commodifying faculty work, this narrow regime preserves a highly individualistic and homogenized professoriate that reproduces Western legacies and ideologies (Gonzales and Núñez 2014). Thus, the narrow terms for legitimacy in many academic processes systematically devalue racially minoritized educators' contributions.

Merit

An underlying logic facilitating determinations of legitimacy in higher education – especially in hiring, admissions, and other human resource decisions – is merit. In principle, merit refers to the notion that people deserve social rewards based on individual effort, talents, and achievements rather than other factors, especially ascriptive identities (Alon and Tienda 2007). Merit and the system that purports to reward it, meritocracy, are prevalent tropes undergirding the United States’ assumed identity as the “land of opportunity.” Karabel (2006, p. 543) writes, “The legitimacy of the American social order depended in good part on the public’s confidence that the pathways to success provided by the nation’s leading universities were open to individuals from all walks of life.”

In practice, perceptions of merit are manifested in the individual qualities and evaluation factors that are most intensely weighted, are most frequently employed, and/or that serve as the basis for a preference when comparing similar applicants. Implicit in an argument for meritocracy is an assumption of equal opportunity that everyone has a chance to prove their talent and effort in equitable ways and be rewarded accordingly. From this perspective, notions of merit are positioned as uncontested and measurable, and outcomes are understood to be fair and unbiased, even as people who did not have equal opportunities tend to be compared with each other.

In practice, however, merit for access to selective educational settings is socially constructed. Discussing the socially constructed scripts of merit that faculty use to make sense of prospective students, Posselt (2016, p. 7) writes, “Merit is always a conditional, not an absolute, assessment.” Scholars have critically examined conceptions of merit with regard to the policies, processes, and outcomes of selective admissions (e.g., Contreras 2005; Guinier 2015; Liu 2011; Posselt 2016; Stevens 2007), selection for academic positions (e.g., Lamont 2009; Smith 2015), and participation in science, technology, engineering, and mathematics (e.g., Carter et al. 2019). While a system of meritocracy purports to privilege fairness and equality, it can ironically legitimize stratification (Alvarado 2010; Littler 2017). Liu (2011) writes,

A troubling effect of an uncritical view of meritocracy is that by not acknowledging there are greater structural social inequalities at play, there may be a tendency to view students who do not reach higher levels of educational attainment as having failed on their own terms (p. 384).

Ideologies of merit cloak the inequities our system creates. The “myth of meritocracy” has thus been used to justify the negative evaluations and exclusion of people deemed not desirable enough to enter academe, furthering their marginalization. Therefore, it is vital that we do not understand merit as objective and fixed, but rather socially constructed and flexible to resistance.

Perspectives on Evaluation

To summarize key points made thus far, evaluation is a foundation of decision making that involves assignment of value through shared interpretive schemes and scripts about what should count as legitimate or meritorious. These schemas, in academia, enable an evaluator to sort people, scholarship, or academic organizations and arrange them into hierarchies of value which can be used to justify decisions that distribute scarce opportunities and resources. If we want to create more equitable outcomes in higher education, we need decision-making systems in which conceptions of legitimacy and merit do not reinforce extant power relations by applying criteria and processes that systematically privilege already advantaged actors, organizations, and knowledge.

With these foundations outlined, we move now to a closer review of how scholars have analyzed evaluation, and then we will do the same with decision making. Lamont et al. (2014) propose that evaluation, like other processes that reflect and create culture (e.g., rationalization, identification, classification, racialization, standardization), connects fundamental microcognitive processes with macro-level material, place-based, and symbolic inequalities that quantitative methods can measure. Evaluation inherently stratifies; therefore, “Ignoring [evaluation] blinds us to crucial pathways that contribute to the production and reproduction of inequality” (Lamont et al. p. 9). However, being contingent in part on human agency, “The outcomes of such processes are open-ended or uncertain, as opposed to always resulting in exploitation, exclusion, or isolation,” (p. 14) as is the case in the material, symbolic, and place-based dimensions of inequality.

Every day within our colleges and universities, actors are caught up in two general types of evaluation – ad hoc judgments and formal review systems – which individually and together shape how symbolic and material resources like access, respect, opportunities, and honors are distributed. Whereas we are constantly confronted with material that is subject to ad hoc judgment, formal systems of review are bureaucratic in nature – delegated, coordinated, and systematized evaluation – enabling batch review of many people or their work. Both types warrant attention and are interrelated, in that ad hoc judgments often precede – and thus constrain – how formal review is carried out. Whether an email from a prospective student warrants immediate action, the quality of writing in a conference proposal or journal manuscript, the appropriateness of a visiting scholar’s language and self-presentation, or the impressiveness of a new journal article relative to readings on a current syllabus – all of these and many more – are informal, ad hoc evaluations. Both official processes and impressions, however, are subject to learned instincts and inherited preferences that include implicit biases and networks that are often more closed than open.

Scholars have applied several analytic lenses to the study of academic evaluation (Hamann and Beljean 2017). Employed individually or in combination, their underlying assumptions attune the researcher’s attention to specific dimensions of evaluation, and they carry differing implications for what it means to improve systems of evaluation and/or put to work the power of evaluation toward more equitable

academic outcomes. Here, we briefly review functionalist, power-analytic/critical, performativity, and constructivist perspectives on evaluation (Hamann & Beljean 2017).

Functionalist Studies

Studies that approach evaluation with an implicitly or explicitly *functionalist* lens tend to focus on how evaluations and the criteria that inform fulfill specific purposes, such as fairness, validity, and reliability. For example, motivating decades of research into standardized test scores' predictive validity (e.g., Cureton et al. 1949; Kuncel et al. 2001; Lannholm 1968; Miller et al. 2019) is an assumption that when determining who should be admitted to selective colleges and graduate or professional degree programs, selection criteria that are more predictive of later educational outcomes are inherently preferable to those with weak validity. Functionalist studies have also examined the adequacy of syllabi in achieving specific learning outcomes (Stanny et al. 2015) and the fairness of evaluation criteria relative to the goals of various admissions systems (Zwick 2017).

Critical and Power-Analytic Perspectives on Evaluation

Studies of evaluation undertaken with a *critical/power analytic* perspective draw attention to the ways that engrained evaluation criteria or processes tends to reinforce power asymmetries generally, or unequal educational and professional outcomes specifically. There is a rich tradition of this type of research in higher education, highlighting how evaluation doubles as discrimination. Evaluators' judgments are rarely as socially pure as they think, and typically involve judgments directly or indirectly associated with ascriptive characteristics. Such discrimination occurs consciously and unconsciously, through personal biases, through practices that stratify, and through the application of more strict scrutiny to applicants from minoritized backgrounds. Eighty percent of research participants judging a Latinx candidate and 75% of those judging a White woman for positions in higher education administration cited their doctoral institution as very important, but only 55% of those evaluating a White man declared it very important (Haro 1995, p. 196). Similarly, Sagaria (2002) found equitable outcomes of selection across race and gender, but found that Black women applying for administrative positions in universities were subjected to "filters" (i.e., sets of criteria) that White men and women were not. We also know from work in this vein, for example, that the review criteria for tenure and promotion diminish the importance of service work, which women – and especially women of color – are disproportionately expected to fulfill (Tierney and Bensimon 1996). In both undergraduate and graduate admissions, conceptions of merit and criteria for operationalizing it in decision-making processes privilege applicants from groups who are already overrepresented (Karabel 2005; Posselt 2016; Posselt et al. 2012; Wechsler 2017). Faculty merit pay is often awarded on

the basis of teaching evaluations, although research consistently documents that students more harshly judge Latinx, African American, and women professors relative to those who are white and/or male (Anderson and Smith 2005; Boring 2017; MacNell et al. 2015; Storage et al. 2016). Evaluations of collegiality are similarly laced with racial and/or gender bias (June 2017). In our reviews below of research on admissions, hiring, peer review, and curriculum and instructional design, many more studies from a critical/power analytic perspective will be discussed.

Performativity in Evaluation

A *performativity* perspective highlights how evaluations trigger people and organizations to act in ways that will ensure a positive evaluation. Whether it is to save face, seek status, or uphold accountability standards, people and groups that want to be viewed positively will enact behaviors that align with known standards of performance. If a team of scholars knows the criteria that their proposal for a grant will be subjected to, they are more likely to craft a proposal that meets those criteria. If a chemistry department knows that accreditation by the American Chemical Society demands particular curriculum offerings or student learning outcomes, they will dedicate resources to promoting those outcomes. Organizational actors may not themselves think of such behavior as performance, but sociocultural analysts (such as those influenced by Goffman's dramaturgical tradition) are quick to observe the parallels.

The more that an evaluation triggers behaviors that a person or organization might not have otherwise adopted, the more it can be viewed from a performativity lens. Graduate students come to adopt a scholarly identity in part by learning to play the role of scholar, for example, picking up in their day-to-day lives the behaviors, work habits, language, and intellectual styles they perceive to be rewarded. Involuntary evaluation of organizations can "cause symbolic rather than substantive reactions, such as the implementation of superficial changes at the periphery of organizations, public pronouncements of ranking goals, or the formation of committees to create the appearance of taking action" (Sauder and Espeland 2009, p. 64). However, there are some situations in which what starts as performative behavior (motivated by an to be evaluated positively) becomes internalized over time as the shared standard for legitimate behavior. Field-wide, isomorphic behaviors among scholars and higher education institutions that align with neoliberal notions of status, productivity, and efficiency offer one such case (Espeland and Sauder 2007). More specifically, it has been well documented that the rise of ranking systems has had a profound effect on institutional behavior across 4-year institutions, as well as for graduate and professional degree programs. Writing about the power of ranking systems to discipline law schools' behavior field-wide, Sauder and Espeland (2009) write,

Rankings reflect what is happening not only at one's own school but also every other school in relation to one's own. Rankings are a zero-sum technology; a school's success comes at the expense of others and small differences matter (p. 73).

In this environment, the mere act of striving for status is legitimated as a worthy pursuit and compromises to equity are frequently overlooked or swept under the rug. For example, amid both declining state appropriations and a push to maintain status, public flagship institutions have come to prioritize enrollment of out-of-state students (who contribute more in tuition revenue and are more likely to have the high standardized test scores that ranking algorithms weigh) at the expense of in-state racially minoritized students (Jaquette et al. 2016). And in a striving Hispanic Serving Institution (HSI), Gonzales (2013) found that faculty themselves had come to rely upon – and loathe – the evaluative criteria for Tier One status that state legislators crafted to compare universities and which administrators held up as their guide to make decisions. In sum, research from the performativity perspective highlights how awareness that a person is being evaluated disciplines both higher education institutions and actors within them to enacting valued behaviors.

Constructivist Perspectives on Evaluation and Judgment

A fourth framework that has been used to look at academic evaluation can be described as *constructivist*, and it emphasizes how evaluation reflects, creates, and maintains cultural values. We have already introduced how evaluations of academic merit are, in principle, the basis for access and advancement in academia, but that in practice, merit is socially constructed and an institutionalized compromise across a community's varied values. A rich set of book-length studies have captured these dynamics. Postdoctoral fellowship review follows “disciplinary styles” (Lamont 2009) and doctoral admissions in strong-paradigm fields like economics, philosophy, and physics is shaped by “disciplinary logics” (Posselt 2015, 2016). Editorial judgments in peer review depend upon the “intellectual milieu” in a community at a given point in time (Hirschauer 2010), while academic book publishing is increasingly driven not by intellectual contributions but rather by “market logics” (Powell 1985). These works and others portray the outcomes of evaluation as a result of culturally situated judgment processes rooted in contextual, sociocultural forces (Boltanski et al. 2006). Actors responsible for executing evaluations may or may not even be entirely aware of the criteria, because they are so rooted in established ways of knowing.

Viewing evaluation as culturally situated judgment highlights contexts and their cultures, and Boltanski and Thevenot (2000) used this perspective to challenge the Bourdieuan claim that a single or unitary hierarchy of cultural values drives judgment. Rather, they argued, constraints born of sociocultural contexts shape what counts as legitimate in the “pursuit of a justified agreement” (Boltanski and Thevenot 2000, p. 208). Decision makers perceive and may try to account for these constraints, but rarely do they actually render them explicit, deferring instead to “common higher principles that give meaning to their action” (Boltanski and Thevenot 2000, p. 211). As such, while individuals may perceive different interests or opinions according to one context (e.g., their individual identities), they can often still find compromise through shared interests related to another (e.g., professional

norms). This process, they claim, plays a central role in organizational life: “The pursuit of compromise that allows the tensions between several orders to be overcome is at the heart of the functioning of organizations” (p. 226). Collective evaluations of merit, from this angle, represent an organizational challenge and a compromise across the multiple evaluative contexts (e.g., discipline, department, and self) to which the decision maker is accountable, which each carry multiple interests. In the context of this complexity, judgments do not come about through application of a single hierarchy of values, preferences, and priorities, but rather a heterarchy, or multiple hierarchies.

In many cases, one can peel back the findings of evaluation research undertaken from a functionalist, power analytic, or performativity perspectives (Hamann and Beljean 2017) to reveal underlying cultural assumptions and values that motivate specific criteria or aspects of the decision-making process. For example, what manifested in a critically-oriented study of a faculty search committee as avoidance in acknowledging or confronting racialized interactions, for example, was ultimately traced back to the community’s cultural priority to perform “niceness,” and this standard was deeply rooted in the university’s Protestant heritage and identity (Villarreal et al. 2019). The foundational role of culture means that if we want to make systems of evaluation more equitable, we need to attend both to the information and criteria in use as well as how actors make sense of it. A constructivist lens on academic evaluation thus provides a strong foundation that is consonant with the other perspectives. Constructivist studies recognize the contexts in which judgment is situated, and provide grounds for scholars to articulate embedded assumptions about what or who counts as legitimate, excellent, or otherwise meritorious. These assumptions inform the conduct and outcomes of judgments, which carry forward as normative fodder for decisions. With these perspectives in mind, we therefore turn now to reviewing established frameworks for decision making (Table 1).

Frameworks for Making Decisions

Decisions necessarily involve, but are more complex than, their embedded evaluations. Having distinguished among some common analytic perspectives on evaluation, we now broaden the frame out to decision making before proposing an equity-minded approach to combining evaluation and decision making. Ideas about how to draw from one’s evaluations to make decisions are as old as our most ancient writings about politics and power. The idea of deliberative democracy, for example, came into being in Athens in the fifth century B.C. It proposes that decisions should be made by as many people as will be affected by the outcomes, through a process that requires voters to articulate reasons for their preferences. In so doing, they are forced to debate the merits and drawbacks of various options, which both results in better decisions and compels an acknowledgment of the value propositions that underlie possible actions (Gutmann and Thompson 2009). This political view of

Table 1 Perspectives on academic evaluation

	Functionalist	Critical and power-analytic	Performativity	Constructivist
Main focus	Evaluation and the criteria that inform evaluation fulfill specific purposes, such as fairness, validity, and reliability	Evaluation criteria or processes tend to reinforce power asymmetries generally, or unequal educational and professional outcomes	Evaluations can trigger behaviors to preserve status or meet accountability standards. In such cases, evaluations prompt symbolic reactions rather than substantive change	Evaluation reflects, creates, and maintains cultural values and ways of knowing within a given community
Assumptions for practice	Assumes that evaluations should proceed with criteria that are associated with or directly predictive of success, that are reliably so across different populations, and that are fair	Assumes that evaluators' judgments are rarely as unbiased as they think, and therefore should ensure that criteria applied do not directly or indirectly undermine access, opportunities, or status for people and organizations from minoritized backgrounds	Assumes that people and organizations will change what they do to receive a positive evaluation, and therefore that evaluative regimes can be imposed to bring about specific behaviors or outcomes	Assumes that actors responsible for evaluations may not be aware of the criteria used, because they are rooted in taken for granted shared values and aversions
Implications for equity	Weak implications for equity, except insofar as the fairness, reliability, or validity of criteria are also assessed with an eye to the distribution of those criteria across groups with differing power	Strong implications for equity, in providing means of examining how judgment, criteria, processes, and outcomes alike may be subject to social and cognitive biases. Facially neutral views of merit, for example, may not be race neutral in impact	Indirect implications for equity, in that performative behaviors stemming from reaction to evaluation may contribute to an internalization and institutionalization of a logic of legitimate behavior focused on status over equity	Embedded assumptions found in cultural values about what or who counts as legitimate, excellent, or meritorious may impact evaluations at an unconscious level

decision making has seen a resurgence in recent decades, including in education. However, other frameworks for analyzing and understanding decision making in higher education contexts have emerged from other academic disciplines. We review a sample of those frameworks in the following sections to highlight how the. Rational choice and bounded rationality originated in economics and organizational sociology, while psychology and behavioral economics have advanced the study of cognitive and social biases, and anthropologists have provided useful insights about cultural dimensions of making decisions.

Rationality and Its Limits

Sociologist Max Weber (1978) argued for the technical superiority of bureaucratic administration as a means of making decisions, for the usual collegiate model's compulsion to create compromises among competing interests slows down the process and threatens the reliability and precision of decision making. The appearance of rationality represented in procedural rules and standard operating practices deployed under a bureaucratic model, by contrast, ensure that personal interests are downplayed relative to the efficient, precision, rapid implementation of a process that, while possessing an element of the arbitrary, will ensure certain standards are consistently upheld (Weber 1978; Wilson 1989). In what is idealized as a "rational" process, the notion is that bureaucratic systems of review yield greater predictability and alignment with core organizational objectives. This perspective has been critiqued from a few angles. For one, we see a surprising lack of predictability or consistency – on a coin whose flip side is a surprising degree of idiosyncrasy – in observations of even the most bureaucratic higher education and other organizational contexts. Another critique, expressed by Jurgen Habermas, emphasizes that the interest in technical rationality operates as an ideological mask over the inherently value-based nature of decision making. Together, these critiques highlight that the inherent unpredictability and value basis of bureaucratic decision making challenge both the common sense view of bureaucratic superiority and the possibility of rationality.

Bounded rationality offered a corrective to the idealized view that decisions are made through a rational sequence of steps in which an actor articulates goals, decision criteria, and alternatives, then analyzes the situation and makes a decision that will maximize benefits and minimize costs. Through studies in mostly corporate environments, James March (1994) outlined two common decision-making logics, noting most people's decisions are not as rational as the prevailing view suggests. Under the *logic of consequences*, actors make decisions based on analyses of the consequences likely to follow specific alternatives. They think not only about the benefits and drawbacks of possible choices, but also the expected consequences that are likely to come with those choices. The trouble is, we can never know exactly what those consequences will be in reality; therefore, we are acting on imperfect information and the decision is never as rational as it may look. The *logic of appropriateness* offers an alternative framework. It asserts that individuals make

decisions by assessing their identities, relevant rules or norms associated with their identities, and the appropriateness of various options given these identities and rules. For example, when faced with the decision of whether or not to sanction a high-performing employee for persistent tardiness, a supervisor might think about their own social identities, the norms for timeliness that accompany their identities, and whether or not those norms imply tardiness constitutes a serious breach of performance. This view recognizes that real people with personal histories and cultures are involved in decision making, and that few people escape such considerations when making decisions.

Neither classic rational choice nor bounded rationality, however, offer direct ways of understanding how and why inequities so frequently arise from the decisions that individuals and organizations make. The failure of these theories to attend to power and privilege – both in the conduct and impact of decision making – may help explain why so many leaders trained in universities teaching these established models go on to make decisions that reproduce social inequities. Higher education administrators striving to enact equity in their decisions can do better than these perspectives by considering other frameworks.

Cognitive and Social Biases

Studying the forms and effects of bias, as well as strategies to mitigate it, has advanced the scholarship of decision making greatly. Human attention and memory are finite; therefore, humans seek out schemas that reduce complexity to forms that are easier to interpret (Massey 2007). With this reduction, however, emerges bias, defined most simply as systematic error. Scholars in behavioral economics (e.g., Kahneman 2011; Milkman et al. 2015), decision theory (e.g., March 1994), and social psychology (e.g., Correll et al. 2007) alike have identified and examined the impact of bias. Recent higher education scholarship has examined cognitive biases and social biases, too. For example, correspondence bias (that is, attributing decisions to an individual's personality rather than the situation in which they made the decision) has been studied with respect to both college admissions and grade assignment/inflation (Bastedo and Bowman 2017; Moore et al. 2010). A novel experiment by Bastedo and Bowman (2017) found that admissions decisions makers selected higher proportions of low SES students when provided with additional information about applicants' high school context. Findings showed that lower SES students are more likely to be admitted when admission officers take into account the resources available to students via their high schools.

Social biases can systematically advantage or disadvantage specific groups. Sometimes this takes place directly (i.e., via valuation associated with a status group itself), other times via qualities (e.g., warmth, competence, risk) that have come to be associated with specific social groups (Correll et al. 2007; Fiske et al. 2002; Milkman et al. 2015). The concepts of implicit and explicit social bias thus have important implications for improving decision making for equity. Both types are predicated on the concept of preferences. Explicit biases are conscious,

intentional expressions of preference that communicate attitudes or stereotypes about groups or individuals. Implicit biases, on the other hand, are unconscious preferences reflecting attitudes or stereotypes. The latter have received considerable attention in recent years by scholars looking at higher education, for we can see their effects everywhere. Higher education scholars have uncovered effects of implicit bias in faculty email responses (Milkman et al. 2015), evaluations of resumes (Moss-Racusin 2012), conference reviews (Roberts et al. 2016), online course evaluations (MacNell et al. 2015), and more. For example, Katherine Milkman and her colleagues sent out 6500 emails to faculty members in 89 universities that implied the sender was a prospective PhD student requesting a short conversation to discuss the possibility of research together in a PhD program. They kept the body of the message identical, varying only the name at the bottom of the email by gender and race. The results showed faculty responding more frequently and more promptly to messages whose senders' names suggested they were men and who were White, relative to messages whose senders' names implied they were women, Black, Chinese, and/or Indian. The results were most pronounced in private universities (Milkman et al. 2015)

Identifying the presence of such biases – which maintain their power largely through their invisibility – is the first step to checking and undermining them. Harvard University's Project Implicit has administered millions of implicit association tests on topics ranging from religion, to race, to body size, and many others. Evidence is quite mixed about the efficacy of trainings and workshops to mitigate the effects of implicit bias in decision making, but suggests a few patterns: First, there must be active interaction and/or discussion about bias in order to normalize it and reduce the defensiveness and stigma that often accompany it. Second, training cannot take place on a single day, but rather should be ongoing to reduce deeply ingrained, habitual bias. Finally, participants should discuss and redress not only personal judgments that may be biased, but the ways in which bias is institutionalized into decision-making processes through typical criteria and everyday practices. For example, letters of recommendation often reflect the gender biases of their authors, making it incumbent upon those who review them to become acquainted with typical manifestations of bias in such letters (Trix and Psenka 2003). Left unchecked, such social biases are pernicious, in that they can become embedded in the culture and therefore invisible to members. We turn to discussing the role of culture in decision making next.

Decision Making and Organizational Culture

Organizational culture is “the system of values, symbols, and shared meanings of a group including the embodiment of these values, symbols, and meaning into material objects and ritualized practices” (Corbally and Sergiovanni 1986, p. viii). As an ever-present facet of organizational life that shapes the interpretations – and thus actions – of its members, culture and subcultures shape decision making of all parties associated with higher education: students' choices of where to enroll, professors'

syllabi and research design decisions, trustees' policy and budget votes, and more. This view regards the organization at least as much an "interpretive undertaking than a rationalized structure with clear decision-making processes" (Tierney 2008).

Schein (1990) posits that organizational culture is defined by patterns of underlying assumptions that have developed over time and become embedded in the values and behaviors of members. Under this framework, these assumptions are regarded as truths about the world – regardless of their evidentiary basis – and inform everything from cultural values to members' decision-making behavior. According to Schein (1990), culture is revealed and reproduced in members' and leaders' informal, tacit judgments and formal, observed decision-making behaviors. Schein (2010) argued that leaders have particular influence in transmitting and embedding culture through decisions that include role modeling; allocating resources; and selecting, recruiting, and retaining members. At the core of these primary mechanisms of transmitting and embedding culture, underlying assumptions and espoused values define what should be prioritized when making decisions.

Within higher education, shared assumptions and values are rooted in an institutionalized ranking regime that enforces a hierarchy of institutions on the premise of national rankings conflating merit and legitimacy with prestige (Gonzales and Núñez 2014). Additionally, of the six articulated cultures of academia defined by Berquist and Pawlak (2007), a collegial culture privileges being nice over voicing concerns, and a study of faculty hiring saw concerns about equity (Villarreal et al. 2019). At the organizational level, this ranking regime and culture of collegiality manifests in ways that value rankings and competition as outcomes above student learning. Using Schein's interpretation of organizational culture, to prioritize rankings can itself be embedded and transmitted as a cultural value, for it is what university leaders pay attention to when allocating resources and selecting and rewarding members.

Although theorists of organizational culture have not always acknowledged it, through actors' cultural interpretations, and subsequent actions and material consequences, people embed power and privilege in decision making and the organization. Some theories of organizational culture speak in only general ways about power, rather than highlighting how specific systems of oppression or domination influence and intersect when actors interpret their contexts and make decisions. Others acknowledge how cultural values, norms, and beliefs limit opportunity or resources to minoritized groups, but in taking a constructivist stance, do not critically interrogate research participants' ways of knowing, ways of evaluating, or ways of making decisions. We propose the necessity of attending more explicitly to power in assessing how evaluation and decision making can contribute to equitable repertoires of faculty practice (Table 2).

A Framework for Equitable Decision-Making

From the evolution of rational choice and bounded rationality theories, we can appreciate that decisions are never purely "rational," that values associated with content and process motivated them, and that individual decision makers'

Table 2 Frameworks for decision making

	Rational choice and bounded rationality	Cognitive and social biases	Organizational culture
Disciplinary origins	Economics; sociology; organizational theory	Psychology; behavioral economics	Anthropology; organizational theory
What is it?	In what is idealized as a “rational” process, the notion that bureaucratic systems of review yield greater predictability and alignment with core organizational objectives. An actor articulates goals, decision criteria, and alternatives, then analyzes the situation and makes a decision that will maximize benefits and minimize costs	Cognitive biases are systematic errors made during decision-making processes when humans seek out schemas that reduce complexity to more easily interpret incoming information. Social biases systematically advantage and disadvantage specific groups either explicitly or implicitly	Organizational culture is a system of values, symbols, and shared meanings of a group and how they are embodied in tangible and symbolic ways and practices
Challenges to equity	Does not offer direct ways of understanding how and why inequities so frequently arise from the decisions that individuals and organizations make. Do not attend to power and privilege in the conduct and impact of decision making	Left unchecked, social biases can become embedded in the culture – invisible and institutionalized. Social biases based on stereotypes can then influence perceptions of individuals from minoritized groups, thus impacting the decisions made	Most work on decision making from an organizational culture perspective lacks sensitivity to issues of power within an organization, and the additional social contexts in which organizations are situated

conceptions of consequences and/or their identities compel norms that manifest as priorities and preferences. Cognitive and social biases – both implicit and explicit – are predictable types of deviation from pure rationality that have received considerable research and theorizing of their own; however, we observe that rarely has this scholarship accounted for the contexts of bias. Biases can be misconstrued as solely individual-level problems unless one recognizes that societal, policy, and organizational contexts in which one has been socialized propagate these biases. Indeed, without active attention, biased conceptions of merit and legitimacy can become engrained as normal and expected within social contexts – perpetuating unequal outcomes through the very processes of decision making that could also be used to interrupt those biases. To advance the study of evaluation and decision making in higher education so that these activities enable faculty toward more equitable repertoires of practice, we propose the following tenets:

1. Evaluation is the core of decision making. It is conceptually distinct from, but deeply embedded in, decision-making processes.
2. Decision-making contexts provide a heterarchy of priorities and preferences that drive the evaluative core of criteria, processes, and outcomes.
3. Evidence of bias – both individual and structural – is expected and endemic, given the systems of power into which decision makers are socialized and the conditions under which evaluation and decision making typically occur.
4. Racialized and gendered conceptions of merit and legitimacy are reinforced by the social contexts and organizational cultures within which evaluation and decision making occur.
5. Equity checkpoints throughout decision making can routinize attention to bias.
6. Evaluation and decision making are central processes in the ongoing creation of academia as a cultural community. Therefore, creating equitable repertoires of practice in these areas represents an opportunity to advance equity in higher education as an institution.

We portray selected elements of this framework for equitable decision making (Fig. 1). In developing our framework for a higher education audience, **we place evaluation at the center, recognizing it as the core of decision making.** Next,

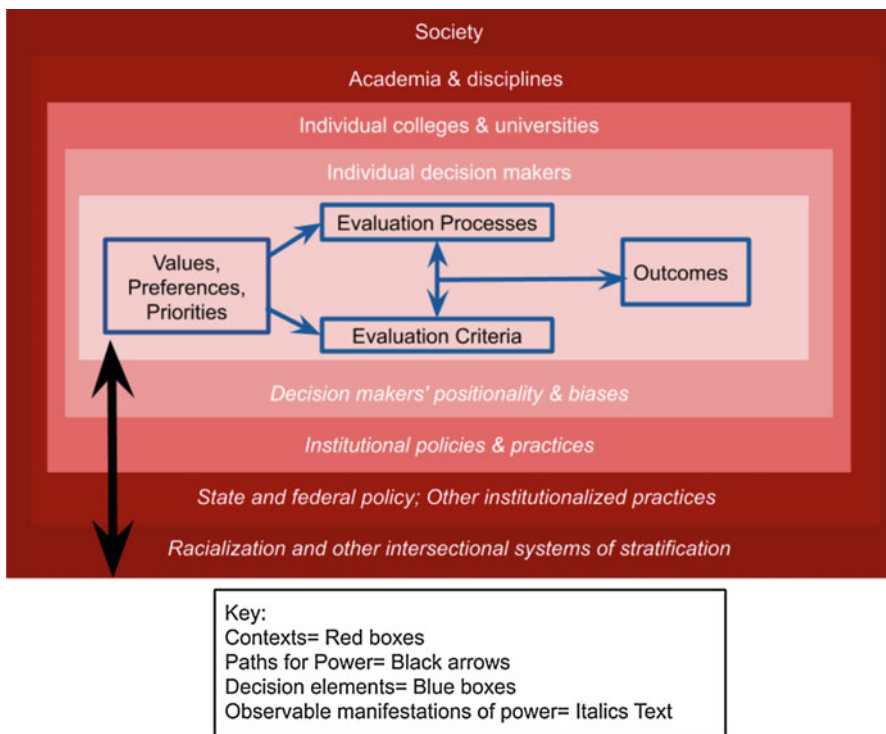


Fig. 1 Framework for equitable decision making

across the varied perspectives on decision making, we determined that decisions are at their simplest, a procedure in which evaluation criteria are applied to deliberative procedures to lead to a specified outcome. These are perhaps the core operational aspects of any specific evaluation or decision process. It suggests that **together, evaluative criteria, deliberative processes, and decision outcomes constitute three key equity checkpoints** at which decision stakeholders can bring equity-mindedness to check their evaluation and decision-making practice. Recognizing the endemic nature of cognitive and social biases, evaluation criteria and deliberative processes can each operate as levers for enhancing or reducing the overall equity of a given decision's outcome. Whether explicit or left implicit, the criteria and process provide the basis and practice for actions that ultimately contribute to broader patterns of inequality; therefore, mindfully treating one's criteria and processes as equity checkpoints ensures that biased default judgments do not drive outcomes.

Values, priorities and preferences reflect conceptions of merit and legitimacy, and moderate the relative importance of specific criteria and processes to particular outcomes. Holding fast to one preference – either for a particular type of criterion, a particular sort of decision-making process, or a particular outcome – means that other preferences may be downplayed in importance. Indeed, there are either-or situations in which a “yes” vote to elevate some criterion, process, or outcome appears to mean a “no” vote to something else. However, a more mindful, creative stance can help transform many apparent either-or decisions into both-and decisions. When revamping an organizational structure, for example, what may appear to be a forced choice between outcomes that prioritize representation or effective leadership may simply require time and creativity to identify an option that accommodates both priorities. Revisiting, then reframing, the details of the situation at hand can facilitate a more holistic and expansive reasonable decision pathways.

Indeed, decisions in higher education are almost always context-specific. As represented by the nested boxes in Fig. 1, micro-level decision-making situations are embedded within larger contexts (see the text in the upper side of the boxes) which have associated manifestations of power (see the italicized text in the lower side of the boxes). **These social contexts of decision making and associated manifestations of power shape values, preferences, priorities, and thus, the evaluative core.** The role of power in these contexts specifically merits attention: racialization and other intersecting systems of stratification; state and federal policies; organizational policies and standard practices; and decision makers' individual-level positionalities and biases. We portray them as nested, to draw attention to the relationships among these contexts.

How does the higher education literature suggest that context shapes decision making? Decisions are made by people, often nested in committees, which are nested within other socio-organizational contexts such as colleges, disciplines, and society. Consistent with the view of a heterarchy of priorities, each individual, committee, and broader context will hold multiple priorities and preferences, not to mention power dynamics and biases that are both implicit and explicit, which rarely overlap perfectly. The processes of individual and collective judgment are laden with the pulls from one's multiple identities, albeit with varying levels of

saliency at different times, groups, and situations. Heuristics and routines enable decision makers to navigate this complexity via mental shortcuts from their experiences; however, this approach to decision making, in reducing complexity, is also prone to errors (Tversky and Kahneman 1974). It eases cognitive load for the decider, but also comes with an increased propensity to cognitively and socially biased judgments (Tversky and Kahneman 1974; Bargh and Chartrand 1999). Building into decision-making routines some context-specific equity checkpoints offers one straightforward strategy for more equitable practice. Checkpoints may include whether known biases are revealed in the information/criteria being used for judgment, whether decision processes or rules are reinforcing or interrupting power asymmetries, and whether intermediate outcomes preceding the ultimate outcome reflect inequities or reduce them.

Relatedly, our framework names power as a force that affects equity in all decision making – one that practitioners and scholars alike should likewise acknowledge and explicitly address. One simple definition of power is the ability to influence social decision making, and we see power affecting decision making in two ways. It shapes decision making from the outside in, as societal influences like racialization and other intersecting systems of oppression manifest within academic environments. Power also operates from the inside out, as individual biases and political games accumulate over time and space to contribute to wider social conditions. Figure 1 depicts this through the bidirectional arrow going back and forth between micro to macro contexts.

Left unexamined, power has multiple channels through which it reproduces inequalities.

It plays out in societal and cultural norms, institutional and organizational policies and practices, and individual decision-making situations. With the exception of scholarship on implicit bias and research on race-conscious admissions, extant perspectives rarely make explicit the roles of racialization in decision making; however, in the USA, we cannot neglect the relevance of race and yet expect equitable outcomes. Decision makers also need to be aware of how power operates through multiple, interacting hierarchical systems that, in addition to race, include class, gender, and others. Attending to power will enable scholars to tell a fuller story about the distribution of resources in higher education than is typically made possible in research on judgment and decision making. Attending to power can also enable decision makers themselves working in colleges, universities, and other academic institutions to use the logics of consequence and identity to think more intentionally about the consequences of their decisions (i.e., will it reproduce inequities?) and/or what is appropriate for a person like them (e.g., how can I use my power/privilege as a decision maker to create a more just organization?).

Toward Equity-Minded Repertoires of Practice for Faculty

To move scholars and practitioners toward more equitable repertoires of practice, the sections that follow review extant literature about the ways that power dynamics are reflected in four domains of practice where faculty routinely make judgments and

decisions: admitting students and hiring faculty fall under the umbrella of institutional service, peer review governs the dissemination of research, and curriculum design involves evaluation and decision making about one's teaching responsibilities. Each of these areas carries implications for the core knowledge production function of academia and role of professors – either directly, such as the priorities that shape peer review and the development of syllabi, or indirectly in how we select students and faculty to join the knowledge production enterprise. In our view, scholars of evaluation and decision making are better able to see equity encouraged or threatened when we attune ourselves not only to its presence or absence in a decision's outcome generally, but in analytically important components of all decisions: criteria, processes, and outcomes. Our review will focus on these three components and the common causal relationship among them: greater equity in the criteria and processes of evaluation and decision making yields outcomes that are more equitable. By making plain how core components of the framework applies to the research, teaching, and service areas of faculty work, considerations relevant to other academic evaluative, and decision-making contexts may also become clearer.

Admitting Students

Unlike undergraduate and professional school admissions, which is usually a centralized decision-making process carried out by staff, graduate admissions decisions are made by faculty at the department level fulfilling obligations of service to one's institution. Despite these different processes of review, common equity threats and opportunities thread through the evaluation criteria and processes across admissions contexts. We conducted a review of research pertaining to admissions criteria, processes, and outcomes,³ and here we discuss these issues with a focus on graduate admissions, where faculty have the most influence. Indeed, their decisions about whom to admit determine who has access to training in knowledge production.

Admissions Criteria

Perhaps the most prevalent theme in literature on admitting students concerned the application criteria used in admissions decisions and how well they predict different definitions of success, like grades, retention, or degree completion. The major

³We conducted a targeted search for literature on undergraduate and graduate/professional admissions within the Proquest ERIC database, limited to English language, peer-reviewed journal articles, and the following search terms: "undergraduate admissions," "college admissions," "graduate admissions," "doctoral admissions," "masters admissions," "professional school admissions," "law school admissions," "medical school admissions," and "business school admissions." These searches turned up 3387 overlapping results. Duplicates were removed. We reviewed titles and abstracts to ensure a focus on admissions in the USA, yielding 285 articles. The literature roughly fell into three areas, though not mutually exclusive: admissions criteria and efficacy for these items to predict academic performance, the ways admissions processes are carried out, and the impacts of enacting varying academic missions through criteria evaluation.

takeaway from this body of evidence for our purposes is this: No single criterion reliably produces the multiple desired outcomes of admissions, nor all forms of success equally well for all populations. Equitable admission judgments therefore need a comprehensive set of criteria, assessed systematically, and contextualized for individual applicants and the organizations they wish to enter.

Quantitative metrics in admissions. For the ongoing questions about both equity and predicting future success, no admissions criteria type has received as much attention as standardized tests. This literature, which implicitly reflects a functionalist approach to admissions evaluation, is highly varied on the question of what forms of future performance are predicted – and for whom.⁴ However, it consistently finds that the longer the time elapsed between taking the test and the measure studied, the weaker the relationship is (Kuncel and Hezlett 2007; Mattern and Patterson 2013). While differentially predicting GPA, graduation rates, and other performance measures (Smith and Garrison 2005; White et al. 2009), we know that from elementary school achievement tests to graduate admissions entrance exams, standardized test scores also correlate with gender, race, and socioeconomic status (Bastedo and Jaquette 2011; Bielby et al. 2014; Posselt et al. 2012). On average, men, high income, White, and Asian students score higher on such exams than their demographic counterparts; therefore, admissions processes that over-rely on standardized test scores or use score cutoffs to make decisions disproportionately limit access to underrepresented groups (Bastedo and Jaquette 2011; Bielby et al. 2014; Miller and Stassun 2014; Posselt et al. 2012).

In most models, prior grade point average (GPA) emerges as the strongest single predictor of future academic performance. Yet, inconsistencies in its validity, too, have been found across institutional contexts, fields of study, and subpopulations.⁵ It does not predict later performance as well for women, racially minoritized students, English learners (ELs), and students with low socioeconomic status (SES) as it does for students from more privileged backgrounds (Culpepper and Davenport 2009; Mattern et al. 2011). At the graduate level, too, undergraduate GPA is the strongest predictor of graduate GPA, although results are mixed with regard to prior disciplinary specific coursework (Christensen et al. 2012; Halberstam and Redstone

⁴In a study of medical students, MCAT predicted 1st year success in clerkships of White students but did not predict performance of racially minoritized students (White et al. 2009). In another professional school setting, the GMAT was found to be a good predictor of GPA in business and management programs, especially for non-US students, (Koys 2005; Sireci and Talento-Miller 2006). However, the test also differentially and negatively predicted success for women and racially minoritized students (Hedlund et al. 2006). These results combined show that while standardized tests offer some degree of correlation with academic success for some students, they may not add much and over reliance on them can have detrimental impact on access for marginalized groups of students (Smith and Garrison 2005).

⁵For studies of grades' differential validity in predicting future success, see Culpepper and Davenport (2009), Halberstam and Redstone (2005) Lanham et al. (2011), and White et al. (2009). It was the best predictor of graduation at HBCUs in one study (Lanham et al. 2011), but another study found that its predictive power decreases as average SAT and selectivity at an institution increases (Kobrin and Patterson 2011; Sawyer 2013).

2005; Miller et al. 2019). Together, the available evidence on validity makes clear that even the best single predictor cannot be relied upon alone.

What is more, faculty do not only use quantitative metrics to identify the students whom they think are most likely to succeed; constructivist research also finds they justify their use of these criteria based on personal associations of the scores with intelligence, which is important to them because they feel it contributed to their own success as scholars. If the goals of admissions (which should not be assumed) include making higher education access more equitable, we will require criteria that do not reproduce demographic inequities and are valid predictors of degree completion given a supportive, quality educational experience. Faculty and others making admissions decisions have the responsibility to question the legitimacy of criteria that uphold inequality while exploring the possibilities of more comprehensive and contextualized sets of criteria.

Qualitative portions of applications. Personal statements, writing samples, letters of recommendation, and interviews are common in many undergraduate, graduate, and professional admissions (Briehl and Wasieleski 2004; Littleford et al. 2018; Posselt 2016; Potvin et al. 2017). These elements enable judgment among academically qualified applicants, particularly at the graduate level (Stevens 2007; Posselt 2016), but, with a few exceptions, have received less scholarly attention than grades and test scores (Briehl and Wasieleski 2004; Littleford et al. 2018; Murphy et al. 2009). Meta-analysis on the research about personal statements (Murphy et al. 2009), for example, concluded that while they did not offer any incremental improvement in the prediction of grades above prior GPA and test scores, they may be useful in assessing program and advisor fit.

Although highly valued in graduate admissions, “fit” is ambiguous and rooted in subjective perceptions, which make it highly susceptible to implicit biases (Posselt 2018). This highlights an important point about selection and decision making: It often proceeds not only to identify people who are likely to be successful, as functionalist views of evaluation suggest, but also latent organizational functions like creating community, reinforcing organizational culture, or nudging it in a new direction – as is consistent with constructivist, performative, and organizational frameworks for evaluation. At least one study found that interviews and in-person exercises were more predictive of achievement in a doctoral program than undergraduate GPA and GRE scores (Mountford et al. 2007). As this last point shows, qualitative aspects of applications may be valued for their direct relationship to markers of future academic and professional success or because they are related to nonacademic qualities that people also believe to be indicators of success. With respect to the latter, scholars have also explored the predictive power of noncognitive competencies.

Noncognitive competencies in admissions. As a broad category of criteria, research on noncognitive and socioemotional competencies (defined broadly as self and relationship management skills used to navigate everyday life) remains inconclusive due, in part, to the inconsistent way these variables have been defined (Kyllonen et al. 2005; Sommerfeld 2011). William Sedlacek (2004) articulated one set – frequently found among racially minoritized students, specifically – that

includes positive self-concept, realistic self-appraisal, negotiating the system, long-range goals, strong support person, leadership, community service, and non-traditional knowledge. While some scholars determined that noncognitive competencies are not adequate predictors of college GPA or persistence based on a meta-analysis of research using a questionnaire based on Sedlacek's work (Thomas et al. 2007), others have found that they predict 1st-year GPA better than high school grades and standardized tests (Shivpuri et al. 2006; Sinha et al. 2011). What is more, these skills do not appear to present the gender and racial disparities so prevalent in other measures (Shivpuri et al. 2006). These patterns, of course, are likely to be affected by how faculty and higher education practitioners operationalize and measure noncognitive competencies. Improving our assessment of noncognitive competencies may provide an opportunity to improve equitable decision making in admissions.

In summary, an equitable repertoire of decision-making practices in admissions requires not only understanding how well different standards predict success, which also necessitates critical reflection and explicit definition, but also scrutinizing whether criteria predict these outcomes across marginalized and privileged groups. For too long, institutions have relied narrowly on quantitative metrics that privilege students from already overrepresented populations, enabling admissions to become a mechanism for the reproduction of inequalities in higher education – and thus the labor market. That reliance creates a threat to equity, not only based on the criteria and their distribution, but also how faculty and others with decision-making authority put the criteria to use. To examine this, we turn to other research on the practices and policies of admissions decision-making processes.

Admissions Processes

Consistent with constructivist and performative views of evaluation, faculty also profess using admissions to create communities of students who will represent the sort of community they want to be (Posselt 2016). In some cases, this idealized vision includes greater diversity or reduced inequalities, but critical and power-analytic studies of admissions are needed to examine how well these efforts actually achieve equity aims and/or center counter-narratives about merit, equity, and diversity, which faculty of color are more likely to hold (e.g., Squire 2019). The backgrounds, training – or more pointedly, lack thereof, and work of faculty and others tasked with admissions decisions each impact evaluation and selection processes and, by extension, the outcome (Hodum and James 2010; Bowman and Bastedo 2018; Posselt 2015). Posselt's (2016) study of PhD admissions found that faculty from lower SES backgrounds thought of themselves as more qualified to judge applicants from low SES backgrounds, and that they sought opportunities to “pay forward” with admission the opportunities they knew someone at some point had extended to them. In addition, practitioners who work together for a long time in a common domain or have undergone similar training may likely develop shared sensibilities in how they evaluate potential for success in a particular field (Christensen et al. 2018; Posselt 2015). Together, these studies highlight that the judgment and social identities of decision makers are intertwined; therefore, who is

at the decision making table matters for how information is processed and – ultimately – who is likely to be admitted.

Another dimension of admission decision-making processes that has equity implications is the evaluative work of holistic review, defined as the consideration of a wide variety of applicant characteristics, including noncognitive or socio-emotional skills and environmental and historical contexts. To date, the lion's share of research on holistic review has been conducted in undergraduate contexts. For example, Bastedo and colleagues (2018) identified three types of holistic review used among undergraduate admissions officers: *whole file*, which considers all aspects of the application; *whole person*, which considers many facets of the applicant's background and potential; and *whole context*, which looks at what an applicant has done in light of the opportunities they have had (Bastedo et al. 2018). In addition, an ethnography of a liberal arts college's admissions office by Mitchell Stevens (2007) described admissions decision making as a process of evaluative storytelling, in which applicants come to be taken seriously or disregarded through the stories that admissions officers weave for one another from the details in student applications. Socioeconomic inequalities are reproduced through evaluative storytelling, Stevens argued. Applicants with privileged backgrounds are more likely to have had an upbringing and admissions coaching so that their record includes tone, details, and experiences through which admissions officers can craft a compelling narrative about why the student should be admitted. For graduate admissions, potential threats to equity can arise from staged, holistic review processes that ignore racialized and gendered disparities inherent in facially neutral criteria (Posselt 2016; Posselt et al. in press). For all the attention that evaluation criteria and processes deserve, these facets of decision making must be judged in part by the outcomes of such efforts, as the next section suggests.

Outcomes of Admissions Decisions: Access and Exclusion

Criteria, people, and processes intertwine to determine how equitable (or not) the outcomes of admissions are for the educational access of historically minoritized groups (Bastedo and Jaquette 2011; Park and Liu 2014; Redding 2013; Smith 2008; Sorey and Duggan 2008).⁶ There are real equity threats and opportunities for gatekeeping professionals in higher education who strive to balance limited resources and slots with the ideal of transparent evaluations of student potential that broaden access. In many places, these practical challenges of equitable admissions decisions are framed by the overarching policy context – such as that which surrounds race-conscious admissions and affirmative action. Such policy indirectly affects the outcomes by affecting decision-making criteria, as well as comfort with discourse about race itself (Caldwell et al. 2007; Garces 2014; Moses and Chang 2006; Posselt 2014). New developments in holistic review and contextualized admissions at both the undergraduate and graduate levels appear to offer

⁶Researchers have paid less attention to other marginalized populations such as undocumented, LGBTQ, and Muslim students (Gildersleeve 2010; Marine 2017; Stegmeir 2017).

opportunities for managing these tensions, though research is needed about their efficacy in shifting outcomes.

Hiring Faculty

Hiring faculty is a second form of service to one's institution that involves evaluation and decision making, and which holds direct implications for equity. The process is generally decentralized, with decision-making authority vested either at the departmental level or with a school/college dean. A search committee typically holds the power to make or at least recommend hiring decisions, which allows for a small group of individuals to have significant influence in shaping who progresses through the hiring process's several rounds of review. There is also variation in how hiring decisions are made based on institution type (Lee and Chun 2014) – both with respect to the policies that order the process and the expectations for prospective scholars. To illustrate the relevance of our framework in this context, we discuss how the literature on faculty hiring⁷ highlights equity threats and opportunities with respect to criteria, processes, and outcomes.

Hiring Criteria

Selection and evaluation of faculty candidates often comes down to debate among search committee members about the definition of merit, and how candidates embody the visions of merit and legitimacy that hold sway in a particular department or discipline. Such debates may begin even before deliberations take place, emerging when crafting the job announcement. Language in the posting represents the consensus view of the skills and competencies needed for the position (Smith 2009); therefore, insofar as there are divergent views about the role of a professor, the relevance or legitimacy of different types of work, the intellectual focus that a position should fill, the job announcement becomes the place for defining criteria of who will be judged qualified.

Job announcements vary in scope and depth, and some specifically outline desired characteristics and qualifications while others reflect boilerplate language about the institution and the title of the role being filled. In a study that evaluated nearly 700 job descriptions, Smith and colleagues (Smith et al. 2004; Smith 2009) found that many job descriptions were seemingly decades out of date except for a

⁷We conducted a targeted search of the literature on faculty hiring through the ProQuest ERIC database with the search terms “faculty hiring.” The parameters were limited to a single search term given the dearth of literature on the topic. Limiting the results to peer-reviewed journal articles yielded 58 results. Forty-four articles adequately represented our conditions; that is, they consisted of empirical evaluations of the faculty hiring process, and represented various theoretical or conceptual approaches to diversifying faculty hiring. Though limited in number, these articles provided various access points to the study of faculty hiring decision processes from search committees, to organizational structures, to institutionalized values, to various cultures of the academy.

certain few that incorporated global or technological priorities. To diversify the faculty, Smith et al. (2004) suggest that drafting the job description must be one of the central elements of the hiring process in which the job description is linked to institutional priorities such as diversity or equity.

Similar to the admissions process, faculty hiring criteria typically include a few standard eligibility criteria, with some variation in expectations by hiring for junior, mid-career, and senior positions: a *curriculum vitae* should list publications, experience teaching and designing courses, and service work to the profession and institutional community. Evaluation of service is one area in which implicit social biases are revealed: qualifications of applicants from minoritized groups are often over-scrutinized and undervalued. For example, the contributions made by racially minoritized faculty to institutional diversity initiatives are often assumed to occur at the expense of scholarly excellence (Sensoy and DiAngelo 2017), while the same lines on a CV of a white male applicant are highly sought after signs of engagement across diversity (Smith et al. 1996).

Research also indicates that academic elitism plays a role in the hiring of faculty members. Judgments of talent and brilliance, for example, tend to inform how faculty think when looking for new colleagues, but are part of the tacit criteria of fit and merit, rather than listed among the formal criteria of review or disclosed in the job description (Lamont 2009). Committees use the prestige of candidates' institutional affiliations as a signal of the person's excellence, a phenomenon known as the halo effect. This practice disadvantages candidates from backgrounds that are underrepresented in the professoriate, who have been less likely to have access to elite higher education at both the undergraduate and graduate levels (Bastedo and Jaquette 2011; Bielby et al. 2014; Posselt et al. 2012; Smith 2009). In summary, as in admissions, traditional evaluation criteria threaten the racial, gender, and socioeconomic equity of hiring outcomes. Campuses can remedy these issues by (1) focusing their efforts on aligning the job description with diversity and inclusion initiatives, (2) defining in advance, and holding fast to, criteria that do not systematically disadvantage already minoritized groups, and (3) being explicit about prioritizing candidates with the capacity and desire to improve equity.

Processes in Faculty Hiring

How do typical faculty hiring processes contribute to the equity of outcomes? One important answer concerns the immediate social context of the decision – that of the search committee. The decentralized nature of the entire process and the autonomy of most search committees allows them to define the qualities, skills, or competencies deemed ideal for the position; however, decentralization and search committee autonomy also create opacity in the process. Few topics in higher education have been more difficult to study through ethnographic or observational data collection than hiring faculty and upper administrators, because deliberations take place behind a veil of secrecy (for recent exceptions to this, see Liera (2018) and Rivera (2017)). Beyond the job description and criteria for candidates, decisions typically come down to committee deliberations – after application periods have closed, following interviews, and for the purposes of confirming recommendations. At each stage, who

is at the table and what the power dynamics are among them contributes greatly to the nature of deliberations and their outcomes. Thus, committee composition merits consideration as one equity checkpoint for hiring, particularly given the evidence of homophily (i.e., preference for people like oneself) in elite academic hiring (Rivera 2017). Despite the democratic process enabled by decision by committee, those committees will continue to reproduce the same outcomes search after search unless they explicitly, mindfully act to disrupt outdated notions of excellence predicated on unequal educational systems (Sensoy and DiAngelo 2017).

Further, although the search committee is influential (Kayes 2006; Sensoy and DiAngelo 2017; Turner 2002), the process and power to make decisions may reside in the hands of other stakeholders, not just those of committee members. Relevant to the institutional policy context that our framework represents, there is considerable variation in the power attributed to administrators such as deans (Kezar and Gehrke 2016) and trustees (Ehrenberg et al. 2012) in carrying out the institutionalized processes (Blankenship-Knox et al. 2017; Freeman and DiRamio 2016; Kezar and Gehrke 2016; Twombly 2005; Uzuner-Smith and Englander 2015) that result in faculty hiring. Varying institutional types have differing governing processes, and this is represented in faculty hiring.

Biases in the search process. Search committee deliberations are not immune from the institutional, cultural, and discipline-specific biases that tacitly govern faculty ways of thinking. Empirical research on the search committee process highlights specific biases and threats to equity across both racialized and gendered lines. Freeman and DiRamio (2016) uncovered that Ph.D. programs were most attracted to candidates who were graduates of other elite Ph.D. programs because of structural similarities across programs. Candidates that came from institutions with similar organizational cultures were sought after because expectations in networking, publishing, and mentoring students were believed to be the same. Their own socialization within the institution that top-ranked programs were the best places to recruit incoming faculty informed their decision-making process even though it came at the expense of excluding candidates that went to less prestigious institutions but may have had better qualifications or potential.

The literature also shows that biases are present in committee deliberations in the form of gendered expectations of personal heterosexual relationships (Rivera 2017) and notions of “fit” (Twombly 2005). Committee members in one study excluded women applicants from moving on to the next round, assuming that their partners were in high-status, geographically fixed positions. In another study, community college faculty search committees made decisions based on personal and institutional values, placing emphasis on teaching experience and perceived notions of how candidates would “fit” with the campus culture (Twombly 2005).

To reduce the impact of biases and assumptions held by search committee members, some scholars argue that champions of equity are needed in search committees to serve as watchdogs and advocates for hiring diverse applicants (Smith 2009; Smith et al. 1996). Others, however, question the wisdom of this approach, either because it appears to absolve the entire committee of attending to

equity implications or because the power dynamics are more complicated than what a single advocate could handle. At one campus that was intentional about training advocates of equity to serve on search committees, the intersectional relations of power associated with race, gender, tenure, and discipline together shaped how these advocates were able to negotiate and resist biases in hiring (Liera 2018). Conversations about hiring decisions were often dominated by what Liera (2018) referred to as a “bro code” that protected the *status quo*. Though the composition of the committee was made intentionally with regards to including trained advocates of racial equity, because the advocates were women, some women of color, their perspectives were often dismissed when shared.

Amid ambiguity of both processes and criteria, divergent faculty cultures valued within the academy collide with the biases and expectations committee members hold around presupposed notions of merit (Kayes 2006), fit (Twombly 2005), and gender and relationship status (Rivera 2017). This ambiguity makes it challenging for hiring committee chairs to articulate their expectations, much less enact equitable processes for evaluating candidates (Blankenship-Knox et al. 2017; Cipriano and Buller 2012) and checking colleagues on misperceptions and biases. There are opportunities to work toward equity, however, through such methods as such as training for *all* committee members to be advocates for equity and diversity. Indeed, professional development for faculty is becoming increasingly common as an expectation of serving on faculty search committees.

Outcomes of Hiring Decisions

As indicated in the previous two sections, the combination of opaque hiring criteria along with imbalanced committee composition and bias in their deliberations create conditions that threaten the equity of outcomes. Regardless of institution type, there are many contextual factors at play when hiring decisions are ultimately made. Influences from organizational culture, prestige of graduate training, power dynamics with regards to gender, race, tenure, and department have the power to shape where and when key decisions are made. The challenges to equity may be kept in check with mindfulness and intentionality at each step of the process: actively shifting job announcements to define diversity and equity as desired qualities, ensuring that search committees represent a diverse set of voices and are adequately trained to advocate for equity, seeking both potential and achievements to date, and working to identify and disrupt biases and assumptions about minoritized candidates (Smith 2009; Smith et al. 2004; Sensoy and DiAngelo 2017; Kayes 2006).

Peer Review

Peer review functions as perhaps the most important system within academia for evaluating and legitimating new knowledge. Faculty members both engage in and rely on peer review processes to assess manuscripts, funding applications, and to determine hiring, promotion, and tenure. In this chapter, we focus on the role of peer

review in evaluating and legitimating published scholarship.⁸ We demonstrate that the peer review process, as it currently exists, threatens equity by systematically favoring white male scholars from elite institutions who publish relatively apolitical work (Carlin et al. 2013; Hojat et al. 2003; Rowland 2002; Salinas 2018); but we argue that by naming and addressing inherent biases and power asymmetries that serve the status quo, peer review can also function as an important site for creating equity.

While there is general consensus around the criteria for evaluating and recognizing excellent scholarship, it is evaluators' disparate perceptions of legitimacy and legitimate scholarship within the peer review process that result in disparities in the works accepted for review and publication, influencing how social capital, recognition, and legitimacy are distributed in higher education. Power and legitimacy manifest in the peer review process in several ways: (1) in the ways referees evaluate what knowledge is credible, original, and valid; (2) in the selection of what work is published; and (3) the peer review process itself confers and reinforces status for individuals, departments, and groups. Conceptions of legitimacy are shaped by institutional and authorial reputation as well as by disciplinary norms, methods, and epistemologies; these conceptions influence the extent to which new knowledge claims are embraced or rejected. Throughout, we demonstrate how unacknowledged and unchecked subjectivities currently function as threats to equity because of the ways they inequitably confer power and legitimacy.

Put simply, peer review refers to the process of screening work. Within the academy, work that has not undergone peer review may be believed to be of lesser quality than peer reviewed work (Roberts and Shambrook 2012). The history of peer review is long, but its current form arose during the Cold War alongside increased government funding for scientific research (Baldwin 2018; Rowland 2002). Peer review was normalized for two reasons: (1) scientists did not want nonexperts determining what was scientifically valid (Baldwin 2018) and (2) the process provided a quality control mechanism for published works (Rowland 2002).

When a piece is submitted to a journal, the submission is reviewed by the editor for general fit within the journal's goals; if the piece is a fit, then the editor assigns the piece to be reviewed by two or more "experts" (Rowland 2002). However, areas of knowledge are increasingly specialized, so "true experts" are likely few and far between (Roberts and Shambrook 2012). Generally, journals employ single blind review to anonymize the author's identity (Tomkins et al. 2017). However, preserving anonymity is challenging when authors' contributions, methodologies, or datasets are unique (Tomkins et al. 2017). After reviewing the manuscript, referees send the piece back to the editor with the recommendation to accept, reject, or

⁸We conducted a search of literature through the ProQuest ERIC database with the terms "peer review," "peer review process," "peer review bias," "peer review + legitimate," and "peer review + equity". In limiting results to peer reviewed journal articles, the majority of the published scholarship centered peer review in the context of published scholarship. A smaller body of work discussed peer review in funding applications, thus our chapter centers peer review in the context of published scholarship.

resubmit with revisions; but, final decision making is left to the editor(s). Both editors and referees serve as important gatekeepers and evaluators in the peer review process.

Functionally, peer review is intended to help the knowledge of a field grow, evolve, and innovate, but the process often reifies or protects existing knowledge claims (Bedeian 2004). In some fields, existing knowledge is protected because knowledge is positioned as cumulative, thus scholarship rests on the reification of prior knowledge as valid (Hyland 1999; Schwartzman 1997). However, disciplines that advance knowledge by refining or rejecting existing theories rely on different assumptions about the value and validity of existing research (Becher 1987, 1981). While not all disciplines construct and reify existing knowledge in the same ways (Becher 1981; Hyland 1999), the peer review process, as a whole, protects existing knowledge in ways that perpetuate inequity.

Despite the process' general bias towards existing knowledge and authorial prestige, the peer review process is heralded as one of the most fair, equitable, and essential elements to academic quality, largely because of its quality control and gatekeeping functions (Hamann and Beljean 2017; Raelin 2008; Roberts and Shambrook 2012). Peer review carries and conveys status, which as was discussed in the introduction, is important because academia functions as a status economy (Hamann and Beljean 2017). Yet, the process reproduces inequity in fulfilling its intended functions: dissemination of new knowledge, archival of canonical knowledge, quality control, and assigning credit to authors (Cole 1983; Rowland 2002). Peer review criteria are explored in order to better understand the varied physical and symbolic outcomes.

Peer Review Criteria: Validity, Credibility, and Novelty

Outside of the general fit for the journal's goals, several criteria tend to guide the peer review process: validity, credibility, and novelty (Bedeian 2004; Siler and Strang 2017). Yet, criteria may vary across disciplines. Physics views knowledge accumulation as contributing to a larger corpus of work, with clearly defined boundaries, while sociology views knowledge as an individual's contribution to a less well-defined body of work (Becher 1987). While conceptions of legitimate knowledge may differ across disciplines, it is still important to examine the function of peer review criteria in the evaluation and legitimation of scholarship.

Bedeian (2004), drawing primarily on management literature, conceptualized validity and credibility as being closely intertwined, representing work that is free of error and contributes to the knowledge base. Yet, Bedeian (2004) recognized that concepts and enactments of validity and credibility rest on socially constructed and legitimated ideas of knowledge. Siler and Strang (2017), drawing on existing literature from 43 fields, positioned novelty as a concept to evaluate the originality of claims, methods, topics, theories, and approaches, but recognized that there is no single, straightforward view of originality.

Cole (1983) connected the functions of peer review to the criteria by explaining how the publication process is meant to produce the research frontier (new knowledge claims) while continuing to evaluate existing knowledge with the intent of

producing a universally accepted set of core ideas within a field. Frontier knowledge claims are not likely to be universally accepted, as a substantial level of disagreement and difficulty exists in determining which claims will turn out to be significant (Cole 1983). Referees are tasked with evaluating work based on its credibility, novelty, and validity in order to shape the research frontier and continuously evaluate – and potentially challenge or institutionalize – existing knowledge claims. Yet, the ways that individual referees perceive, understand, and employ these criteria differ by field, training, epistemology, status, and experiences (Apple 1999; Roberts and Shambrook 2012). These differences directly shape the process and outcomes associated with peer review and ultimately reproduce stratification in the academy.

Peer Review Process: Unchecked Evaluation Biases

Ideally, the peer review process evaluates the soundness of research and its potential contributions to the field (Roberts and Shambrook 2012). However, this evaluation process is socially constructed and situated, meaning it is less objective than many would hope for it to be (Bedeian 2004; Hojat et al. 2003). The lack of objectivity is not a problem in and of itself, insofar as socially constructed preferences will always drive what is valued; rather, it is the process' unchecked biases that inequitably distribute power. Despite the importance of peer review as a process to evaluate and disseminate new and original research, work that diverges from the mainstream – work that is novel – is hard to evaluate and often is rejected or heavily revised in the peer review process (Siler and Strang 2017). The process creates a tension between the goals of authors and referees (Bedeian 2004). Authors seek to make original claims, while referees strive to place the work within the existing knowledge base (Becher and Trowler 2001; Bedeian 2004). The tension between originality and inclusion in the knowledge base is exacerbated by the fact that some forms of originality are more valued than others (Becher and Trowler 2001; Siler and Strang 2017). Work that challenged existing theoretical perspectives faced higher levels of criticism than pieces that extended or combined established perspectives (Siler and Strang 2017). Siler and Strang (2017) argued that reviewers desire originality in the abstract but are more conservative in practice because of their socialization. Thus, not all forms of knowledge are evaluated equally or equitably.

Further, studies have uncovered multiple sources of bias in the peer review process arising from referee's schemas, or existing conceptions, of knowledge and merit (Raelin 2008). Peer review generally favors work that confirms what is believed to be true (Hojat et al. 2003). Conversely, referees and editors may block knowledge that disproves their own work or demonstrates negative results (Hojat et al. 2003; Roberts and Shambrook 2012; Siler and Strang 2017). Peer review often disadvantages non-male authors (Carlin et al. 2013; Hojat et al. 2003; Rowland 2002), authors from less prestigious or minority institutions (Rowland 2002), and work that is political in nature (i.e., work about race) (Hojat et al. 2003; Salinas 2018). The process favors authors who are seen as famous or who come from elite departments or institutions. Due to the same halo effect that elevates judgement of faculty candidates from elite universities (Paxton and Bollen 2003), their work is assumed to be of high quality, regardless of the actual quality of the piece

(Becher and Trowler 2001; Hojat et al. 2003; Tomkins et al. 2017). Collectively, these findings indicate that peer review favors those who already have status in the academy, reproducing existing social and professional disparities.

In short, there is no universal standard of merit by which submissions are judged because referees and editors construct and conceptualize merit differently in the peer review process (Bedeian 2004; Cole and Simon 1981). Dissensus is common because the criteria for peer review are culturally situated (Becher and Trowler 2001; Cole and Simon 1981; Miller 2006). The social nature of evaluation in peer review is influenced by epistemology, past experiences, disciplinary norms, and more – thus, the process and outcomes of peer review are anything but straightforward, objective, or rational (Becher and Trowler 2001; Cole and Simon 1981; Hamann and Beljean 2017). Peer review's lack of objectivity is not the problem, rather peer review exists as a threat to equity because of the ways that it is heralded as objective, despite evidence that it is anything but.

Peer Review Outcomes: Social Reproduction of Authority and Legitimacy

Given the disparate perceptions and enactments of evaluation in peer review, the peer review process perpetuates inequities in both the work and authors that are published and legitimized. Further, the peer review process does not always recognize or reward the most novel or highest quality scholarship, a process Becher and Trowler (2001) refer to as “fail[ing] to predict the winners” (p. 87). This claim speaks to the idiosyncratic, subjective nature of manuscript acceptance (Becher and Trowler 2001). Given lack of consensus about what work is deserving, novel, and credible, a manuscript's success may largely depend on its reviewers (Bedeian 2004; Cole and Simon 1981). Further, the peer review process is largely one of homogenization (Bedeian 2004; Siler and Strang 2017). Siler and Strang (2017) demonstrated that few pieces that challenged dominant theoretical perspectives were published, indicating they were either not accepted or were not submitted – novel concepts were more widely accepted than challenges. This homogenization and exclusion may reproduce (1) a lack of research on critical social issues (e.g., race, gender, etc.), (2) acceptance only of work that does not disrupt status quo, and/or (3) marginalization of non-dominant paradigms and epistemologies, and by extension, the Faculty of Color who are more likely to express these perspectives (Delgado Bernal and Villalpando 2002; Salinas 2018). The peer review process has the potential to increase and address threats to equity by acknowledging and grappling with these realities.

Publication is a demonstration of legitimated knowledge and is a form of currency or capital (Apple 1999; Bedeian 2004). Further, publications in top tier journals garner more citations and therefore greater legitimacy, authority, and recognition (Bedeian 2004). As a source of legitimacy, the accumulation of publications and citations provides an important form of recognition and authority in academia (Tyler 2006). Individuals, departments, and universities seek to accumulate this type of capital and power – creating pressure to publish more and in elite journals (Apple 1999). Those whose work is published acquire authority and legitimacy, specifically

the rights to shape, dictate, and direct the peer review process in the future. Thus, the peer review process creates an uneven cycle of evaluation and legitimation, perpetuating a cycle of homogenization and stratification of knowledge and capital.

Impact factors and publishing records continue to be prized as indicators of quality, but these measures disproportionately favor a small number of people and institutions (Bell and Chong 2010). Bell and Chong (2010) even suggested the peer review stratification process creates a “caste and class system” (p. 80) due to the tangible effects on individual’s pay, recruitment, promotion, tenure outcomes, and more. The stakes of peer review are disproportionately placed on pre-tenured scholars whose legitimacy depends on the system (Raelin 2008). Yet, there is a strong desire to maintain the peer review system, even though existing process and metrics hold institutions, journals, scholars, and the production of knowledge hostage to narrow definitions of acceptable scholarship (Brand 2013; Rowland 2002).

In summary, peer review evaluation and legitimation practices must grapple with the reality that all knowledge claims and evaluations of knowledge claims are socially constructed (Bedeian 2004). As it currently functions, peer review threatens the possibility of deep equity within the academy by largely favoring white male scholars (and by extension, their epistemologies) from prestigious programs. These researchers are disproportionately favored in the peer review process, leading to their legitimation as scholars, and allowing them to eventually occupy gatekeeping positions as editors and referees that replicate the same processes. However, when faculty name and address power disparities inherent in current system for evaluating and legitimating knowledge, peer review has the opportunity to promote equity; following the discussion of curriculum and instruction – our final area of faculty practice – we discuss specific strategies for doing so. Without critical examination of the individual and collective criteria and processes used to construct merit in peer review – and in so doing, construct quality – its outcomes will continue to favor those who control and benefit from the canon of knowledge and research methods. Developed and controlled historically by cisgender white men, these preferences will deny diverse and important forms of knowledge and knowing within the academy (Roberts and Shambrook 2012) to researchers and students – present and future.

Curriculum and Instruction

Disciplinary canons legitimated through peer review matter not only for conversations among researchers, but for that which the next generation of students will come to regard as the subject matter. What leads professors to construct and deliver curriculum to students involves a host of evaluations and decisions which we now turn to describe. While co-curricular experiences (those outside of traditional classroom learning environments) provide important opportunities for college students’ cognitive and social-psychological development (Pascarella 1985; Pascarella and Terenzini 1991), a primary goal of postsecondary education is to provide students with opportunities for deep learning about specific subject matter. Yet research

shows that this goal is often not fulfilled. Postsecondary education produces very modest changes in student learning (Arum and Roska 2011; Pascarella et al. 2011). Higher education scholars have looked to the role of curriculum and instruction to interrogate this phenomenon. To advance the practice of teaching and learning in higher education, it is essential for higher education researchers to consider how faculty evaluate and make decisions about their own curriculum and instruction.

Curriculum and instruction are distinct, yet interrelated concepts, and so too are the decisions faculty make about each. Curriculum refers to content knowledge (i.e., the *what* of education: Which sets of concepts should be taught? In what order? Using which tools and artifacts?), while instruction refers to pedagogical knowledge (i.e., the *how* of education: Which pedagogical strategies should be employed to maximize student learning around a particular set of concepts?). Promoting the mastery of content knowledge in isolation of pedagogical knowledge (or vice versa) does not lead to student learning. Instead, Shulman (1986) introduced pedagogical content knowledge, or what he calls “subject matter *for teaching*” (Shulman 1986, p. 9, emphasis in original text). It is the intersection of those two contexts that supports instructors’ knowledge of how to promote deep conceptual change and development for students in particular disciplinary contexts.

How educators evaluate, select, and then enact pedagogical practices that make learning a particular discipline more accessible involves pedagogical content knowledge (PCK) (Shulman 1986). PCK is an intentionally integrative concept that merges theory about teaching with knowledge gained from the practice of teaching; it relies on knowledge gained from instructors’ teaching experience within particular disciplinary settings. It is a highly context-dependent (with regards to discipline) framework that is influenced by individual teachers’ prior lived experience and teaching contexts. To be clear, pedagogical content knowledge is a primary contextual factor that drives educator decision making about what to teach and how to teach it.

While literature on pedagogical content knowledge initiated in K–12 education, researchers have shown an increased interest in studying practices of teaching and learning in higher education (Lattuca 2005; Neumann 2014). Research shows that curriculum and instruction have an important impact on student learning (Bok 2009). Here, we apply the criteria, process, outcomes framework to the study of decision making around curriculum and instruction in higher education.

Criteria: Curriculum and Instruction as Co-constituted in Syllabi

In many ways, decisions about teaching take place on a microanalytic scale. Because instructors literally make minute-to-minute decisions in an effort to continuously meet the needs of their students, teaching is often seen as an improvisational endeavor. However, teaching is much more than the aggregate of many small decisions. While it is true that good instructors are often adaptable, optimal design involves transparent learning objectives and a robust plan to ensure those objectives will be met. This is usually actualized through decisions about curriculum.

A syllabus can be understood as a contract between students and instructors that sets important expectations based on the instructor’s judgment about what merits

learning (Sulik and Keys 2014, p. 152). It formalizes what Lattuca and Stark (2011) define as an academic plan. They argue for an operational definition of curriculum as an academic plan, asserting that a focus on broad curriculum can lead to ambiguity that prevents tangible change. They write, “our goal in conceptualizing curriculum as an academic plan is to identify the critical decision points that, if effectively addressed, will enhance the academic experience of students” (Lattuca and Stark 2011, p. 4). Nelson Laird et al. (2008, p. 469) posit that “. . . learning is a shared responsibility between students and faculty,” and syllabi can organize expectations and reveal taken-for-granted assumptions about students (Felix et al. 2015) and about how faculty define the subject matter.

Hora and Ferrare citing Stark (2013) argue that “faculty beliefs and assumptions about education drove decisions about the structure and content of a course and that these beliefs were in turn influenced by characteristics and goals, external influences, departmental goals, and facilities and resources” (p. 216). In a study of math and science disciplines at three research universities, Hora and Ferrare (2013) found that 73% of faculty consider the syllabus to be an important mediator of instructional practice. Yet faculty do not always have control over the design of syllabi for classes they teach. Fifty-four percent of respondents reported the existence of a curriculum planning committee that developed learning goals, scope and sequence for introductory courses, with some committees even choosing textbooks (Hora and Ferrare (2013). An additional 18% reported inheriting syllabi from more senior faculty who previously taught the course (Hora and Ferrare (2013). In both of these instances, decision making was constrained by academic plans.

Academic plans vis-à-vis syllabi “[become] part of the tacit fabric of a department’s approach to curriculum and instruction” (Hora and Ferrare 2013, p. 246). Academic plans can be thought of as cultural artifacts of learning environments that mediate instructional practice, and potentially transformative pedagogical change, in the academy. This demonstrates how academic plans can encourage or impede various forms of instructional practice and faculty agency.

Process: Sociocultural Dynamics Affecting Curriculum and Instruction Decisions

While individual factors about faculty, such as their motivation, self-efficacy, and the desire for autonomy, inform decision making around curriculum and instruction in higher education, the broader organizational and institutional contexts also matter for understanding the criteria, processes, and outcomes of evaluation and decision making in higher education (Stupnisky et al. 2018). The enacted mission and values of the larger organization frames what faculty value and replicate in practice (Neumann 2009). Therefore, the study of process cannot be divorced from context. Specifically, curriculum and instructional practices operate in “distinct cultural and organizational contexts at the institutional, departmental, and classroom levels” (Hora and Ferrare 2013, p. 214).

If individual decision-making processes around curriculum and instruction are informed by meso-level cultural beliefs, norms, and practices, then accounting for disciplinary norms and values, departmental culture, and normative assumptions

about academic rigor is critical (Hora and Ferrare 2013; Lattuca 2005). Lattuca (2005) asserts that each academic discipline utilizes a set of tools that operates to guide their collective practice. Faculty are socialized to “. . . learn what is appropriate, expected, and accepted in terms of their behavior in the field, including how to teach and how to learn” (Nelson Laird et al. 2008, p. 472). Furthermore, Neumann (2009, p. 7) positions the goal of the professoriate to “[construct], [share] and [apply] disciplinary and preferred subject matter knowledge.” From these perspectives, legitimate knowledge is vetted and affirmed through the disciplines and expected to be reinforced in curriculum and instruction practices. These disciplinary logics of consequences and appropriateness create and propagate systems of legitimation that simultaneously engenders and constrains action (Posselt 2014, 2015). Individual processes of decision making are mediated by established norms of the respective governing field.

Using Becher’s (1989) typology, Neumann et al. (2002) sought to uncover the ways various disciplines, as evidenced by the knowledge field they privilege, compare, and contrast with regard to curriculum and instruction practices. They considered the practices of four knowledge fields: hard pure (e.g., physics and chemistry), soft pure (e.g., history and anthropology), hard applied (e.g., engineering), and soft applied (e.g., education and management studies). They found that the disciplinary norms of the knowledge fields were highly coupled with corresponding curriculum and instruction choices. For example, a hard pure knowledge field, like physics, values the acquisition of an objective set of “established facts and demonstrable theories” (Neumann et al. 2002, p. 407) whereas professors in a soft pure knowledge field, such as anthropology, privilege the application and integration of knowledge. This difference in goals cause faculty members in these distinct knowledge fields to design and evaluate learning in different ways. Whereas the soft pure fields would likely design classroom environments that privilege the role of dialogue and individualized meaning making, hard pure fields would likely take on a lecture and lab format to systematically scaffold towards mastery.

As our framework highlights about decision making in general, processes of decision making around curriculum and instruction are complex due to the many competing priorities faculty must balance across the multiple domains in which their practice is situated. As Wertsch (1991) reminds us, no activity occurs in complete autonomy from broader ecological systems. Therefore, a discussion of curriculum and instruction in higher education demands that we take seriously the multiple cognitive, cultural, and contextual factors that influence these practices (Hora and Ferrare 2013; Hora and Holden 2012).

Outcomes: Racialized and Gendered Learning Experiences

Despite their recent diversity, equity, and inclusion efforts, US colleges and universities continue to be racialized and gendered spaces that produce disparate outcomes for students along these lines (Solórzano et al. 2000). From studies of racial campus climate (Harper 2012; Harper et al. 2018; Harper and Hurtado 2007; Hurtado 1992), student engagement (Mann 2001; Quaye and Harper 2014; Patton et al. 2015), and

classroom learning (Gay 1990; Pascarella and Terenzini 2005; Sandler 1996), research in higher education shows the racialized reality of postsecondary learning. People of Color of all genders and white women report experiences of isolation and discrimination in college classrooms across the USA, especially in STEM disciplines, describing that professors' instructional choices often create a "chilly climate" that negatively affects student motivation, learning, and persistence (see, for example, Pittman 2010). Especially in the humanities and social sciences, the propagation of Eurocentric epistemologies in curriculum can increase marginalized students' feelings of isolation in the classroom (Morrison 2010). Quaye and Harper (2007, p. 36) argue, "When students are exposed only to white, dominant perspectives, they come to believe that viewpoints from other racial and ethnic groups are trivial and lack value, intellectual worth, and scholarly credibility."

Furthermore, it can contribute to the epistemic suppression and intellectual *othering* of racially minoritized students who do not assimilate into the mainstream ways of knowing prized by academe. Gay (1990) discusses "curriculum segregation," wherein faculty's beliefs and assumptions about students inform their use of differentiated pedagogical approaches. For example, when teaching middle-class white men, she notes that faculty likely employ rigorous academic material and use strategies that encourage self-actualization and affirmation in the learning process. In contrary, faculty are likely to use strategies that encourage dependence and assimilation with racially minoritized students of all/no genders,⁹ white women, and students from economically disenfranchised backgrounds. This creates what Gay (1990, p. 57) calls "a dual system of access to knowledge and accountability" that systematically disadvantages minoritized students.

Too often, deficit-based narratives about racially minoritized student performance distract from the need for faculty accountability and the possibilities of re-envisioning postsecondary learning as a "practice of freedom" (Hooks 1994, p. 30). Rather than deeply interrogating the academy's history of exclusion, institutions and their leaders often scapegoat racially minoritized students as a problem to be solved. Scholars like Bensimon and Malcom (2012) call for a paradigm shift in the culture of postsecondary institutions to expect more from leaders and institutional agents. Stanton-Salazar (2011, p. 1067) defines an institutional agent as "an individual who occupies one or more hierarchical positions of relatively high-status and authority." Bensimon and Malcom (2012) encourage powerful institutional agents to become "equity agents," people who are responsible for shepherding the institution towards more equitable practices in favor of minoritized students. Making a commitment to study learning outcomes as a reflection of the beliefs and practices that institutional actors (who may or may not be acting as equity agents) and postsecondary institutions constitutes an important move toward accountability for institutions (Bensimon 2005; Bensimon et al. 2007). Faculty are well positioned to act as equity agents for marginalized students in postsecondary institutions.

⁹We choose this language in order to include people who are agender.

Implications and Recommendations

Although we have covered them as separate areas of practice involving evaluation and decision making, admissions, hiring, peer review, and curriculum and instruction constitute a system affecting student experiences and learning. The learning experiences that faculty create are a function not only of their curriculum and instructional choices, but also the outcomes of peer review that legitimates some knowledge as more important to cover than others. Student experiences are also shaped by instructors' own backgrounds (and thus, the faculty hiring process), as well as the demographics of their fellow students (resulting from admissions). Collectively, what and whom we value will affect whether and how our changing population of students sees itself in higher education. Equity therefore demands that we work mindfully toward rethinking *status quo* evaluation and decision making to both shift the opportunity structure for knowledge production and ensure all students can appreciate that they belong and can thrive in higher education.

Based on the preceding discussion of how criteria, processes, and outcomes pose threats and opportunities for equitable decision making, we offer the following recommendations for empirical scholarship and theoretical development that might enhance equitable repertoires of practice in admissions, hiring, peer review, and curriculum design and instruction. We will then follow this with global recommendations for evaluation and decision making. Even as this chapter focuses on the decisions professors often make, we recognize they rarely have sole control over the decision-making. Thus, we urge all parties involved in admissions, hiring, peer review, and curriculum and instruction to consider the following recommendations. Further, the recommendations below vary in terms of feasibility. Given the power of legitimated processes and behaviors, some recommendations will require long-term investment, commitment, and culture change. We do not seek to offer quick fixes; rather we hope to prompt reflection and reinvention of existing decision making and evaluation processes in order to instantiate more equitable repertoires of practice. While we have focused on the role faculty play in making key decisions that impact academic repertoires of practice, addressing these implications and adopting/adapting the recommendations will require collaborative partnerships among faculty, administrators, and other higher education stakeholders.

Recall that Gutierrez and Rogoff (2003) described repertoires of practice as.

ways of engaging in activities stemming from observing and otherwise participating in cultural practices. . . . To understand both individual and community learning it is necessary to examine the nature and forms of cultural artifacts and tools used; the social relations, rules, and division of labor; and the historical development of individuals and communities (p. 22).

From this perspective, the multiple contexts in which faculty judgment is situated are not merely backdrops. Instead, they represent components of the way people have been socialized to internalize and perform what they have learned. If our goal is to provide equitable access to rigorous intellectual development and knowledge

production in higher education, we must manage equity threats and provide tools for faculty members to develop repertoires of practice grounded in equity.

Admissions: Implications and Recommendations

Additional empirical scholarship would be useful for understanding the current and emerging landscape of admissions evaluation and decision making. As traditional markers of merit, such as standardized tests, fall under increasing scrutiny, faculty and administrators rely on other traditional elements of applications to a greater extent or turn to under-studied criteria. While non-cognitive competencies, for example, seem promising, we still do not know enough about if or how faculty might evaluate students of different racial/ethnic or gender identities based on these criteria. If faculty were to consider the same examples of a non-cognitive criterion like self-confidence as a positive sign when expressed by a man and a negative sign when expressed by a woman, using these criteria could lead to unintended consequences that perpetuate inequities.

In addition, as affirmative action is imperiled in the courts, holistic review more generally may come under greater scrutiny. Some versions of holistic review look at diversity broadly, while others consider race as one sub-factor within a broader factor of diversity – a more specific operationalization that is nonetheless in compliance with Supreme Court precedent on race-conscious admissions. Regardless, more research is needed about the design and implementation of holistic review. While admissions research is sensitive, well designed studies would help practitioners better understand what and how to conduct holistic review in admissions to yield more equitable outcomes and avoid unintended consequences like intra-racial discrimination.

Next, we suggest ideas for conceptual and theoretical development in order to inspire future research and innovations in practice. Simple questions about the purposes of admissions and of higher education expose area for theoretical exploration: How do practitioners think of the purposes of admissions and of higher education more broadly? If the purpose of admissions is only to select the students who are most likely to succeed, what is the role of academia beyond credentialing the elite classes it reproduces? If the purpose of higher education is to foster and grow potential, then how do we as a society determine the distribution of this investment? Moreover, if the purpose of academia is to support a learned democracy and the well-being of its citizenry, how might admissions be equitably conceived? We hope the exploration of empirical and conceptual issues in admissions decision making that we raised here will promote transformations for equity in higher education.

Hiring: Implications and Recommendations

Empirical research is needed into the efforts of the growing number of campuses that are investing efforts to diversify their faculty membership. Understanding that

decision making in hiring is an opaque procedure, the literature makes clear that inequities are cloaked and discussion of candidate identities is coded through practitioners' vague conversations assertions of merit, fit, and excellence. To move the process from opacity to transparency, we recommend that faculty commit to unpack their social biases around these traditional conceptions of worth. In doing so, we also implore scholars to question the very traditions upon which faculty hiring processes stand. A critical examination on behalf of scholars and practitioners of current hiring decision making processes from a lens of equity and social justice frames can begin to interrogate the very measures that the professoriate has long deemed objective.

In our review of the literature on faculty hiring, a majority of the publications that claimed to provide strategies or support for building a diverse faculty front loaded the work to the recruitment phase of hiring with little regard to how these strategies continued to hire the same type of candidate. Further research aimed at providing strategies for practice should expand beyond the traditional frameworks used to study organizations or education and shift toward using lenses that allow for a more critical discourse in the academy. Scholars must question merit and fit from perspectives of critical Whiteness, institutionalized racism, intersectionality, and other frameworks or theories that explicitly provoke conversations around racial equity. Additionally, we recommend that practitioners and scholars continue to engage in participatory and critical action research that documents how campuses are (and are not) shifting their hiring practices and outcomes. A more comprehensive library of case studies of this nature is needed. Liera (2018), for example, conducted a case study of how one campus went through with what seemed like an overhaul of their hiring practices with respect to racial equity and call for more research of the same. He documented how the university gathered a team of equity-minded individuals to pare through their hiring guidelines, foregrounding racial equity, and legitimized the work of this team by providing training for working as an equity advocate on hiring committees. Scholars of faculty diversity, equity, and hiring should continue work in this vein, documenting how universities navigate the opacity and ambiguity of the search process to build a more equitable repertoire of hiring practice.

Peer Review: Implications and Recommendations

In providing implications and recommendations regarding the ways peer review can embrace a more equitable repertoire of practice, we urge further examination into at least three key questions: How are the actors involved in the peer review process working to change what counts as legitimate knowledge? How do assessments of legitimacy play out with regards to research, content, and methods? How do editors, referees, and authors legitimate new forms of knowledge through engaging in resistance to the status quo in the peer review process? These questions have yet to be explored in the literature but would open opportunities for more equitable repertoires of practice in peer review. We need further examination of the ways socially constructed ideas of merit and legitimacy shape evaluation and decision

making that reify inequities in the peer review process. Thus, we offer three recommendations related to positionality statements, reflexivity of editors and referees, and citation practices in the peer review process.

Positionality. Positionality provides one avenue for authors to interrogate and situate their knowledge and orientation to their work (Gordon 2005; Rose 1997). Regardless of how they are integrated in the peer review process, author positionality statements provide additional insight into authors' epistemologies and conceptions of their work. We also call for research that examines the effects of and resistance to increased expectations around author positionality statements in peer review processes and outcomes, as we believe positionality statements have the potential to contribute to a more equitable repertoire of practice. While positionality statements are a common feature of qualitative work (Gordon 2005), their normalization across methodologies and fields (at least in the social sciences) can contribute to a more honest appraisal of the origins of our scholarly knowledge. With further insight into authors' positionality, editors and referees can more holistically evaluate submitted work.

However, positionality statements without ongoing reflexivity work by editors and referees may only reify the existing inequities. There is a need to examine the effects of integrating these practices in peer review on equity. Synergizing positionality and reflexivity efforts has the potential to surface previously invisible assumptions and norms about the nature of legitimated knowledge and the processes of knowledge legitimation. Surfacing, and then interrogating, these assumptions may lead to validation of multiple forms of knowledge and further equity. Positionality statements can provide opportunities to both resist and change norms related to peer review. Collectively, reflexivity and positionality have important implications for peer review's adoption of a more equitable repertoire of practice.

Reflexivity. Reflexivity is on-going and critical reflection that challenges one to explore and interrogate "the diversity and complexity of one's social location" (Hesse-Biber 2017, p. 45). Reflexivity stems from practices to ensure validity and trustworthiness in qualitative inquiry (Hesse-Biber 2017). This form of critical reflection may illuminate previously taken for granted assumptions about norms, values, and knowledge – a practice essential for qualitative researchers' to attempt to understand and account for their influence on the research and analysis process. Further, we argue that reflexivity has value in multiple settings, including peer review. Given editors' and referees' gatekeeping roles in the peer review process, reflexivity is an essential first step in embracing a more equitable repertoire of practice. Editors and referees employ socially constructed views of legitimate knowledge in their evaluation of works submitted for peer review and these views are shaped by their identities, socialization, discipline, life experiences, and more. In the current process, these unacknowledged biases that contribute to inequity.

We urge editors and referees to engage in both individual and collective reflexivity in order to identify the epistemologies, values, and norms that implicitly shape their evaluation and decision making. The recommendations provided in relation to positionality statements provide one example for editors and referees to interrogate and situate their epistemologies, values, and beliefs in the peer review process.

Further, we call for research that examines the development, implementation, and effects of this practice on equity. This reflective practice will help editors and referees lay bare their taken for granted or invisible biases (Milner 2007) that shape the peer review process. While simply naming and acknowledging biases and preferences will not immediately result in more equitable practice, it is an important first step in changing peer review norms. Reflexivity can help editors and referees identify their hidden preferences – in terms of content, method, epistemology, prestige, and more – in order to examine where these biases manifest in the peer review process. Research that closely examines the influence of reflexivity practices on equity in peer review processes and outcomes can provide deep insights into equitable repertoires of practice.

Citation practices. While norms of citation practice differ across disciplines (Hyland 1999), citation practice is one important way that work is positioned and legitimated. Harris and Patton (2018), referencing Delgado (1984), argued “who scholars cite is a political act and creates a genealogy of ideas that dis/empower the originators of such ideas” (p. 7). However, citation practices themselves often protect and cement legitimated scholarship. This process often benefits the work of older, white men from elite institutions (Delgado 1984). Editors and referees, given their purported content expertise, may expect to see certain authors, theories, and methods cited and employed in pieces they review. These expectations may translate into unfavorable reviews for pieces that do not match their expectations, furthering inequities. Thus, authors have to navigate the need to connect their work to existing and legitimated bodies of work, with potential assertions of originality or critique (Bedeian 2004).

Citation practices play a central role in both conferring and claiming legitimacy – who and what is cited appeals to legitimacy and what is cited confers status (Apple 1999; Rowland 2002). Thus, citation practices are inherently political. Authors can resist current and inequitable practices by intentionally citing authors who are not as widely represented in the current canon – including authors from less elite institutions, and those with marginalized racial and gender identities. This practice is one way to engage in resistance to current inequitable citation and peer review practices. Thus, we urge editors and referees to unpack their assumptions about who and what should be cited, as unchecked biases continue to reify inequities throughout the peer review process. Finally, we call for further research into the complexities and outcomes of equity-oriented citation practice as a form of resistance and effort to embrace a more equitable repertoire of practice in peer review.

Curriculum and Instruction: Implications and Recommendations

When considering change processes relating to faculty practice in the university, we need to consider the communities of practice that faculty can draw upon to improve their practice and the role of critical reflection as a tool for professional development. We make the following recommendations for bringing about change in curriculum and instruction in higher education.

(Re)constructing communities of practice. Academic freedom is a prized possession in the academy. Research shows that faculty members value the autonomy in research and teaching that academic freedom provides (Tierney 1993; Tierney and Corwin 2007). Despite expressing an interest in learning to improve their pedagogy, faculty often report a dearth of professional development opportunities around teaching effectiveness in postsecondary institutions (Brownell and Tanner 2012; Seldin 1995). Curriculum and instruction changes in higher education often happen through the enactment and reproduction of communities of practice.

Communities of practice is a theory developed by Lave and Wenger (1991) that defines learning as shifts in identity. Wenger (2010) posits that communities of practice represent a “dual process of meaning making” that leverages both personal participation in social life and the reification of various norms, beliefs, and understandings that are embodied in communal practice. From this perspective, learning happens as individuals move from being novice, peripheral participants to legitimated full participants in particular cultural communities, taking up a shared set of practices deemed legitimate by existing members. According to this theory, learning is not purely an individual cognitive endeavor; it shapes how we make sense of both the complex social world and our place within it. In short, communities of practice balance the uniqueness of personal experience with the reification of various norms, beliefs, and understandings that are embodied in communal practice. This leads us to consider in what ways should we reconstruct communities of practice to meet the needs of a growing subset of faculty rethinking curriculum and instruction practices toward equity for minoritized students?

The overall community of practice is a reflection of its members; communities of practice change if the values, beliefs, and mindsets of its members change. However, communities of practice can often resist change, as their practices and beliefs are often institutionalized over time. Because disciplinary norms and institutional culture play an important role in supporting or impeding change in decision making and evaluation, we suggest creating opportunities for the development of emergent communities of practice. These developing communities of practice can then act as counterspaces that are amenable to evolution in ways that the established communities of practices are not. Barab et al. (2002, p. 493) write,

By adopting a community of practice perspective on teacher development, it shifts attention away from the traditional analysis of the cognitive attributes and instructional practices of individual teachers and, instead, toward the collaborative interactions that occur among teachers as they attempt to develop and improve their practice.

We argue that Lave and Wenger’s (1991) construct of communities of practice provides a useful way to conceptualize how we might support faculty in adopting more equitable pedagogical practice. Their macro-level approach is an important contribution to thinking about decision making and evaluation in higher education.

Adopting ecological research approaches. We assert the need to take an ecological approach to understanding curriculum and instruction decision making processes in higher education. We believe that focusing solely on the beliefs,

mindsets, and practices of faculty is too narrow to understand change. We should also study activity systems (Engeström 1987), or the ways in which interactions among actors, environments, and mediating tools and instruments (both apparent and tacit) facilitate or impede change. The tenure and promotion process is an excellent example of the ways institutional level forces impact individual practice. Seldin comments, “Until recent years, the widespread institutional bias toward research and scholarship outside the classroom discouraged and rendered pointless efforts to improve teaching” (Seldin 1995, p. 9). This might lead us to ask: How do tacit norms of the tenure and promotion processes inform curriculum and instruction practices in academia? How might changing criteria for tenure and promotion process affect the redesign of curriculum and instruction practices? Research that adopts an ecological approach will allow for deeper analysis and potentially more expansive solutions that situate problems in systems rather than people.

Leveraging critical reflection in professional development. While professional development is recognized as an important tool to change pedagogical practice in K–12 schools (Borko 2004), research indicates that there are multiple barriers to the effectiveness of professional development in postsecondary institutions (Caffarella and Zinn 1999). In addition to a general scarcity of professional development opportunities available to university faculty around teaching and curricular development (Brownwell and Tanner 2012; Seldin 1995), a major critique of professional development programming is the absence of the opportunity for critical reflection (Brownwell and Tanner 2012; Brookfield 2017). “Critical reflection is, quite simply, the sustained and intentional process of identifying and checking the accuracy and validity of our teaching assumptions” (Brookfield 2017, p.3). Reflection is considered an important part of the learning process in faculty professional development; it helps faculty to more intentionally adopt student-centered approaches to teaching that can have lasting positive impacts on student learning and achievement (McKenna et al. 2009). However, opportunities for reflection around pedagogy are rare or occur in superficial ways (Brownwell and Tanner 2012; Brookfield 2017). Building practices of critical reflection into professional development programming can provide a way for faculty to improve their teaching.

Embracing Equitable Repertoires of Faculty Practice

In advancing a framework for equitable decision making, we highlighted the significance of evaluation criteria and processes as well as the outcomes and contexts of decision making for fostering equity in higher education. We then applied our framework to reviews of the admissions, hiring, peer review, and curriculum and instruction literatures, and considered their implications and associated recommendations for research and practice. Working across these four, core areas of faculty practice has strengthened our conviction of the vital need in higher education to value and validate the minoritized and marginalized within our community, as well as those who have been excluded from it. Broadening what we decide to define as merit and legitimate is a necessary first step in that expansion.

To move academia closer to equity goals, we have proposed the value of taking a critical stance on merit and legitimacy and integrating this perspective into key themes in the extant research on evaluation and decision making. From this, we created the framework for equitable decision making, and applied the evaluative core concepts to empirical literature about four areas of faculty practice relevant to research, teaching, and service. Based on all of these, and the implications for future scholarship that follows from them, we are able to make four concluding and overarching recommendations that can instantiate equitable repertoires of practice – regardless of the evaluation or decision-making context. While not intended for alignment with every type of decision, these are general guideposts that can support decision making for equity.

Attend to Your Multiple Contexts

One way to logically facilitate a broader vision of merit and legitimacy is to shift from the notion of a single hierarchy of preferences for each evaluation or decision to a framework of multiple hierarchies (i.e., heterarchy) that are associated with the multiple contexts in which judgments and evaluations are situated. In both individual and collective types of decision making, it is important to know your organizations' (e.g., department/unit, school/college, university, discipline) histories and missions, which can shape the evaluation criteria as well as how stakeholders judge the process and outcome of a given decision. Yet, as Fig. 1 demonstrated, institutional context is just one of the multiple contexts that matter. Equity opportunities and threats are present for individuals, committees, organizations, and institutions, alike. We must be mindful of the systemic nature of inequities, accounting for interactions across contexts. When leading a decision-making process or making everyday decisions, recognizing how alternatives are likely to affect specific individuals involved, specific units, and/or the institution in general can clarify how our thoughts and actions are working for or against equity.

The norms and values of a given decision-making context matter much for the potential to compromise or encourage equity. Cultural perspectives on evaluation reveal this most clearly, whereas individual-level perspectives seek commonalities across contexts. As we become more mindful of the contexts in which we are making decisions – their political, cultural, and interpersonal dynamics as well as the formal organizational context that structures the work to be done – we can begin to imagine ways to work with the context's dynamics and priorities to achieve more just decisions and, thus, institutions.

Employ Comprehensive, Contextualized, and Systematic Holistic Review

It should be clear by now that decision making is bound up with evaluation. One cannot make decisions without rendering judgments based on specific criteria (whether they are consciously chosen or left implicit); and, therefore, both processes

deserve administrators' attention as they relate to the outcomes of decisions. The judgment involved in organizational decisions typically results from the application of criteria to an evaluation situation. Rather than trying to eliminate subjectivity in evaluations, research shows the greater need is for practitioners to pay greater attention to the ways that equity is impacted by both the criteria in use and how criteria are interpreted and applied to come to decisions. Holistic review of the options at hand offers one such strategy.

As introduced in the discussion of admissions above, holistic review has been advanced as a means of better evaluating and selecting prospective students. However, it can also be used in a wide range of personnel decisions, including hiring, promotions, committee appointments, awards, determinations of merit pay, and more. To improve on current approaches so that they better reflect and serve equity aims, Posselt and Miller (2018) have proposed a model of holistic review with three elements. Broadly, review should be *comprehensive* in the qualities of options and applicants that it takes into account and the types of information (e.g., parts of an application like metrics, letters of recommendation, writing samples) that it uses to infer those qualities. Decision makers looking at people should be mindful not only of an individual's achievements to date (which can reflect unequal opportunities), but also their potential for future contributions. To assess potential, they should take into account a wide range of characteristics, including socio-emotional or non-cognitive skills (e.g., creativity, leadership, persistence, preference for long-term goals). Holistic review should also *contextualize* the available information. Admissions criteria should be judged in light of a college or program mission, and achievements (or lack thereof) should be contextualized according to student opportunities, which differ markedly by race/ethnicity, gender, and socioeconomic status, among other identities. Further, when considering metrics (e.g., impact factor and teaching evaluation scores when looking at faculty performance or test scores and grades when looking at student performance), decision makers should recognize every metric is a statistic, that every statistic contains error, and therefore that no statistic is suitable as a sole criterion for evaluation or selection. Rather, in a holistic process, reviewers should contextualize metrics according to their statistical error, limits in predicting future success, and differential distributions in the population by race, gender, class, and the like. Finally, holistic review must be *systematic* to increase efficiency, mitigate bias, and improve consistency, transparency, and accountability. To this end, the development and use of evaluation protocols or rubrics is recommended to guide decision makers in defining shared criteria on which everyone will be assessed (and that collectively will reflect a commitment to obtaining equitable outcomes), and then providing training and practice with the rubric before setting individuals to work reviewing files.

Routinize Equity Checks at Each Point of the Process

Attention to equity and justice – through mindfulness and formal equity and bias checks – is needed at all stages of the decision making process. In enrollment management and human relations decisions such as those emphasized in this

chapter, we need to take into account the ways that outreach activities shape the pool of who is available for evaluation and selection, and how the quality of our recruitment efforts enable us to attract the candidates who are selected. In these ways, one can think about outreach and admissions as shoulders of a decision-making process that includes both evaluation and selection. Equity checks at each stage of the process will render more just decisions by putting data in the hands of decision makers. In extended and committee-based decision-making processes, such as searches, another type of equity check may focus on the qualities of interactions among those participating in the process. More robust, honest climate is created when leaders create occasional opportunities for individuals to share whether they feel free to express their opinion and whether the climate of the group is hospitable to discussion and respectful disagreement. This point is closely related to our next, and final, recommendation.

Address the Intersectional Positionalities of Those with Decision-Making Power

Recognizing how different decisions privilege individuals and groups is an important step for improving the practice of making decisions. Positionality, defined as one's formal position in a social system, as informed by all identities they have available to enact their agency (Battilana 2006), shapes how individuals engage in decision making. For example, when a student serves on a committee composed of faculty and administrators, the committee chair should take steps to ensure that student has means of expressing his/her opinion. Both leaders and members of groups making decisions can act in ways to protect the voice of those who are participating in the process.

Decision makers, too, have identities that affect the equity of outcomes. We are all likely to have subtle, implicit biases for individuals or decision alternatives, and depending upon our positionality, we may be more or less able to advocate for equity in group decision-making contexts. In situations where decisions are being made by individuals or by groups, mindfulness about one's own positionality and individual preferences is an important precursor to making decisions with wisdom – that is, with attentiveness to collective interests and multiple factors. For individuals tasked with making or facilitating decisions, it is important to check in with people from diverse backgrounds as you construct the process and weigh alternatives. In higher education, we must have the vision to see how each person's multiple identities position them in distinctive ways with respect to power, agency, and voice. And in response, we ought to create opportunities to ensure that decision making power and decision-making bodies are equitably distributed across race and ethnicity.

Conclusion

We have proposed that scholars conceptualize varied forms of decision making from an equity-minded perspective, given its formative role in the allocation of opportunities and resources of various sorts. We proposed a framework that situates decision

making in multiple higher education contexts, and which proceeds through an evaluative core consisting of criteria, processes, and outcomes that are all shaped by decision makers' values, priorities, and preferences. Our hope is that a critical understanding of dominant frameworks and their application to empirical research in our field can inform evolution in the repertoires of practice that shape everyday work and student learning (Gutierrez and Rogoff 2003). There is much to learn from existing literature, theory, and experience to improve this important facet of academic work – to mindfully use decision making as the powerful lever it is in making our organizations more just and equitable.

We hope to have shown in this chapter that improving faculty work and its outcomes to become more equitable will mean attending to repertoires of practice for research, teaching, and service alike. Within each of these areas, faculty can cultivate (1) critical consciousness about the evaluative criteria that socially construct legitimacy and merit, and (2) equity-mindedness at regular points in the decision-making process, including an eye to collective interests and more equitable outcomes. As scholars, we have a great opportunity to advance theory and research on these topics by attending more explicitly to the implicit rules that govern priorities and decision making in specific contexts, associated social forces such as negotiation and contestation, and the multifaceted role of power. Indeed, the quality of our scholarship can shape the availability of equitable repertoires of practice for the next generation of higher education leaders.

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Trends and Perspectives on Finance Equity and the Promise of Community Colleges 10

Alicia C. Dowd, Kelly Ochs Rosinger, and Marlon Fernandez Castro

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Abstract

This chapter examines the condition of equity in the financing of community colleges in the United States, conceptualizing equity in resource distribution and in opportunities for civic membership by drawing on economic, political-economic, and critical policy perspectives. It provides an up-to-date profile of revenue sources and trends and of the demographic composition of the student body. Analyses of declines in state investment combined with the growth in college Promise programs, which typically subsidize tuition costs for eligible students, and performance-based funding, which links a portion of state funds colleges receive to student outcomes and highlights the changing terms of the social contract of participation and membership in community colleges. We conclude the chapter with recommendations for those who research community college leadership, finance, and policy.

Keywords

Community college · Postsecondary education · Education finance · Policy · Equity · Efficiency · Adequacy · Accountability · Financial aid · Tuition and fees · Economic development · Promise programs · Performance-based funding (PBF) · In-state resident tuition · Civic membership · Substantive membership

Equity is a standard for judging the fairness of a policy or practice and for assessing whether the social conditions resulting from policies and practices are just or unjust (DesJardins 2003; Dowd and Bensimon 2015). In using equity as the primary frame of analysis in this chapter focused on community college financing, we highlight at the outset that the word equity is not synonymous with “equal.” Justice sometimes requires state and institutional actors to distribute public goods and benefits in unequal ways. This is especially true when it comes to remedying past injustice, such as the discrimination women, people with disabilities, those of lower socio-economic status, and those who are members of racially and ethnically minoritized groups have experienced in higher education.

Studies of public community college financing have mainly taken an economic approach and centered their equity questions on the just acquisition (e.g., through taxation) and allocation of human and financial resources (Breneman and Nelson 1981, 1994; Dowd 2003, 2004, 2014; Dowd and Grant 2006, 2007; Dowd and Shieh 2013, 2014; Garms 1981; Kahlenberg 2015; Kolbe and Baker 2019; Melguizo et al. 2017). However, the meaning of equity also encompasses issues of power, civil rights, equal treatment, liberation from oppression (Bensimon 2018; Harper et al. 2009; Stewart 2017), humanity, dignity, voice, representation, and incorporation in the cultural practices of education (Baber et al. 2019; Banks and Banks 1995; Dowd and Bensimon 2015; Dowd and Fernandez Castro *in press*; Paris 2012). Therefore,

we adopt a dual lens on the meaning of equity to consider issues of justice in the allocation of public resources and justice in the treatment of community college stakeholders as equal civic members.

With many state legislatures and local communities creating college “Promise” programs (Davidson et al. 2018; Jones and Berger 2018; Mishoury 2018; Perna and Leigh 2017), which offer no-debt or no-tuition fee options to encourage college enrollment, we discuss trends in finance equity by invoking the notion of a promise as a social contract that sets the terms of participation in higher education. The social contract of higher education is contested and changing, but can generally be understood as the reciprocal relationship between the institution of higher education and society. On the one hand, society provides resources, political support, and some guidance, and on the other, higher education educates students, provides social critiques, and serves as producers, repositories, and disseminators of knowledge. However, the social contract can take different shapes depending on how stakeholders define the public good that higher education is supposed to serve and the philosophies underlying those definitions, namely communitarian, neoliberal, and utilitarian philosophies (Kezar 2004). As we consider the changing conditions of the social contract of higher education, we note, as St. John (2003) did in his book *Refinancing the College Dream: Access, Equal Opportunity, and Justice for Taxpayers*, that perceptions of the conditions of a “just and efficient college finance” (p. 22, citing Mortensen 2001) vary for different stakeholders. These stakeholders include the middle-class majority of prospective college students, of taxpayers, and for members of racial and socioeconomic groups that have historically experienced discrimination and legal exclusion from educational institutions.

Community colleges hold a special position as open access institutions within a highly variegated postsecondary landscape in which they serve learners with a wide variety of characteristics, educational aspirations, and career goals (Bailey and Morest 2006; Bragg 2001, 2011; Diener 1994; Dougherty 1994, 2002; Witt et al. 1994). Following World War II, the United States was competing to maintain ideological leadership and economic dominance as countries around the world were rebuilding through investments in infrastructure, space exploration, and human capital (Schultz 1961; Wattenbarger 1966). The community college sector blossomed with the drive toward broader participation in postsecondary education when the 1947 Commission on Higher Education (convened by President Truman) declared that “the young people of America could profit from attending grades 13 and 14” (Cohen 1992, p. 155).

As Arthur Cohen (1992) recounts, to meet the needs of a growing population and the increasing rate of high school completion, “During the 1960s and 1970s the number of public two-year colleges more than doubled... ‘A new college every week’ was the proudly repeated slogan” (p. 152). Community colleges advanced the college access mission by offering a diverse array of credit-bearing and non-credit courses in technical and general education (Bragg 2001; Cohen 1992; Dougherty 1994, 2002). As high school graduation rates rose in the twentieth

century, universities valued selectivity and the right to exclude potential students, whereas junior colleges (as they were known early on) “measured their success by inclusion”; this openness to expansion and inclusion earned these new institutions monikers such as the “people’s colleges,” “the university of the common man” (Witt et al. 1994, p. 3), the “open door college,” and “democracy’s college” (Diener 1994, p. 9). The disdain of elite colleges aside, the community college movement was propelled by an expanding “view of democracy,” wherein “the concept of equal rights was broadened to include equal opportunity—the right of all citizens to test their potential” (Witt et al. 1994, p. 2).

Despite this defining “saga” of the community college forged in ideals about equal opportunity and open access (Dowd 2003, p. 5, citing Burton Clark), in the United States postsecondary education, unlike elementary and secondary education, is not compulsory nor guaranteed on democratic grounds. Most state constitutions do not allude to a “right” to a college education in the same way that they establish a right to primary and secondary schooling (Breneman and Nelson 1981; Dowd and Grant 2006; Kolbe and Baker 2019; Melguizo et al. 2017). Therefore, the framing of the social contract of publicly subsidized postsecondary opportunity often positions a college education as an economic exchange between taxpayer and student, a framing referred to as neoliberalism (Ayers 2005; Harbour and Jaquette 2007). Economic concerns have always been part of the ideology of public education, with the social efficiency of economic investments balanced against the recurring rhetorical themes of social mobility and democratic education (Labaree 1997a, b). In this context, the promises made by the states and localities that fund community colleges are best understood as counter-balancing the promise of equal opportunity with expectations of economic productivity.

Today individual community college students are expected to take on more of the burden of paying for college, a trend referred to as “privatization” (Baber et al. 2019, p. 213; Harbour and Jaquette 2007, p. 198). Privatization is associated with a decline in public investments in education and a diminished belief in the governmental role in promoting democracy and the public good (Giroux 2019). Relative to the current enrollment demand for college and the high point of investment during the 1950s and early 1960s – the “golden age” of community colleges (Lombardi 1992, p. 30) – taxpayer commitment to college financing has eroded. A recession in the early 2000s, the financial turmoil of 2008, and the Great Recession resulted in lean times for public spending (Zumeta 2013). These all took a lingering toll on state subsidies for higher education (Zumeta 2018). From 2003 to 2013, state and local appropriations to community colleges declined by 9.1% (adjusted for enrollment and inflation) (Feldman and Romano 2019). Despite subsequent incremental increases, on average state appropriations for community colleges have not fully recovered (Kolbe and Baker 2019; Laderman et al. 2019; Romano and Palmer 2016).

In this funding environment, community colleges are called on to demonstrate their quality and value through accountability policies, some of which tie funding appropriations to a college’s efficiency and effectiveness in producing graduates with credentials and degrees (Dougherty and Natow 2015; Friedel et al. 2013; Li et al. 2018). Due to the growing emphasis on college completion (Lester 2014), at least

35 states have adopted performance-based funding (PBF) policies, including at least 24 states that apply performance funding to the public community college sector (Li and Kennedy 2018). This raises the question of where additional resources will come from to meet this demand for improved quality and effectiveness. Community college finance analysts observe in response to such pressures that, as it stands, community colleges are underfunded relative to their task of educating college students who on average have lower levels of academic preparedness, more family and work responsibilities, and greater needs for counseling and advising (Century Foundation Working Group on Community College Financial Resources 2019; Feldman and Romano 2019; Kahlenberg 2015; TICAS 2019). Lack of adequate funding, especially when combined with increased enrollment demand, has been associated with enrollment caps and rationing, insufficient course offerings, and increased reliance on part-time, adjunct faculty (Dowd and Shieh 2014; Feldman and Romano 2019; Lester 2014; Xu 2019).

The Century Foundation Working Group on Community College Financial Resources (2019) has argued that increased investment is essential in light of the sector's distinctive role: "In the United States, where social mobility has been considered a birthright, community colleges are essential to that promise" (p. 1). Accountability for community college students' degree completion and successful transfer to bachelor's degree programs is also important to counter concerns that community colleges are mainly playing a "cooling out" function (Clark 1960, 1980). To cool out students' degree aspirations is to divert them from attending bachelor's granting colleges and universities (Brint and Karabel 1989), thereby protecting the elite status of those institutions and guarding them from the "massification" movement of broad college access that fueled the creation of community colleges (Baber et al. 2019, p. 206).

The question of whether community colleges divert students who aspire to a baccalaureate from doing so has been extensively debated and studied. Empirical investigations of Brint and Karabel's (1989) "diverted dream" thesis have produced inconclusive and contradictory findings, with some studies showing that when appropriate statistical comparisons are created the diversion thesis is not supported (Goldrick-Rab 2010). These findings have done little to alleviate concerns that students who start out at a community college rather than a primarily bachelor's-granting institution are less likely to earn any degree or credential in comparison to those who start out at better resourced bachelor's degree granting institutions and research universities. Of course, funding mechanisms are only one consideration in community college financing. Other considerations include college quality (what are taxpayers paying for?) and eligibility for participation in college. Today, equity considerations intertwine issues of resource distribution with contested understandings of college quality and equal civic membership for all students. The guiding finance policy assessment questions introduced by Hansen and Weisbrod (1969) a half century ago – Who pays? Who benefits? At what cost? – remain highly salient (see also Paulsen and Smart 2001). In the contemporary era of global mobility and online distance education, these questions are even more greatly encumbered than they were previously by the question "Who belongs?" Conceptions of community

and merit have become paramount as policy makers ration access and set new terms of participation, for example, restrictive residency requirements pre- or post-college to secure eligibility for Promise program benefits.

To create a frame of analysis for issues of membership, equal treatment, dignity, and eligibility for local- and state-funded benefits that arise in community college finance policy, we highlight the liberal egalitarian perspective that comprehensive analyses of equity must call attention to the distribution of “all social primary goods – liberty and opportunity, income and wealth, and the bases of self-respect” (Rawls 1971, p. 303). The latter of these humanistic bases for a just society, self-respect, is often overlooked in economic and rational policy analyses of education finance. In contrast, concerns for dignity, voice, and respect are core elements of analyses of racial equity conducted from critical policy perspectives, which incorporate attention to power (Baber et al. 2019; Bensimon and Bishop 2012). Political economic perspectives on college finance also emphasize that policy makers act to “satisfy their own interests” and those of their voters (Doyle 2007, p. 336). Similarly, community college administrators must negotiate complex political situations in their everyday decision making to meet the interests of multiple stakeholders, including legislators, faculty, board members, and taxpayers. In the contemporary era, the leadership role frequently involves collaboration across different types of educational institutions, resource constraints and competition, and more entrepreneurial approaches that involve the private sector and market-like mechanisms for resource allocation (Eddy 2013).

Access and affordability remain as primary goals for state, local, and institutional policymakers. However, the terms under which governing bodies are granting access are changing, both for the colleges charged with providing access and for students who seek to enroll. As noted, state appropriations are now tied in many states to outcomes, through PBF, as the college completion agenda has gained widespread traction in policy, philanthropic, and educational leadership circles (Baber et al. 2019; Bragg and Durham 2012; Lester 2014), and Promise programs place expectations on students that curtail the openness of the “open door” (Diener 1994, p. 9) community college. To explore the implications of these shifts in policy, in this chapter we first examine the equity rationale of long-standing finance strategies, such as appropriations and financial aid. Then, drawing on our dual lens of equity as justice in the allocation of resources and justice in civic membership, we examine these two major funding policy innovations: college Promise programs and performance-based funding. We focus on these two funding strategies in particular because they influence resource allocation in multiple states (including states with large community college enrollments), have received substantial attention in most states, and provide a meaningful vantage point to survey the changing terms of the social contract of community college financing nationwide.

We argue that while some aspects of Promise program and PBF policy designs have been positive, many aspects of these policy innovations threaten to undermine equity in community college finance. A positive aspect of Promise programs is the early signaling of college affordability to low-income students who might otherwise believe that college is out of reach for them. PBF valuably highlights that it is

fundamentally unfair to enroll students and not graduate them, if degree completion is a student's goal. The quality of education must be adequate to enable students to see a return in the form of certificates, degrees, labor market returns, and gains in social status and capacity for civic leadership. Drawing attention to low college completion rates and the need for educational reform can be equity-enhancing if the accountability design enables college practitioners to learn how to improve the quality of educational programs, for example, through stronger data systems, data use practices, or practitioner inquiry that produce knowledge about the gateways and gatekeepers to students' academic progress (Dowd 2005, 2008b; Dowd and Tong 2007).

On the other hand, when these policy innovations diminish public investments in the clear equity-enhancing policies of state appropriations and means-tested financial aid, which keep the costs of college (relatively) low for students who need financial support to attend college, they represent a retreat from equity. Promise program and PBF designs create incentives to limit enrollment to students who are better positioned to enroll full time and complete their degrees more quickly. As we discuss, these incentives may redirect funding subsidies from less affluent to more affluent students and families and discourage enrollment by lower-income students, who are more likely to work long hours to pay for college and to have family responsibilities that prohibit full-time enrollment. With these tensions in mind, through our analysis we tease out the conditions under which Promise programs and PBF are most likely to act in equity-enhancing ways.

Organization of the Chapter

The first of the following major sections of the text summarizes the various sources of revenue for community colleges, noting trends in the proportion of core revenues flowing from local and state appropriations and student tuition payments. To analyze the equity of college financing, it is necessary to ask who is benefiting from public subsidies. Therefore, the second section provides a profile of community college students in terms of degrees and certificates awarded, the demographic composition of the student body in different states, and trends in students' academic preparedness and degree completion. (For a more comprehensive profile, see the website of the American Association of Community Colleges at www.aacc.nche.edu.)

The third section describes conceptualizations of equity and efficiency from the fields of economics and policy that have been used to characterize the various streams of funding for community colleges. This approach is consistent with prior treatments of this topic as principles of equity and efficiency have long been used in tandem to analyze the state of community college financing (Breneman and Nelson 1981; Dowd and Shieh 2013; Garms 1981; Harbour and Jaquette 2007; Melguizo et al. 2017; Romano and Palmer 2016; Wattenbarger 1966) and to analyze higher education policies more generally (DesJardins 2003; Hearn and Longanecker 1985; Paulsen and Smart 2001; St. John 2003). The applications of these economic policy principles in the community college finance literature lack robust conceptions

of democratic education (Gutmann 1987; Howe 1997), however, and of the conditions of college financing that accord college students the “bases of self-respect” (Rawls 1971, p. 303). To meet that gap, we also incorporate principles of “substantive membership” into our analytical framework (Perry 2006a, b). The fourth and fifth sections draw on these principles and present analyses of Promise programs and PBF, respectively. Finally, we conclude with recommendations for future research.

We acknowledge that by dedicating considerable focus within this chapter to two policy innovations that provide a meaningful vantage point to survey the changing terms of community college financing, there are many important finance topics that are not discussed here, especially those centered on the expenditure side of the funding equation. Readers should complement this chapter with other articles and books, for example, Romano and Palmer’s (2016) comprehensive treatment of the broad array of community college financing topics. Other important topics that we do not address here but are important to the big picture of community college financing include cost estimates and cost efficiency, collective bargaining, faculty and staff compensation, budget models, market competition with the for-profit sector, and intrastate variations in funding by geographic region (e.g., rural and urban locations).

Sources of Revenue

The existence of different operational definitions of the term “community college,” as well as a variety of data sources, produces variation in the number and type of institutions included in any study of community colleges (Katsinas et al. 2012). In this chapter, when referencing “community colleges,” we are referring to public colleges in the United States that primarily award associate’s degrees and educational certifications below the level of the baccalaureate, including technical colleges. Referring to data available through the Delta Cost Project (retrieved from <https://deltacostproject.org/delta-cost-project-database>), we defined community colleges as US institutions in the 2-year public sector (excluding those in US territories [colonies]). Utilizing this definition yielded an institutional population of 964 colleges in 49 states.

The majority of revenues for these colleges comes from four major categories of funding, as shown in Fig. 1 for community colleges nationally in 2015 (based on our analyses of Delta Cost Project database, which has been constructed for the purpose of financial and cost analysis using variables available in the federal government’s Integrated Postsecondary Education Data System (IPEDS)). The first three major revenue sources to note are state appropriations, net tuition payments, and local appropriations. As shown in Fig. 1, net tuition revenues (tuition payments less the amount colleges spend on institutional aid) and state appropriations allocated by the state legislative body each amount to 29% of total revenues. Net tuition also includes income colleges receive from Pell Grants, a key source of financial aid for low-income students (Goldrick-Rab et al. 2009; Katsinas et al. 2012; Park and Scott-Clayton 2018; St. John 2003). Local appropriations from the communities in which

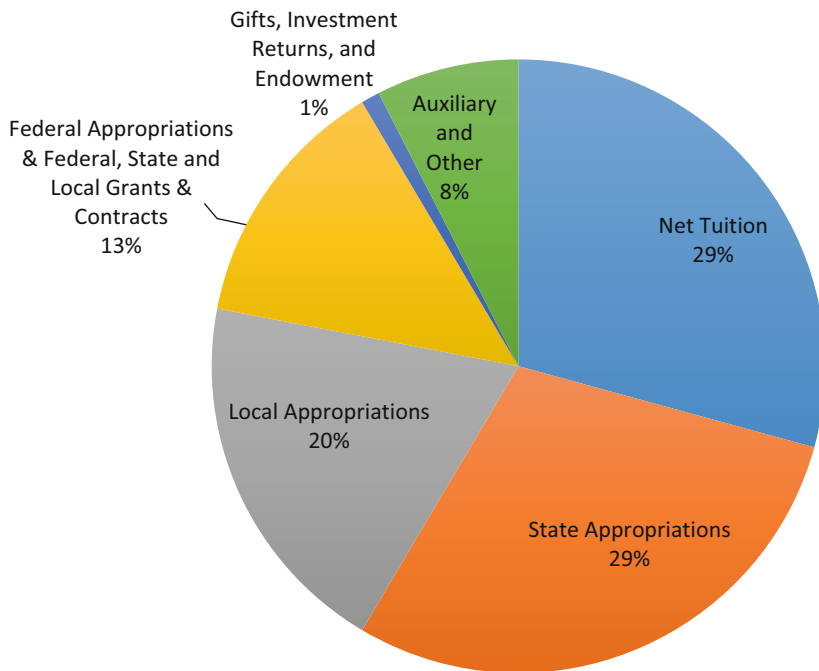


Fig. 1 Community college funding sources as a percent of total revenues, 2015. Note: Sample includes 964 public, 2-year colleges in the United States (excluding US territories (colonies)). (Source: Delta Cost Project Database 2015)

colleges are located are shown as making a 20% contribution to the total, but it is important to note that community colleges in about half of the states do not report any local funding.

Given the amount of unreported data in the local appropriations revenue category, it is important to note that estimates for local appropriations revenue share overall are sensitive to how missing data are treated when producing the estimate. If we replace unreported local appropriation figures with 0 (assuming these community colleges do not receive any local funds), the share of revenues that come from local appropriations decreases to around 14%, with minor increases in other revenue categories. However, given that total revenue amounts in the Delta Cost Project Database do not include any local appropriations data for these colleges, it is likely that the value of local appropriations for most of them is zero.

The stacked bar graphs in Fig. 2, which show local and state appropriations and net tuition revenue as a percent of total revenues by state (based on our analyses of Delta Cost Project data), demonstrate the tremendous variation state by state in the balance of responsibility between public sources of funds and private sources (students, their families, and scholarship funds that provide monies for tuition payments). In any discussion of community college financing, national data and averages can be misleading, because community college financing structures are

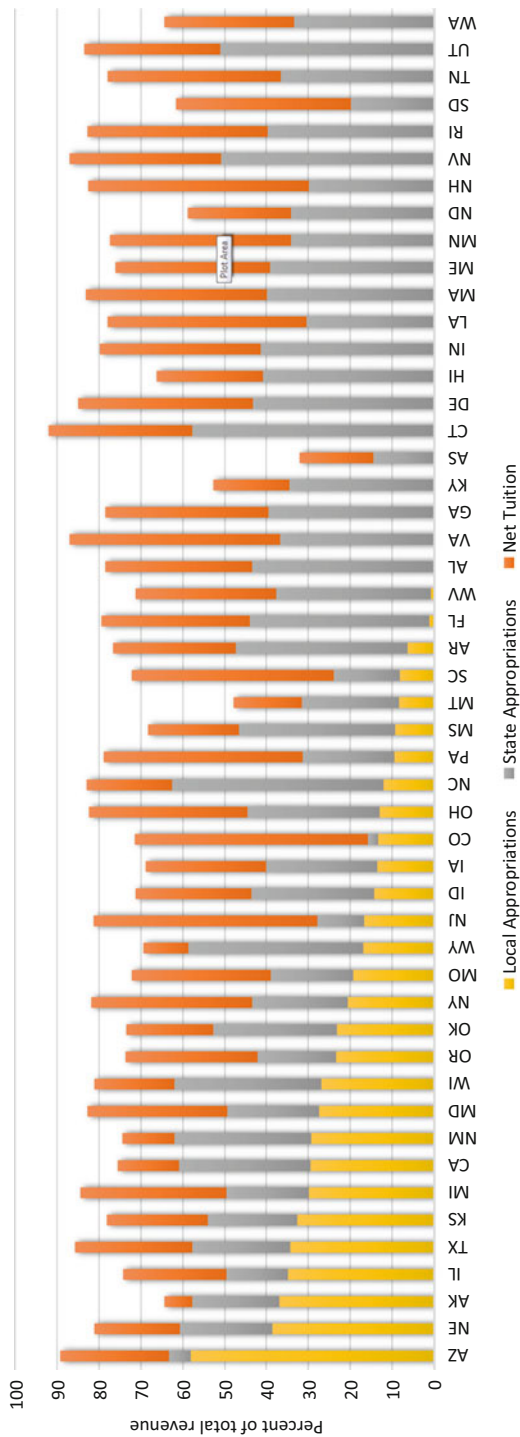


Fig. 2 Local and state appropriations and net tuition revenue as a percent of total revenues, averaged by state, 2015. Note: Sample includes 964 public, 2-year colleges in the United States (excluding US territories (colonies)). Revenues from federal appropriations and federal, state, and local grants and contracts, gifts, investment returns, and endowment, and auxiliary and other categories not shown. (Source: Delta Cost Project Database 2015)

intricate (Tollefson and Fountain 1994). State data and reports are often, therefore, more authoritative regarding revenue (and expenditure) sources, as state higher education officers are best positioned to take account of the nuances of community college funding in their state.

Even with these caveats in mind, the main point that wide variation in funding sources exists across the states is easily seen at the ends of the continuum of Fig. 2, where states like Arizona, Nebraska, Alaska, Illinois, Texas, Kansas, Michigan, California, and Minnesota rely on local funding for 29% or more of total revenues and, in contrast, the states to the right-hand side of the figure have no local funding reported. Further, some states with reported local appropriations, such as California, Minnesota, and Wisconsin, also have a considerable state contribution, with state appropriations amounting to 30% or more of total funding. These states rely less on tuition revenues than most of the other states, with a 19% share or less coming from net tuition compared with the national average net tuition share of 29%.

These variations have roots in the historical development of junior, technical, and community colleges. The local funding role traces back to the early founding of community colleges, which were often (but not always) positioned in local educational contexts as the fifth and sixth year of high school or as the first two years of college (Diener 1994; Eddy 2013; Witt et al. 1994). Some community college systems, however, never had a local funding role. They were created at the state level, inspired by California's Master Plan that carved out a special role for community colleges in a tiered higher education system. By the 1960s, many states were playing a stronger role in community college finance and governance, even in those states that had originated under local control. State-level higher education governing boards were viewed by stakeholders within and outside the community college movement as providing needed coordination and the potential for greater efficiencies, concerns for which intensified during times of economic recession in the 1970s and subsequent decades (Charles 1978; Diener 1994; Wattenbarger 1966; Witt et al. 1994).

The fourth major category of funding includes the slice of the pie chart in Fig. 1 labeled "federal appropriations, and federal, state, and local grants and contracts" (a category of funding not shown on Fig. 2). Unlike local and state appropriations, federal appropriations constitute a negligible amount and are reported in this amalgamated revenue category with grants and contracts from federal, state, and local governments, summing all together to 13% of total revenue. Although federal grants are a relatively small contributor in terms of sheer dollars, civil rights legislation and specially directed funds have had an impact on college financing priorities, enrollment policies, administrative focus, and accountability rhetoric (Diener 1994; Lester 2014; Palmadessa 2017; Posselt 2008).

When the federal government heightened attention to civil rights, equal opportunity, and equal treatment in the 1960s, states and the federal government began to play a greater role by providing categorical funds to equalize opportunity (Breneman and Nelson 1981; Lombardi 1992; Lovell and Trough 2004; Wattenbarger 1966). In 2010–2011, the American Recovery and Reinvestment Act (ARRA) directed federal funds to states for public education subsidies (among other uses). To ensure that states would not simply reduce their own funding upon receiving federal funds, colleges were

required to make a “maintenance of effort” commitment. In combination with “record Pell Grant increases” made at the same time, the federal government played a key role in “opening the door for millions, in the midst of the most severe recession since the 1930s” by creating an incentive to states not to raise tuition fees and by offsetting declines in state grant aid (Katsinas et al. 2012, p. 2; see also Park and Scott-Clayton 2018).

President Barack Obama highlighted the importance of college affordability and college completion, as articulated through his American Graduation Initiative and America’s College Promise (Palmadessa 2017). These initiatives influenced finance policy by amplifying the message of major higher education philanthropies, such as the Gates and Lumina foundations, that providing open access to college without accountability for college completion was out of fashion. As Lester (2014) explains, federal grantmaking (even when negligible in dollar amounts) influenced the priorities of other institutional actors, including states, which received incentives to build databases to track student progress:

The impact of the American Graduation Initiative is found in a series of initiatives to include Complete to Compete, Complete College America, and Trade Adjustment Assistance Community College and Career Training program. Each of these programs focuse[d] on providing money to create training programs or new and better data collection methods to track student progress through state-level higher education data systems. (p. 424)

Nearly all of community college revenues – 91% – come from the four major funding sources of state appropriations, net tuition revenues, local appropriations, and government grants and contracts. As Fig. 2 makes clear, the particular mix varies by state, but in the majority of states, nearly all of community college revenues comes from some combination of these four revenue sources. The remaining funds for community colleges in 2015 came from auxiliary enterprises, independent operations, and other sources (8%) and private gifts, grants and contracts, investment returns, and endowment earnings (1%).

Declining State Appropriations

Given the declining share of state appropriations, it is important to note that community colleges are also typically more dependent on state (and local) appropriations than other sectors of higher education (Feldman and Romano 2019). Universities can raise revenues through other means, such as research and alumni giving (which is much greater than the minimal amount of private gifts secured by community colleges (Dowd and Grant 2007)). The fact that state appropriations are not stable from year to year further complicates the community colleges’ funding environment (Romano and Palmer 2016). This instability introduces uncertainty into college leaders’ time-critical decisions about core functions such as hiring, course scheduling, and program development. Enrollment fluctuations also pose problems for community colleges, which in some years are oversubscribed and have trouble

meeting demand and in other years cannot meet their per capita funding expectations (Dowd and Shieh 2014). Community college students are more price sensitive than students in other sectors (Heller 1997; Leslie and Brinkman 1987). Many are working long hours to pay tuition and have little room in their schedules to earn more money to pay a higher fee.

This shift in funding streams, where students and families have been called on over time to carry more of the financial burden, has raised concerns about college affordability and college debt (Kolbe and Baker 2019). However, community colleges have traditionally been the low-cost college option, relative to other higher education sectors, and their price increases have been relatively minimal compared to public master's and research universities (Feldman and Romano 2019). While tuition revenue has become an increasingly important revenue source for public 4-year institutions, the average increase nationally has been smaller in community colleges, in part because rate increases were imposed on lower base amounts than at more expensive colleges and universities.

Nevertheless, the growing concerns about higher education affordability apply to considerations of community college financing as they do in other sectors. With wage stagnation for all but the highest paying occupations and growing healthcare costs, less affluent families have little discretionary income to invest in college. This predicament was compounded by the 2008 financial crisis. Black and Latinx new home buyers who were subjected to predatory lending experienced a significant erosion of property values and high rates of mortgage repayment default (Rugh and Massey 2010). In this context, stagnated or declining public funding equates to a disinvestment in higher education for individuals who hold lower socioeconomic status.

State Variation

In Fig. 2, it is easy to see that community colleges in all states but a few (Arizona, Arkansas, New Jersey, Illinois, and Colorado) draw 15% or more of their funding from state appropriations. That is why the trend of declining state appropriations, as a share of total revenue from 1987 to 2015, depicted in Fig. 3 is so concerning. In 1987, state appropriations (averaged nationally) contributed 46% of total community college revenues. By 2015, that figure had dropped to 29%, with net tuition revenues becoming an increasingly important share of revenue, growing from around 15% in 1987 to 29% of total revenues in 2015.

The notable drop in 2002 in net tuition revenues may reflect the importance of the federal Pell Grant to community colleges. At that time, the use of Pell Grant funds for summer term enrollment became more restricted than it was previously (Katsinas et al. 2012). However, the share of revenues coming from net tuition quickly rebounded the following year, making it difficult to draw many conclusions from a 1-year dip. Conversely, the subsequent rise in the net tuition share of total revenues beginning in 2008 may reflect increases in Pell funding over this period. As Katsinas et al. (2012) report, "Congressional investments starting in FY2008 raised the

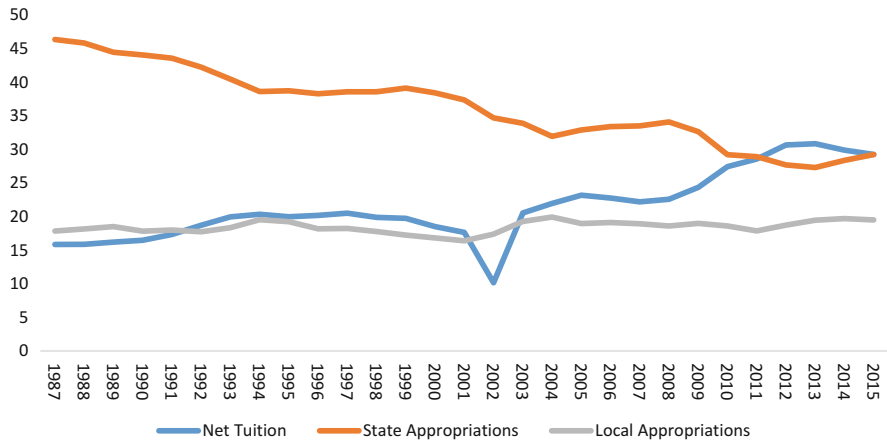


Fig. 3 Community college funding sources as a percent of total revenue, over time. Note: Sample includes 964 public, 2-year colleges in the United States (excluding US territories [colonies]). (Source: Delta Cost Project Database 1987–2015)

maximum Pell Grant to \$5,350 in 2009–2010, and \$5,550 in 2010–2011” (p. 4), and the minimum grant also increased from \$690 in 2008–2009 to \$976 in 2009–2010 (Park and Scott-Clayton 2018). Over the three decades we observe, the level of local appropriations remained relatively stable falling between 15% and 20% of total revenue. (Continuing our analysis of sensitivity to our estimation strategy, we note that if we assume that community colleges that have not reported a value for local appropriations in fact received zero dollars from local sources, the local share remains similar, in the range of 12% to 15% of total revenues).

Among states, the mechanisms for postsecondary educational appropriations and governance vary greatly and often involve multiple governmental and institutional actors (Tollefson and Fountain 1994). For example, when it comes to setting tuition and fees, in three-quarters of the states, the decision process is set forth in tuition policies established by a legislative statute or by the state legislature. In 19 states, the boards of individual institutions play the tuition-setting role, and in 15 others the responsibility falls to a higher education system coordinating board (Armstrong et al. 2017; State Higher Education Executive Officers Association (SHEEO) 2018). To summarize the variety of community college governance structures, Lovell and Trouth (2004) reviewed at least five existing taxonomies and then produced yet another that offered advantages of simplicity and clarity. Their taxonomy located governance structures on a two-dimensional grid according to the degree of centralization of decision-making, on one axis, and by six varieties of board structures on the other. The six identified structures they identified are state boards of education, state higher education boards or commissions, state community college coordinating boards, state community college governing boards, and state boards of regents (see pp. 166–167, Table 4.7).

With such variety it is difficult to make blanket statements about the benefits and drawbacks of any particular governance approach. Centralization does enable the

imposition of more uniform policies and perhaps also the capacity for innovation, as we see in Tennessee, with the widely emulated Tennessee Promise, and in Colorado, with its coordinated push to enhance equity through the Equity in Excellence initiative (Witham et al. 2015). Reflecting powerhouse status in the world of higher education finance policy, Tennessee was also the first state to adopt a performance-based funding policy (Dougherty et al. 2014). In contrast, a state with a decentralized structure, with contested state and local governing roles, may be ineffectively positioned to counterbalance the competing interest of public comprehensive and research universities for state funding. In California, for example, the “Master Plan” for higher education (California State Department of Education 1960) segmented enrollment and governance, but positioned community colleges in an inferior funding position relative to the University of California and the California State University (Boland et al. 2018). This structure, along with the Proposition 98 voter initiative to limit taxes for schools and colleges (Melguizo et al. 2017), constrains the capacity of the California community colleges to raise funds.

States with Large Community College Enrollments

Whether or not any given state’s governance financing approach is highly consequential to a national profile of community college financing depends on its size gauged by the number of students enrolled relative to other sectors in the state and in absolute numbers. The role that community colleges play relative to public comprehensive and research universities, liberal arts colleges, and other private-sector institutions within a state system of higher education also varies considerably.

Table 1 presents a profile of the six states with the largest community college enrollments, as reported in the Delta Cost Project for 2015. In descending order of reported full-time equivalent enrollments for colleges in our sample data, these are California (1.47 million enrolled), Texas (662,974), Florida (430,980), Illinois (278,919), North Carolina (234,452), and New York (224,739). Together, these six states enrolled 49% of community college students in 2015 (Authors’ calculations from Delta Cost Project data). California stands out even in this select group of states by the fact that it is the state with the largest number of students enrolled in community colleges (one of every five nationwide). Three of these six states have a longstanding distinction as places where community colleges have flourished. As early as 1930, after an era of expansion following World War I, California, Texas, and Illinois enrolled 51% of community college students nationwide (Eddy 2013).

In each of the six states in Table 1, except Florida, community colleges enroll nearly one-half or more of all students enrolled in public higher education in the state (as shown in column 3). Community colleges in all but two (Florida and North Carolina) of these six states benefit from a sizeable share of revenues from local and state appropriations (columns 4 and 5, respectively). California and North Carolina rely the least on tuition revenues (column 6). The table also indicates that all of these states now have some form of PBF (with some policies being newer or more encompassing than others) and two have Promise programs (California and New

Table 1 The six states with the largest community college enrollments

State (# of community colleges) ^a	Enrollment ^a	Community college share of public enrollments ^b	Local appropriations as % of total revenues ^a	State appropriations as % of total revenues ^a	Net tuition as % of total revenues ^a	Performance-based funding for community colleges (dates) ^c	State Promise program (launch date) ^g	Governance structure ^h
California (81)	1,467,396	71.0%	29.6%	31.2%	14.7%	Yes (2018–present) ^d	California College Promise (2017)	Moderately decentralized state community college coordinating board
Texas (58)	662,974	57.1%	34.3%	23.4%	28.0%	Yes (2013–present)	None	Decentralized state higher education board or commission
Florida (62)	430,980	58.8%	1.2%	42.9%	35.3%	Yes (1996–2008; 2012–present) ^e	None	Moderately decentralized state community college coordinating board
Illinois (38)	278,919	65.9%	34.9%	14.6%	24.6%	Yes (1998–2002; 2011–present)	None	Moderately decentralized state community college coordinating board

North Carolina (60)	234,452	56.9%	9.8%	48.7%	8.5%	Yes (1998–2008; 2012–present)	None	Moderately centralized community college coordinating board
New York (31)	224,739	34.3%	20.6%	22.8%	38.5%	Yes (2013–present) ^f	Excelsior Scholarship (2017)	Moderately decentralized state governing board (SUNY) and municipal governing board (CUNY)

^aDelta Cost Project Database 2015. Community colleges defined by Delta Cost Project Database as institutions in the “two-year public” sector. The number of colleges reported here may differ from other data sources due to the way in which community colleges are defined and/or the way in which community colleges report data (e.g., as part of a district or cluster of campuses or as a single campus)

^bAuthor’s calculation, Delta Cost Project Database 2015. Enrollment is defined as fall undergraduate enrollment and represents the percent of students enrolled at public 2- and 4-year or above

^cLi and Kennedy (2018, p. 12, Table 2)

^dFain (2018)

^eCornelius and Cavanaugh (2016)

^fRomano and Palmer (2016, p. 101)

^gDavidson et al. (2018, pp. 6–7, Table 1; p. 11, Table 2)

^hLovell and Trough (2004, pp. 166–167, Table 4.7)

York) (columns 7 and 8). None fall at the far end of Lovell and Truth's (2004) governance structure typology as having a decentralized or highly decentralized governance structure, but rather reflect a mix in the middle of the spectrum of moderately decentralized to moderately centralized (column 9).

Community College Students

Although federal terminology in the Institutional Postsecondary Education Data System (IPEDS) designates community colleges as the “two-year” public sector, for several reasons we subsequently avoid using the term “two-year college” students (unless it is necessary to accurately relay information in source documents). The majority of students who enroll do not complete any degree or certificate program within 2 years. Some students complete certificates within a time frame that may be shorter or longer than a 2-year course of study. Many of those who do complete the normatively referenced 60-credit associate's degree programs do not do so within a 2-year span, nor within what is known as 150% time (i.e., 3 years) (Juszkiewicz 2019). Further, the term 2-year college is increasingly misleading. Nearly half of the states now allow community colleges to offer bachelor's degrees, which even at the pace of full-time study typically take longer than 2 years to complete if a student begins without prior college credits (Povich 2018; Romano and Palmer 2016). Our institutional population of interest includes these primarily associate's degree-granting colleges that also grant bachelor's degrees, a group which numbered approximately 85 as of 2017 (Ortagus and Hu *in press*).

Enrollment, Student Body, and Degrees Awarded

As the number of undergraduates in the United States increased in the years following World War II, public community colleges absorbed much of the growth (Diener 1994). According to the Pew Research Center (2019), enrollment growth can be attributed mainly to students from low-income and racially and ethnically minoritized backgrounds, who disproportionately enroll in public community colleges, private for-profit institutions, and the least selective 4-year colleges. In 2017, community colleges enrolled nearly 40% of all first-time post-secondary students, approximately 8.7 million students (Ginder et al. 2018, p. 9, Table 5). About a third of first-time freshmen begin their postsecondary education at a community college (Shapiro et al. 2017, 2018). Of those students, 75% are members of racially and ethnically minoritized groups and 44% receive the federal Pell Grant, which is directed toward low-income students (Ma and Baum 2016). (Note that estimates of the community college student population vary depending on how community colleges and community college students are defined and therefore can vary by report or study).

The majority of those enrolled in public community colleges do not fit what has been considered the traditional profile of a college student, a young adult who is

18–22 years of age, recently graduated from high school, and enrolled in college full time (Carlson and Zaback 2014). In 2015–2016, slightly over half of community college students were over 40 years of age (Campbell and Wescott 2019, p. 6, Table 1.1). Since 1996, the share of dependent undergraduates enrolled in community colleges decreased from 44% to 36% in 2016 (Pew Research Center 2019, pp. 6, 8). Financially independent students who make up a growing share of community college enrollees are more likely to be employed and to attend college part-time. In 2015–2016, 47% of community colleges worked full-time, 60% attended part-time, and 58% enrolled in only part of the traditional academic year (Campbell and Wescott 2019, pp. 5, 7, Table 1.1). One of the most profound changes concerns the increase in the proportion of community college students living in or near poverty, nearly 50% according to the Pew Research Center (2019). Additionally, a recent survey of community college students revealed that nearly half experience food insecurity and 60% experience housing insecurity (Goldrick-Rab et al. 2019).

In comparison, the representation of low-income and first-generation college-goers has remained low and relatively unchanged at the most selective institutions (Chetty et al. 2017). The stratification between sectors of higher education by class is evident in both enrollment and degree completion rates (Bailey and Dynarski 2011; Cahalan et al. 2019; McFarland et al. 2019). For example, students in the highest fifth socioeconomic status (SES) quintile were more likely in 2016 to pursue a bachelor's than an associate's degree, while students in the lowest SES were more likely to first pursue an associate's degree, a certificate or diploma, or take classes without pursuing a credential (McFarland et al. 2019, p. 5, Fig. 3). Students from the highest SES quintile are eight times more likely than students from the lowest quintile to enroll in the most selective institutions, where completion rates are higher (Cahalan et al. 2019, p. 75, equity indicator 2f; McFarland et al. 2019, p. 14, Fig. 5). Subsequently, students who are low income and first generation are less than half as likely to earn a bachelor's degree in 6 years compared to peers who are not low income or first generation (21% vs. 57%; Cahalan et al. 2019, p. 129, equity indicator 5c(ii)).

Community colleges offer a wide array of academic programs, including courses of study leading to technical certifications and associate's degrees, to the transfer of credits toward bachelor's degrees, and coursework that provides basic skills education to prepare students for success in college-credit-bearing courses. However, associate's degrees account for the largest share of degrees awarded and their provision is a defining characteristic of community colleges relative to other public colleges and universities. (Note that some private-not-for-profit, for-profit colleges, and public colleges and universities that primarily award degrees at the baccalaureate level or higher also award associate's degrees, but are not included in our dataset.) Community colleges awarded 714,152 associate's degrees in 2016–2017, which represented over 56% of all awards conferred in 2016–2017 by colleges designated as 2-year colleges in IPEDS (Ginder et al. 2018, Table 3). Educational certificates accounted for slightly less than 44% of all awards. The percentage of bachelor's degrees was negligible (and rounded out to zero), because only 29 bachelor's

degrees total were reported as awarded by the colleges during the same academic year (Ginder et al. 2018, Table 3).

Many community college students aspire to transfer to a baccalaureate-granting institution. However, of all those who started at a community college in 2010, fewer than one-third (31.5%) had transferred to a 4-year institution by 2016. Further, only a third of those who did transfer (34%) earned a certificate or associate's degree (Schudde and Brown 2019; Shapiro et al. 2017, p. 9, Tables 3 and 4). These statistics call into question whether these transfer students' attachment to the community college was more like a stepping stone or as a place to gather incidental credits or coursework. The historical depictions of the relationship between junior and senior colleges as being part of a 2 + 2 system of lower and upper division undergraduate course offerings completed consecutively (Diener 1994) no longer holds very well. Students have a high degree of mobility among different types of colleges, both laterally among community colleges in their area and vertically, moving to and back from primarily bachelor's granting institutions (Goldrick-Rab 2006).

Racial and Ethnic Composition and MSIs

Generally, community colleges enroll students from their local communities, so as with most community college trends, the extent of racial and ethnic clustering in community college student bodies varies by state and locality. Overall, community colleges enroll higher number of students from racially and ethnically minoritized groups. Yet intrastate variation exists as well. Some colleges enroll larger numbers of low-income, first-generation, and racially minoritized students, while others enroll more privileged students, depending on their local context (Boland et al. 2018; Dowd 2004; Dowd and Grant 2006; Kolbe and Baker 2019; Malcom 2013). Latinx students are overrepresented in 2-year colleges, with over 51.4% of Latinx students starting at 2-year institutions compared to 34.6% of white students (Shapiro et al. 2018). Ma and Baum (2016), analyzing IPEDS data, reported that across all higher education enrollments, 44% of Black and 56% of Latinx college students were in the public 2-year sector. These figures compare with an enrollment of 29% of each group in the public 4-year sector. In contrast, Asian and white students attended each sector at roughly the same rates (40% and 43%, respectively, for Asian students, and 39% in both sectors for white students).

States with the largest Latinx populations, namely California and Texas, have the largest enrollments of Latinx students in community college: 43% of all community college students in California and 39% in Texas are Latinx, compared with 22% of community college students nationally (Ma and Baum 2016). (Sensitivity analyses show, however, that even when California and Texas are removed from the data, Latinx students remain overrepresented in community colleges (Ma and Baum 2016), with over 51.4% of Latinx students starting at community colleges compared to 34.6% of white students (Shapiro et al. 2018).

States with the highest percentage of undergraduate enrollments in community colleges have higher numbers of Hispanic-Serving Institutions (HSI). HSIs are

institutions whose Latinx enrollment is 25% or more of their full-time equivalent undergraduate enrollments and where students have demonstrated financial need to attend college (Nguyen et al. 2015, p. 2, Table 1). Of the 523 HSIs in the United States in 2017–2018, 42% are public community colleges and 69% are located in California, Texas, Puerto Rico, and New York (Excelencia in Education 2018). While HSIs are concentrated in a few states, some are located in states not known for having large Latinx populations. Arkansas, Idaho, Louisiana, Ohio, Pennsylvania, and Wisconsin each have one HSI, and among them, there are a total of 17 emerging HSIs. One-third of current HSIs and 47% of emerging HSIs in these states are community colleges (Excelencia in Education 2018). As of 2018, HSIs are located in 27 states and emerging HSIs in 35 states, suggesting the presence of established and emerging Latinx communities in most states. These statistics demonstrate the mobility and dispersion of Latinx communities across the country and the prominent role of community colleges in serving Latinx populations nationwide.

The HSI is only one of several federal Minority Serving Institutions (MSI) designations. Others include Asian American and Native American Pacific Islander-Serving Institutions (AANAPISIs), Tribal Colleges and Universities (TCUs), Historically Black Colleges and Universities (HBCUs), and Primarily Black Institutions (PBIs). The federal government uses these MSI designations to increase investment in colleges serving racially minoritized communities, which have historically been subject to state disenfranchisement and disinvestment. State and regional clustering patterns are again evident and the public community college sector continues to have disproportionate representation. In California, for example, which in 2014 had 57 HSIs, 28 AANAPISIs, 42 that were both HSIs and AANAPISIs, 3 jointly designated as HSIs and PBIs, and 1 joint AANAPISI/PBI, MSIs are primarily located in the public community college sector (Boland et al. 2018, p. 1373).

Nationally, MSIs in the community college sector constitute 46% of all MSIs and 22% of all community colleges (Nguyen et al. 2015). Further, these MSIs enroll a high proportion of their focal groups. HSIs, for example, account for 7% of all community colleges, yet enrolled 28% of Latinx community college students and conferred degrees to 45% of Latinx recipients at community colleges in 2012 (Nguyen et al. 2015). By 2015–2016, 37% of all degrees awarded to Latinx students were conferred by HSIs and of the 185,100 degrees conferred to Latinx students by HSIs, the majority were associate's degrees (54%) (National Center for Education Statistics 2019). As expected, many MSIs are located near communities of their focal racial and ethnic groups, and some MSIs (i.e., HBCUs and TCUs) are found where students have limited access to higher education due to underfunded school systems (Nguyen et al. 2015).

Changes in College Completion Rates and Students' Academic Preparedness

Since the 1970s, a greater proportion of high school graduates have been entering higher education, but colleges of all types have not been able to keep pace to meet

the needs of these new entrants, the majority of whom enter community colleges (Carnevale and Strohl 2013; Feldman and Romano 2019). This is evidenced by college completion rates. According to the most recent National Student Clearinghouse report, students who started in community colleges had a 43.5% completion rate, with 46.2% no longer enrolled in any institution after eight years (Shapiro et al. 2019). Although estimates of college completion increase slightly when using measures of 8-year outcomes, for colleges with a prominent transfer function, it is still concerning that only 16.7% of students in the Fall 2012 entering cohort ultimately transferred and completed a degree at a 4-year institution (Shapiro et al. 2019).

Due to differences in estimation strategies and available data sources, the causes, trends, and magnitude of change in degree completion rates have been estimated with somewhat contradictory results (Bound et al. 2010; Denning et al. 2019a; Goldrick-Rab et al. 2009). However, it appears that, even if there has been a slight improvement in more recent years (Denning et al. 2019a), community college completion rates have declined substantially from the 1970s to the present day (Bound et al. 2010). Two prominent factors are viewed as explanatory, with one being the decline in state funding discussed previously and illustrated in Fig. 3. The second explanation points to decreases in the prior preparation and academic success of entering students over time. Among students entering community colleges who were members of the high school graduating class of 1972, almost half (47%) were from the top half of their class, as measured by high school grade point average (GPA). Among community college entrants from the class of 2004, in contrast, less than one-fifth were among those who were the most successful in high school; 84% were from the lower half of the GPA distribution (Feldman and Romano 2019, p. 26).

Bound et al. (2010) conducted statistical simulations to parse out the factors contributing to the decline in college completion that they estimated occurred between the matriculation dates of the 1972 and 1992 high school graduating classes. They considered student characteristics (i.e., students' academic preparation) and collegiate characteristics (i.e., institutional resources) and concluded that shifts in student preparation accounted for almost 90% of the total drop in completion rates among community college students. Denning et al. (2019a) subsequently updated Bound, Lovenheim, and Turner's study using data from more recent cohorts (the high school graduating classes of 1992 and 2004). They produced different results, in part due to a slight increase in completion rates during this period. They posited possible explanations for this improvement besides enrollment trends and student preparation, identifying factors such as changes to the college wage premium, students' employment in the workforce while enrolled, decreases in time spent studying, and the price of college.

Problematically, however, many of these factors would predict a decrease in completion rates and not the observed increases. Therefore, Denning et al. (2019a) hypothesized that standards for degree completion may have decreased, due to policies such as PBF that place increased emphasis on college completion. Recent increases in completion rates do not reflect increases in student support or learning,

they argued, but instead indicate changes to graduation standards in order to receive state funding. These contradictory findings may reflect insufficient theorization of the qualities of student preparation that matter to student success and the ways that student preferences interact with institutional policies and practices (Goldrick-Rab et al. 2009).

Despite differences in empirical results, researchers consistently highlight that spending per students and academic support to promote graduation have declined, leading to “supply side” inadequacies (Bound et al. 2010, p. 131). Denning et al. (2019a) suggested that funding mechanisms are insufficient to meet the demands of today’s community college students. These findings clearly have equity and policy implications. If educational quality declines, students’ educational experiences, their prospects of degree completion, and the value of their degrees will also decline. In addition, if PBF leads to program quality declines, rather than the intended improvements in institutional performance, its value as a funding mechanism is called into question.

Issues of community college students’ academic preparation and funding inadequacies have driven attention to the quality of developmental education (also known as remedial or basic skills education), which is intended to compensate for the shortcomings of students’ primary and secondary schooling. A search for more cost-effective forms of developmental education has been underway for several decades (Barnett 2003; Breneman 1998; Pretlow III and Wathington 2012; Shaw 1997), with models such as guided pathways (Jenkins and Cho 2013), co-requisite instruction (where students simultaneously receive basic skills and college-credit bearing instruction), and supplemental instruction being tested and revised at institutional and state policy levels (Mazzeo 2002; Merisotis and Phipps 2000). Developmental education reforms have been driven by concerns for taxpayer burden, inefficiencies in the educational system as a whole, and racial equity, as some studies show that Latinx and Black students are the least well served by the predominant forms of the developmental education curriculum (Dowd 2008b; Mokker et al. 2018; M. Perry et al. 2010; Xu 2016).

Principles of Community College Finance

In education, the concept of equity serves as a guide for ethical decision-making to create just educational systems, programs, and practices (Bragg and Durham 2012; DesJardins 2003; Dowd 2003; Dowd and Fernandez Castro *in press*; Dowd and Shieh 2013). This section discusses principles of community college financing, drawing as prior studies have on ideas about the relationship between educational efficiency and equity and on John Rawls’ theory of justice (1971) to conceptualize the conditions under which college financing is equitable (DesJardins 2003; St. John 2003). When discussing community colleges, in particular, it is important to attend to ideas about community membership in relation to the questions of “Who pays? Who benefits? Who belongs?” To do so, we draw on concepts of democratic education (Gutmann 1987; Howe 1997) and “substantive membership” (Perry

2006a, b). To illustrate these principles, we discuss them in relation to particular financing sources and policies that are shaped by the principles under discussion.

Allocative Efficiency

As discussed, state appropriations are the most uniformly present source of community college funding. States allocate funds for colleges because in the absence of a state subsidy, individual investments in higher education would be suboptimal to meet workforce needs and the quality of life in a community, and society more broadly would be diminished because a smaller share of the population would gain the health, civic, and economic benefits associated with a college education at any level. This suboptimal private investment is addressed through public funding, in this case state appropriations for public colleges, according to the principle of allocative efficiency, which indicates that governments should allocate funds in the manner that has a likelihood of a higher return than the next best potential alternative public investment (Breneman and Nelson 1981; Paulsen and Smart 2001; Romano and Palmer 2016). For the same reason, in approximately half the states, local governments also provide community college appropriations, either directly to their local college or through a state agency that manages disbursement of local and state funds to localities statewide (Breneman and Nelson 1981; Dowd and Grant 2006; Kolbe and Baker 2019; Mullin and Honeyman 2007). Local bond funds also raise money in some states to pay for new construction and facility upgrades, which can make a marked difference in the quality of educational programming across colleges in the same state.

The relative contribution from state appropriations for community colleges fluctuates year-to-year with the strength of the state economy and resource demands from the primary and secondary school (K12) sector (Zumeta 2018). In weak economies or when K12 enrollments or other funding needs (e.g., pensions, health care) increase, states often turn to the tuition and fees charged to college students to fill gaps in the budget. The funding of primary and secondary education is compulsory and subject to legal challenge if the amount is deemed by finance equity advocates to be too low or poorly distributed across more and less affluent neighborhoods (Satz 2007). Therefore, legislatures frequently turn to higher education appropriations as a “balance wheel” for state budgets (Delaney and Doyle 2011, p. 343; Hovey 1999, p. vii; Zumeta 2018, p. 60), given that colleges can increase tuition charges to make up for lost revenue from state-funding cuts by calling on college students and their families to take on more of the financing burden themselves.

Allocative efficiency principles are also the basis for the federal government’s investments in providing subsidized and unsubsidized loans for college enrollment. College students typically have little to no collateral. Therefore, the private banking sector is not inclined to take a risk without charging college borrowers high rates of interest. The federal government has stepped in to provide the financial capital needed, providing loans at a lower rate of interest and thereby reducing borrowing

costs enough to stimulate college-going investments. Within this system, the federal government also promotes equity by setting a financial means test on the best interest rates and repayment plans.

Allocative efficiency can be confounded by another type of efficiency known as productive or technical efficiency, which is the degree to which the desired output of a production process is achieved with the lowest level of inputs, holding the quality of the desired output stable (DesJardins 2003; Dowd 2002, 2003; Dowd and Shieh 2013). The considerable challenges of productive efficiency in the administration of the federal subsidized loan program undermine the utility of this policy instrument. The steps necessary to obtain subsidized loans and repay them through equity-enhancing programs such as income-driven repayment are greatly hampered by procedural complexity. Creating further administrative hurdles, some community colleges, fearing the potential for high default rates among their students, decline to participate in the federal lending program or do not provide sufficient counseling about loan options for students to make well-informed college financing decisions (Ahlman and Gonzales 2019; Burdman 2005, 2012; Park and Scott-Clayton 2018). Productive inefficiencies diminish the federal government's capacity to stimulate private investments in college by those with limited economic means through the provision of subsidized loans.

Many students do not borrow an amount sufficient to significantly offset the need to work long hours so that they can then focus on their studies. Borrowing too little can be problematic because those who do not complete degrees are heavily at risk of default (Ahlman and Gonzales 2019). Some have attributed hesitancy to borrow, especially among Latinx groups, to a cultural aversion to risk. However, a more direct explanation is that limited access to trusted counselors for families who have experienced discrimination in formal banking systems, combined with opaque borrowing and repayment procedures, creates disparate risks of participation in lending programs, and these different levels of exposure to risk produce different borrowing patterns among racial and ethnic groups (Dowd 2008c; Goldrick-Rab et al. 2009; Rendón et al. 2012).

Horizontal and Vertical Equity

The principles of horizontal and vertical equity are derived from liberal-egalitarian philosophical perspectives, which argue for a “system of educational opportunities of equal worth – defined in terms of the interaction between individuals and educational institutions” (Howe 1997, p. 28). Following philosopher John Rawls' (1971) first principle for enacting justice as fairness, horizontal equity recognizes that: “Each person is to have an equal right to the most extensive total system of equal basic liberties compatible with a similar system of liberty for all” (p. 250). Most simply put, to those with equal needs and interests, the provision of equal resources is a fair approach, i.e., equitable (DesJardins 2003; Dowd 2002, 2003; Dowd and Shieh 2013).

However, in a world of social, racial, and economic inequality (e.g., see Piketty and Saez 2003), Rawls' "difference principle" then comes into play. The difference principle holds that if public funds are not being distributed equally, they should always be distributed "so as to most improve the situation of the least advantaged" (DesJardins 2003; Howe 1997, p. 26). A state that would provide educational opportunities only to its wealthier citizens, whether through the public or private sectors, or both, would perpetuate undemocratic differences in economic and political power. Liberal-egalitarianism asserts that educational opportunity should not be limited by the financial means of an individual's family. The countervailing principle of vertical equity establishes that it is just to provide those communities and individuals that have fewer resources and greater educational need at the post-secondary level with greater resources. Vertical equity is the guiding principle for the provision of financial aid grants that are described as needs-based or "means-tested," indicating that funds are allocated to those with more limited economic means to pay for college. In means-tested programs, the size of the grant is adjusted based on the income or socioeconomic status of the student or student's family. Means-tested aid also plays a "remedial" (Yosso et al. 2004, p. 6), or compensatory (Howe 1997), role for racial discrimination. From this perspective, although means-tested aid programs exclude some social members from participation, the reallocation of resources serves to "strengthen the total system of liberty shared by all" (Rawls 1971, p. 250).

In 1972, reauthorization of the Higher Education Act established the Basic Educational Opportunity Grant, a cornerstone of a means-tested financial aid system, which was later renamed the Pell Grant. The Pell Grant was established to boost economic and social mobility by providing access to higher education for students who would otherwise be unable to afford to attend (Curs et al. 2007; Posselt 2008). The Pell Grant represents the largest source of federal grant aid for college students and is a means-tested program that meets a vertical equity standard. Eighty-five percent of dependent and 88% of independent students who receive the Pell Grant come from households earning less than \$50,000 annually (College Board 2018b). In the 2017–2018 academic year, 7.2 million undergraduates received the Pell Grant, amounting to \$28.2 billion in federal disbursements (College Board 2018b). The same year, 34% of Pell Grant funds went to students at public community colleges (College Board 2018b).

However, the maximum Pell Grant award has lost considerable purchasing power over time, after adjusting for inflation (Jones and Berger 2018). The maximum Pell Grant award in 2017 was \$5,920, just 5% higher in inflation-adjusted dollars than its 1970s amount (College Board 2018b). The average Pell award has increased nearly \$1,000 since the 1970s, but this increase lags substantially behind tuition fee growth, especially at 4-year colleges (College Board 2018a). Increases in non-tuition costs are an even greater concern for community college students, who spend much more on expenses for books and supplies, transportation, and housing than on tuition fees, expenditures that amount to two-thirds or more of their total college-related spending (based on College Board data from 2017 to 2018) (Jones 2019; Jones and Berger 2018; Mercado 2019).

Disbursement of Pell Grants are also subject to technical inefficiencies. To be considered for the Pell Grant and other sources of federal (and sometimes state) aid, students must submit a Free Application for Federal Student Aid (FAFSA). Research demonstrates that complexity associated with the FAFSA, which consists of more than 100 questions and is longer than the tax forms many low-income families file, may deter many students from accessing federal student aid (e.g., Dynarski and Scott-Clayton 2006). Indeed, many low-income students who might be eligible for the Pell Grant never submit a FAFSA (Delisle 2017; Rosinger and Ford 2019) and leave substantial amounts of aid on the table (Kofoed 2017). Forty percent of undergraduates in the bottom quintile and 35% in the second quintile (families earning below \$30,000 annually) do not receive Pell, frequently reporting that they did not apply for aid because they thought they were not eligible, did not have need, did not have information about how to apply, or that the forms were too much work (Rosinger and Ford 2019). Recent policy efforts have focused on simplifying FAFSA (Dynarski and Wiederspan 2012) as well as helping students navigate the college and financial aid processes (see Meyer and Rosinger 2019, for a summary of federal policy efforts in this area).

Such simplification may be essential to reach more community college students and to improve the impact of Pell on community college student enrollment and degree completion. Some research has shown that Pell Grants are associated with increased enrollment among students in their 20s and 30s (Seftor and Turner 2002) and increased enrollment intensity (Park and Scott-Clayton 2018), but other studies indicate no impact on increasing college enrollment. Instead some research shows small changes in college choice, with students on average enrolling in colleges with slightly higher tuition (Carruthers and Welch 2019), suggesting that Pell serves students at the margin of community college or 4-year college enrollment. For those students who do enroll at 4-year colleges, evidence indicates that aid receipt contributes to increased degree completion and (therefore) higher earnings (Denning et al. 2019b).

Vertical equity is also the rationale for state agencies (in about ten states) to intervene in the allocation of local funds, redistributing them across the state using an equalizing formula that redirects funds from more to less affluent communities (Breneman and Nelson 1981; Dowd and Grant 2006; Mullin and Honeyman 2007). This application of the vertical equity standard is based on the assumption that in the absence of equalizing formulas, the quality of educational provision would be higher and the costs lower for students attending colleges in affluent areas, where taxpayers are better able to provide local funding. A condition of education in which opportunity is contingent on the wealth of one's parents or neighborhood is generally considered inequitable.

However, while state funding has this potential to equalize available resources, Kolbe and Baker (2019) and Dowd and Grant (2006) obtained mixed results when investigating whether the state role in community college funding is associated with more equitable intrastate resource allocation across more and less affluent geographic areas. The state role was associated with a more equitable funding distribution in some states but not in others. While the local role in funding may create

funding disparities within a state, there is some evidence that it also generates higher overall levels of funding for community colleges (Dowd and Grant 2006).

Outcome Equity (Adequacy)

Vertical equity standards can be difficult to implement because it is unclear how much a state must spend to sufficiently equalize learning outcomes. This is where the quality dimension enters the equity-efficiency debate. In secondary education, the learning standards movement produced a benchmark against which to estimate the costs of funding “adequacy,” the amount of funding necessary to produce adequate learning outcomes (Melguizo et al. 2017, p. 195). The adequacy standard is sometimes referred to as “outcome equity” (Dowd 2003, p. 92). Many argue that the overall level of resources provided to community colleges is not sufficient to achieve outcome equity. Therefore, scholars have been exploring strategies to generate cost estimates for adequacy in community college financing (Century Foundation Working Group on Community College Financial Resources 2019; Melguizo et al. 2017).

The question of how to determine adequate levels of funding is also complicated by the variation in higher education investments in general and community college appropriations in particular among the states. It is not possible to make direct comparisons of absolute funding levels to different types of institutions, without also considering the relative costs of their course and program offerings (Romano and Djajalaksana 2011). For example, 4-year institutions provide a greater number of upper-level courses, which typically enroll smaller numbers of students, thereby inhibiting economies of scale. Nationally in 2017, public community colleges received an average of \$15,710 in total revenue per full-time-equivalent student, compared to the \$45,128 revenue for public 4-year universities (US Department of Education 2018). The lower level of resources available to different types of institutions, from private and public sources, raises concerns that the quality of education at community colleges relative to the task of meeting the educational needs of community college students is also lower. Many argue that these relatively low levels of funding for community colleges represent inequities (Belfield et al. 2014; Denning 2017; Goldrick-Rab 2010; McKinney and Hagedorn 2017) and that the relatively low completion rates of community college students indicate that the available resources are inadequate (Century Foundation Working Group on Community College Financial Resources 2019).

Although, for allocative efficiency reasons, funding may not be equal across sectors of public higher education, it should be adequate in each sector, equity advocates argue (Carnevale and Strohl 2013; Century Foundation Working Group on Community College Financial Resources 2019; Dowd 2003; Melguizo et al. 2017). Liberal-egalitarian conceptions of justice assert that educational outcomes must not only enable all students to reach a threshold level of economic participation but also a threshold of civic equality. From this point of view, “dignitary injuries” that reduce some citizens to second-class status and place them on less than equal

footing in their social relationships with others in their community are particularly pernicious (Satz 2007, p. 639).

As Satz (2007) emphasizes, “inequalities that involve some people falling below the requirements of full social membership are always of concern” (p. 641). The threshold of what is deemed adequate in the provision of education must then be determined not only at the bottom of the funding distribution but at the top as well. When wealthy families can afford highly expensive elite colleges and enjoy the benefits of such rich environments (educationally, economically, and socially speaking), the threshold of financial need is raised. This difference is not simply a matter of the perception of need relative to high college costs. As Satz (2007), drawing on Rawlsian conceptions of fair equality of opportunity and the fair value of political liberty, points out “what is sufficient to serve as a social minimum is inevitably conditioned by the resources that others have and what they can do with those resources. When some people have a lot more, this may effect what others need to take part in community life” (p. 639). Large differences in the amount of public and private investments in different sectors of higher education reproduce racial and social stratification and sustain inequities in the socioeconomic status of degree holders who attend different types of institutions, a phenomenon known as “effectively maintained inequality” (EMI) (Carnevale and Strohl 2013; Minor 2008, p. 863; Posselt et al. 2012, p. 1077), even as less-affluent groups gain access to higher education, more affluent groups maintain their privilege by securing even more valuable and high-status resources for themselves.

Amid rising tuition costs, declining state commitments to higher education funding, and relatively stagnant Pell awards, student loans are intended to function as a key financing mechanism to promote college enrolment and choice (Hearn 1998), but as noted previously the effectiveness of this policy instrument is undermined by issues of productive inefficiency. Those students who are in the greatest need of additional resources to achieve an adequate level of funding are most susceptible to the risks of degree non-completion and loan default (Ahlmán and Gonzales 2019). Students from affluent families are able to borrow from the federal government to pay for the high cost of prestigious universities, and to then repay those loans when graduating into professional occupations that remunerate their investment. In contrast, students at community colleges are less likely to borrow and, on average, they borrow much less than students at other types of colleges.

Only 20% of public community college students borrowed, a borrowing rate that is low relative to the 47% of all postsecondary students who borrowed. Among students entering loan repayment in 2011, the median community college student borrowed around \$9,600 in federal loans (compared to an average of \$15,265 for students in all types of postsecondary institutions) (Looney and Yannelis 2015). Given state and local appropriations to keep community college tuition charges relatively low, lower amounts of federal government loans can help support a student’s college enrollment in this sector, but the onerous downside of the risks of default places a counterweight on the value of these federal subsidies.

Therefore, the federal provision of financial capital through student loans is often an inadequate intervention for most community college students. A growing body of

research examines the social and economic factors and public policies that shape socioeconomic status (SES) and racial disparities in student debt and loan repayment (e.g., Goldrick-Rab et al. 2014; Scott-Clayton 2018; Scott-Clayton and Li 2016). Despite low rates of borrowing and borrowing less, community college students default on their loans at rates that are particularly high relative to students who were enrolled in all other higher education sectors, except for-profit institutions. Over one-third (38%) of community college students who entered repayment in 2008–2009 defaulted on their loans within 5 years (College Board 2018b). In part, this outcome occurs because community college students have lower rates of degree completion than other college students (Juszkiewicz 2019). For students who were enrolled at any type of institution, default rates are particularly high for those who did not complete a degree (even though these students often hold relatively small amounts of debt) (Scott-Clayton 2018).

Black students, even bachelor's degree holders, are particularly susceptible to default (Ahlman and Gonzales 2019; Miller 2017; Scott-Clayton 2018), which highlights the importance of family income and wealth as a factor cushioning college enrollment decisions and longer-term financial outcomes. Black students, who are disproportionately enrolled in community colleges, have been subject to an array of housing policies, from redlining and housing covenants to exclusionary and predatory mortgage lending, that have limited their ability to accrue wealth (Kendi 2016; Rugh and Massey 2010). Concerns about student default rates in general have led some community colleges to restrict students' access to federal loans by declining to administer loans through their financial aid systems (Burdman 2012; Wiederspan 2016). They have taken this step because high default rates can imperil a college's eligibility for all forms of federal student financial aid under the Title IV (which governs aid policies). However, this institutional response may have negative implications for students' progress toward degree completion and/or transfer to a 4-year institution. Recent studies indicate that access to federal student loans supports academic progress for community college students, such as credit hour accumulation (Marx and Turner 2019; Wiederspan 2016) and transfer to 4-year institutions (Marx and Turner 2019).

These patterns of interaction with the federal government's lending program indicate the trade-offs between equity principles and efficiency. The federal government subsidizes the largest loans for those enrolled in graduate and professional programs and at highly selective institutions, whose graduates are likely to earn considerably more than most community college graduates. It is efficient for the government to stimulate the complementary private higher educational investments made by students in these programs. However, with such unequal outcomes accruing to low-income and Black students who borrow, this particular aspect of the financial aid system has built-in inequities. That leaves the work of promoting equity in higher education to other policy interventions, such as Pell Grants, means-test state grant aid and scholarships, general appropriations to community colleges, and (under some progressive designs) Promise programs (discussed below).

Civic Membership and Eligibility for Higher Education Resources

The philosophical perspective of liberal-egalitarianism emphasizes that the benefits of education in a democracy should be equally shared by society's members (Howe 1997). Yet, the benefits of eligibility for in-state tuition rates, which are often substantially lower than out-of-state resident rates (Rizzo and Ehrenberg 2004), and for state aid (whether need- or merit-based) are typically limited to state residents. This raises the question, how is residency and membership in a state determined? State residency eligibility and restrictions stem from the social charter of higher education to serve the state and state residents whose taxes pay for colleges and universities. A social charter of higher education wherein all state residents are eligible for state benefits without restrictions based on home ownership or the amount of taxes paid (whether through income, property, or sale taxes) rests on two ideological foundations: the belief that education is a public good and it is an essential foundation for equal membership in political communities (Satz 2007).

Therefore, membership in a state can typically be established within a period of several months to a year. New residents must also sometimes provide a statement or demonstration of intent to establish domicile, to make a state one's "true, permanent, and fixed abode" (Olivas 2004, p. 438). Minors typically acquire the residency status of their parents when they become adults, making them eligible for state benefits in the state where they have lived. For college students, about a year of residency typically provides eligibility for in-state tuition rates at public colleges and universities. A number of court cases have prohibited states from imposing a waiting period in excess of one to two years for the right to receive a variety of resident benefits. The more essential the benefit, such as child welfare services, the shorter the period of time required for eligibility. In contrast, in a case concerning state-subsidized student loans for Alaska residents, a relatively lengthy waiting period of 2 years was upheld (Olivas 1988), which suggests that higher education is sometimes viewed as a less essential benefit than early childhood care and elementary education.

Duration of residency is one, but not the only way, to determine community membership. Societies also rely on conceptions of "substantive membership" (A. Perry 2006b, p. 37) to determine who deserves to receive resources. Substantive membership is constituted by a number of factors besides residency. These include reciprocation, investment in the community, law abidingness, patriotism, a sense of a shared future (destiny), and social awareness (knowledge of language, traditions, and norms) (Perry 2006a). A framework of substantive membership serves to define and locate who is a member of a political community and thus, to whom the community should allocate goods and services.

Legal and legislative arguments and case law concerning the educational rights of undocumented students shed light on the criteria for social membership in a state or nation. Conflicts are evident in arguments in favor of and against undocumented student eligibility to receive in-state financial aid. Perry (2006a, b) studied stakeholders (including both policy makers and undocumented students) who were involved in or affected by legislation enacted through Texas House Bill 1403,

which granted in-state tuition to undocumented students. Perry found that individuals in differing social positions and statuses generally agreed that membership entails residency, social awareness, reciprocation, investment, identification, destiny, patriotism, and law abidingness. However, despite holding similar beliefs about substantive membership, stakeholders did not necessarily support or enact policies that reflected shared beliefs because they did not weigh each component equally. They gave consideration to some values but not others. These differences regarding how membership is defined and enacted in policy serve to exclude some members from participating in a political community and benefiting from the rights and privileges of substantive membership.

The Supreme Court decision in *Plyer v. Doe* (1982) and Section 505 of the US Congress' Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (IIRIRA) demonstrate conflicting conceptions of membership. In *Plyer v. Doe* (1982), the Supreme Court evoked the Fourteenth Amendment equal protection clause to determine that people who are undocumented are entitled to life, liberty, property, and due process. Although education is not explicitly afforded in the United States Constitution, the Court recognized the need for education to achieve individual equality. Therefore, the Court granted undocumented immigrants who met certain conditions various educational rights, recognizing the individual investments of these civic members in education as investments to the political community (Perry 2006a). In other words, the Court recognized undocumented immigrants as potential citizens. It acknowledged that residency, time spent in the country, and unlikelihood of deportation are factors to be considered in the allocation of education benefits. As members, access to basic education and particularly higher education helps individuals be better able to realize the benefits of espoused equality. Society also benefits reciprocally through civic and democratic engagement, which in turn supports economic and market goals of society (Perry 2006a).

While *Plyer v. Doe* decided children of immigrants should be viewed as future members and granted the benefits of primary and secondary education, the IIRIRA does not consider undocumented immigrants as members or potential members. The Act is commonly interpreted as barring in-state tuition to undocumented students (Bjorklund 2018). Section 505 of the IIRIRA in particular states that “if a state offers in-state tuition or any other higher education benefits to undocumented students, then the state must provide the same benefits to out-of-state U.S. citizens” (Perry 2006b, p. 23). This interpretation of IIRIRA assumes undocumented students are not substantive members in large part because it overlooks residency, time spent in the country, and unlikelihood of deportation. When states adopt this interpretation of IIRIRA, they eliminate the possibility of eligibility for undocumented students for state and federal financial aid. However, between 2001 and 2016, through legislation or adoption of higher education board policies, 20 states have enabled undocumented students to receive in-state resident tuition. Six states, including California and Texas, which are among the highest enrollment community college systems in the country, provide state loans and college financing to undocumented students. However, these steps do not provide access to federal financial aid (Bjorklund 2018).

These conflicting state and federal laws and policies demonstrate varied perspectives on civic membership that determine a potential college student's eligibility for higher education resources. In particular, we see that when individuals and groups are not viewed as current or potential future members of society, they may be excluded from participation in education. Restrictive views of membership pose a threat to communitarian ideals underlying the public good of education in a democracy. Communitarianism is distinguished by a focus on communities and collective action over individuals and individual action (Kezar 2004). Such collective action may depend on the development of moral or civic character through schooling. The "conscious social reproduction" of a democracy requires that schools provide opportunities for young people to be taught social values and to learn how to deliberate in the future about which values are nonoppressive and nondiscriminatory (Gutmann 1987, p. 14). From a liberal-egalitarian perspective, creating a society in which citizens are afforded respect and the social "bases of self-respect" is a core purpose of resource redistribution, more important than the opportunity for economic advancement (Rawls 1971, p. 303; see also Satz 2007).

Neoliberalism, when instantiated in educational policy with an overriding focus on the economic value of individuals and on individual behavior in response to market incentives, represents a threat to communitarianism, and thereby to the public good of higher education (Ayers 2005; Baber et al. 2019; Dowd 2003; Giroux 2019). Neoliberal ideologies "create particularly narrow, economic visions" of public goods using a "logic [that] only limits democratic possibilities" (Baez 2007, pp. 12–13). Through neoliberal ideologies the purposes of education are reduced to the production of human capital and social exchanges are reconstituted as entrepreneurial exchanges in educational markets. This view of education creates a particularly problematic relationship between the state and its members, especially for community colleges as state agents if they are to continue to embrace the mission of functioning as "democracy's college" (Diener 1994; Rhoads and Valadez 1996). When taken up with "one-dimensional" emphasis, current policies focused on accountability, institutional performance, and outcomes carry a risk of diminishing the workforce mission that has been carried out by community colleges as part of a social justice agenda. As Baber et al. (2019) state:

In the spirit of economic justice and equity, the opportunity to enhance skills and technical knowledge is a critical part of the campus experience for community college students. Indeed, social justice frames support intentional activities around workforce development for populations who have not been served well by previous policies. However, isolating educational outcomes to forms of material well-being serves to reproduce one-dimensional perspectives towards populations already oppressed by limited vision of their humanity. Community colleges are at their best when they operate from a democratic foundation and support the holistic—economic, cultural, and citizenry—development of diverse learners and communities. (p. 217)

These concerns for humane and holistic educational practices emerge as a central consideration as we turn to consideration of conceptions of membership embedded in the wide variety of eligibility criteria for Promise programs.

The Changing Social Contract of the College “Promise”

For over a decade and with increasing attention in the 2000s, “Promise” programs have been a popular policy innovation for the provision of community college and baccalaureate institutional funding ([Campaign for Free College Tuition](#); Perna 2016; Perna et al. 2018). Attention to Promise programs was heightened in the years leading up to the 2020 elections in the United States, as candidates for president and state-wide offices endorsed “free tuition” policies as part of their campaign platforms or pushed for such policies in their states (Jones 2019; Kim 2019; Mishoury 2018). Promise programs are defined by the commitment made to potential students that tuition charges for program participants will be reduced to zero (for some period of time) (Billings 2018; Davidson et al. 2018; Holtzman et al. 2019; Mishoury 2018; Perna and Leigh 2017; Perna et al. 2018). To be eligible for Promise funding, potential college students are required to meet some type of “place-based” membership requirement or requirements, prior to, during, and/or after college. For instance, eligible members may be those who graduated from a particular high school or district and within a certain time period enroll in a participating college, such as going on to a public community college or bachelor’s granting institution in the state within one year of high school graduation.

States, municipalities, individual and district college boards, and local and national education foundations have all been among the entities to designate or subsidize “Promise” funds, either through public monies or philanthropic funding. A wide variety of additional eligibility criteria have been attached to Promise programs. These include different thresholds or indicators of economic need, academic performance, community service, and planned course of study in college, particularly in technical and workforce preparation. Programs also sometimes require applicants to make a pledge of virtuous behavior (e.g., not to use drugs) or require documentation of law abidingness (e.g., no DUI convictions). In this section, we further characterize Promise programs and consider the equity implications of various eligibility and participation criteria. We highlight, first, that because the flow of dollars in the majority of programs is not means-tested, Promise programs do not promote vertical equity in the same manner as means-tested federal and state aid. Second, some eligibility requirements are based on restrictive views of civic membership. Relative to typical community college matriculation policies, these restrictions diminish open access. Finally, we highlight the incorporation of neoliberal ideology in a variety of eligibility criteria, which serve to ration rather than expand access, and question whether neoliberal tenets undermine communitarian ideals of democratic education and the “community” nature of community colleges.

Prevalence of and Variation in Promise Program Designs

Estimates of the number of Promise programs in existence fluctuate annually with changes in funding, legislation, and available data. Perna and Leigh (2017) conducted an analysis of 289 Promise programs of various types through a

comprehensive analysis of a data base of such programs. (Through Penn AHEAD, they also maintain an updated program database at <http://www.ahead-penn.org/creating-knowledge/college-promise>) (Perna and Leigh n.d.). They categorized the programs in their analysis in a number of different ways using statistical cluster analysis techniques, which enable the identification of conceptual groupings based on empirically observable program characteristics.

Defining features emerging from Perna and Leigh's (2017) typology study distinguish whether a program was sponsored by a state or by another entity, such as a local community college district or municipality. Davidson et al. (2018) also produced a categorization and identified workforce development as an additional characterizing feature, as some programs limited participation in programs deemed to lead to employment in high demand occupations that contribute to a state's economic development. Further, while Perna and Leigh (2017) categorized Promise programs separately from merit aid programs, which require a high school or college GPA exceeding what is expected under typical college enrollment policies or the satisfactory academic progress (SAP) requirement for federal Pell Grant eligibility (a college GPA of 2.0), other analysts take stock of these academic merit standards as part of the growing number of encumbrances on Promise program eligibility (Billings 2018; Davidson et al. 2018; Jones and Berger 2018).

The Tennessee Promise, enacted in June 2014, was the first state-funded program, and the Kalamazoo Promise, which is philanthropically funded by anonymous donors, was the first place-based program providing eligibility to students in a local area (in this instance the Kalamazoo Public School district). Both of these programs have been widely referenced and cited by those who have created or advocated for the subsequent creation of similar programs (Perna and Leigh 2017; Perna et al. 2018). The I Have a Dream program, which was launched in 1981 when Eugene Lang promised to pay the college tuition for any student in New York City's PS 121 sixth grade class who graduated from high school (I Have a Dream Foundation 2007), is an early philanthropic precursor to the current Promise movement. State-sponsored programs typically provide funding for enrollment at public (and sometimes also at private not-for-profit) colleges in the state where the program is offered). Local programs may allow for a more limited selection of local colleges or, as in the case of the Kalamazoo Promise, allow for enrollment in a wide variety of colleges in a state or region.

One-third of the Promise programs Perna and Leigh (2017) analyzed, which had been created by November of 2016, restricted enrollment to community colleges. By 2018, an estimated 20 state-level programs were in existence (Jones and Berger 2018; Mercado 2019), with 17 states offered funding for enrollment in community colleges (Mishoury 2018). In July 2019, West Virginia launched an additional state-sponsored tuition-free community college program called West Virginia Invests (Hazelrigg 2019).

Promise programs are also distinguished by whether students may receive funding even if other available public sources of aid, such as Pell Grants or state means-test financial aid, will already cover their tuition and fees. When students are required to first exhaust these other sources (and receive zero Promise dollars if those

sources do not leave unmet need), the funding provision is referred to as “last dollar” aid. If students may receive Promise funding in addition to other funds, the funding is referred to as “first-dollar” aid (Perna and Leigh 2017, p. 156). When programs provide first-dollar aid to students who are also eligible for federal and state means-tested financial aid, low-income students often gain funds not only to pay tuition and fees but also to pay non-tuition expenses, such as for books, living, and other expenses (Billings 2018), costs that make up a large share of college costs for community college students in many states (Jones 2019; Jones and Berger 2018; Mercado 2019).

Notably, however, first-dollar financial aid is one of the least common forms of Promise program aid designs (Perna and Leigh 2017; Perna and Leigh 2017, n.d.). More often, Promise programs provide only for the distribution of last-dollar aid. Analyzing 153 local-level Promise programs created in the period 2005–2017, Billings (2018) found that three-quarters are last-dollar scholarships. This type of design is regressive (i.e., exacerbates inequities) in comparison to means-tested programs, because more dollars flow to middle- and higher-income students than to low-income students, whose tuition and fees are covered through Pell Grants and state means-tested aid (Davidson 2018; Perna and Leigh 2017).

Only 16 of the 115 community college Promise programs captured in May 2019 in a comprehensive national database of such programs had first-dollar aid designs (Perna and Leigh n.d.). In California, which is known for its progressive, low-cost finance policies, only 8 of 42 local community colleges that had Promise program offerings as of Fall 2017 (which was the largest number of any state) provided awards on a first-dollar basis. By May 2019, that number grew slightly to 11, and at that point California became home to two-thirds of the 16 first-dollar Promise aid programs in the whole country (Rauner et al. 2018). These figures demonstrate that at the state and local levels and with respect to financing community college or baccalaureate enrollment the majority of Promise programs are directing aid away from low-income students and toward those who do not qualify for Pell Grants or for state-administered means-tested aid, i.e., last-dollar programs.

Despite these equity concerns, Promise programs remain a popular policy, in part because they show positive effects on increasing college access and enrollment. Clearly, design features, eligibility criteria, award amounts, and stability of funding will all play a role in determining the impact of any particular program on student enrollment behavior. However, studies of the effects of local Promise programs that have been in place for several years (or longer) on college enrollment, persistence, and degree completion typically indicate positive effects on these intended beneficial outcomes (Bartik et al. 2017; Carruthers and Fox 2016; Page et al. *in press*). A student’s decision about what type of college to attend may also be influenced, but the direction of impact is uncertain and varies with program design features (e.g., whether funds may only be used for enrollment at community colleges). The empirical results are mixed in this regard, with one study finding that students were incentivized to select community colleges over 4-year colleges (Carruthers and Fox 2016), and another finding that low-income students were encouraged by

the Promise of funding to seek out more selective, 4-year college options (Andrews et al. 2010).

A small but growing body of research has also begun to examine the impact on student outcomes of state-level Promise programs, which are newer policy options relative to local Promises. One of these, an evaluation of the Oregon Promise program, which was adopted in 2016 and covers community college tuition for in-state students, demonstrated an increase in college enrollment (Gurantz 2019). This increase was initially driven by students selecting community colleges over 4-year colleges and later by an increase in community college enrollment with no corresponding decrease in 4-year enrollment.

California and New York are the only ones among the six states with the largest community college enrollments featured in Table 1 to have a state-level Promise program. In the next section, our comparison between the California and New York programs and the most recent state program created to date (West Virginia's) serves to illustrate the wide variety of Promise program designs. Our description highlights that the programs in these three states share many common features with Promise programs nationally and have distinctive characteristics as well.

California Promise Grant. In California, Assembly Bill 19, which was signed into law in 2017, created the California College Promise. The program has not been implemented in all of the California community colleges. Instead, the legislation created a state-funded incentive for individual community colleges in the state to opt-in to the program, contingent on meeting certain institutional policy and practice conditions, in order to receive funding that enables the colleges to then waive up to one year of tuition and fee charges (for eligible students) without loss of revenues. Fee waivers under the Promise program may only be awarded to full-time (enrolled in 12 credits per semester), first-time students. There is no income threshold for participation (Jones and Berger 2018; Rauner et al. 2018) and undocumented students are also eligible. California was one of five states in 2019, including Oregon, Washington, Delaware, and Rhode Island, to allow undocumented students to benefit from Promise program awards (Taylor and Del Pilar 2018).

Students who are eligible for the distinct means-tested state financial aid program can then use that aid to pay for non-tuition costs. That aid program was known as the Board of Governors (BOG) Fee Waiver and has now been renamed the California Promise Grant (California College Promise Project 2018). Colleges that opt in to the California College Promise must participate in the federal subsidized loan program (Jones and Berger 2018), which some do not do for fear of high student default rates (Burdman 2012). This requirement helps the state capture a greater share of federal dollars for college funding.

California colleges are also required to meet a number of academic programming requirements to receive College Promise funds. They must create a partnership with a local education agency to promote “an early commitment to college” in the communities served by the college, adopt a structured curriculum and advising model called “guided pathways” (Jenkins and Cho 2013), and use multiple measures (e.g., high school grades and placement test scores) to place students into their initial coursework (California College Promise Project 2018, p. 1). These types of

requirements, many of which fall within the decision-making purview of the college and state Academic Senates, reflect political bargaining between interest groups whose advocacy centers on a variety of goals such as college affordability, access, curriculum reform, and accountability for student outcomes. This is important to note because it would be a mistake to view college Promise programs as being strictly about increasing college access and opportunity.

A study involving interviews and a survey of California Promise program stakeholders in community colleges and districts, community foundations, and K-12, community and local government agencies demonstrated that respondents had multifaceted understandings of program goals that included not only college access and affordability but also degree completion, sectoral alignment from K-12 to college, and the academic quality of advising and the curriculum (Rauner et al. 2018). Through a scan of the requirements of the local- and state-level Promise programs in California, the study's authors concluded that these programs were best understood as "a framework for student success and as a mechanism for aligning with other student success initiatives" (p. 7). This observation was based on the finding that nearly all programs (almost 90%) incorporated student support in the form of academic advising and other college counseling and three-quarters made receipt of the financial award contingent on student compliance with these mentoring and advising requirements. Although such requirements may, indeed, be beneficial to degree completion, they illustrate the ways that Promise programs, where enacted, modify the community colleges' open access policies by adding conditions that students have not historically faced when the college access benefit came in the form of state and local appropriations that reduced the tuition and fees paid by students.

New York's Excelsior Scholarship. New York's Promise program, which began enrolling students in Fall 2017, is called the Excelsior Scholarship. It is available to those whose income does not exceed an income cap (\$125,000 in 2019) and covers enrollment in community colleges or baccalaureate institutions. Awards are last-dollar aid, are provided for up to 2 years for an associate's degree and 4 years for a bachelor's degree, and do not cover fees or non-tuition expenses (Jones and Berger 2018; Perna et al. 2018). Neither Excelsior nor the California College Promise require a college GPA higher than that required for eligibility for federal Pell Grants, a feature that Jones and Berger (2018) identify as a positive characteristic in their "framework for equity-driven free college policy" (p. 4). However, in a constraining twist that signals the changing social contract for receipt of grant aid, the dollars a student receives through the Excelsior Scholarship will convert to a loan (interest-free) if participants do not remain and work in the state for a period of time equal to the number of years they received the grant (Jones and Berger 2018; Perna et al. 2018).

As last-dollar aid restricted to tuition payments, Excelsior does not provide any additional financial assistance to low-income students who cover tuition costs with means-tested aid. Having an income eligibility cap positions Excelsior as a program targeted on middle-income students and families, because the highest income families are excluded (Poutré and Voight 2018). To assess a state's commitment to college access and affordability for low-income students, it is important to place the

magnitude of state investments in Promise programs in relative context alongside state investments in means-tested financial aid programs. New York State invests heavily in state financial aid, with nearly all (97%) of the state aid programs limited and disbursed on a means-tested basis to low-income families (Perna et al. 2018). The largest of these, the Tuition Assistance Program (TAP), was funded at a magnitude ten times greater in 2014–2015 (at \$956 million) than the Excelsior Scholarship in its first year (\$87 million). This illustrates that Excelsior (and other last-dollar Promise programs) are similar to other policies introduced to appeal to middle-class taxpayers and parents of dependent students, such as college tax credits and merit aid programs (St. John 2003).

As Perna et al. (2018) point out, Excelsior's full-time enrollment requirement (which is found in other programs as well) reflects the values of college completion agenda and a concern with on-time degree completion. Full-time enrollment is one of a variety of requirements that may serve to limit rather than broaden access. For example, Holtzman et al. (2019) describe the many obstacles to enrollment faced by students with children, especially single mothers, who in comparison to students who do not have children are more likely to be older, working more hours, enrolled part time, and to be Black, Native American, and Native Hawaiian or Pacific Islander. The student parent population, nearly half of whom attend community colleges, is one that would benefit greatly from additional financial aid, because they are disproportionately living at or near the federal poverty line and must pay additional expenses, such as the cost of child care. Living in off-campus housing and paying more for basic living costs (e.g., food), student parents who attend community colleges are estimated to pay only 20% of their total college budget on tuition and fees, which indicates that last-dollar aid would cover a fraction of total college-going expenses.

Holtzman et al. (2019) report that the eligibility criteria of the majority of Promise programs exclude students over the age of 25 years of age. Programs with such direct participation restrictions, combined with the restrictive effects of other enrollment intensity criteria intentioned to boost college completion, act to exclude many student parents. Restrictive requirements demonstrate greater alignment with the college completion agenda explicitly articulated in performance-based funding policies than in traditional massification and open access policies. The multiplicity of requirements and expectations illustrate that Promise programs are laden with multiple policy values and goals, many of which undermine rather than promote equity in the distribution of public resources and in understandings of who in the population is deserving of participation as community members with equal civic status.

West Virginia Invests. Like the Excelsior program, West Virginia Invests similarly has a last-dollar award design where Promise grants convert into loans if students fail to meet any of the eligibility requirements, which include completing at least 6 credit hours per semester with at least a 2.0 GPA and working in West Virginia for at least 2 years following graduation (West Virginia Council for Community and Technical College Education 2019). Although the grant-to-loan conversion caveat is relatively uncommon, Arkansas similarly requires Promise program participants to

work in the state for 3 consecutive years after degree completion, or face the need to repay the financial aid received (Davidson et al. 2018).

In a unique (to date) requirement in West Virginia, applicants must pass a drug test, which they themselves must pay for, at the start of each semester (Hazelrigg 2019). West Virginia's drug test stands among a variety of moral stature and lawfulness tests that lawmakers have incorporated into Promise legislation. Others, such as Indiana's 21st Century Scholars program, include making a pledge not to "use illegal drugs, alcohol, or commit a crime or delinquent act" (Davidson et al. 2018, p. 12).

Community service is another requirement – and one that is not uncommon (exact estimates of the prevalence of service requirements are not available in recent studies, but the database at Perna and Leigh *n.d.* provides over a dozen examples) – that signals that participation hinges on virtuousness. In West Virginia participants must perform 2 hours of community service each semester they receive funding, for a total of 8 hours. In having a service requirement, West Virginia's program is like state-level programs in Montana, Nevada, and Tennessee (Davidson et al. 2018). While seemingly simple, service requirements can be difficult to meet and therefore restrictive. For example, in 2016 only 40% of those who filed an application for the Tennessee Promise completed the community service requirement (Perna et al. 2018). Although the initial impetus for some Promise programs may have been to signal the availability of an affordable college education, the administrative complexity and profusion of participation criteria undermine that premise, as students cannot easily foretell whether they will be able to diligently meet all service and moral stature requirements or where employment opportunities or family responsibilities may take them after they complete their degrees.

In regard to yet another requirement – enrollment in a workforce-oriented program of study – West Virginia Invests adopts program design features found in other state- and local-level Promise programs. Participation in West Virginia Invests is limited to those in programs of study for certificates or associate's degrees in specified fields of study that lead to occupations with strong workforce demand, such as nursing and health sciences, STEM, business, accounting, and public service, education, and legal studies (wvinvests.org). Davidson et al. (2018), analyzing 13 states with state-level Promise programs, characterized workforce development programs as a particular category of program design that is not "focused on increasing access to higher education," but "rather, their goal is to produce graduates that have skills deemed as high demand in their state" (p. 12). Programs in Arkansas, Indiana, Kentucky, and South Dakota restricted funding to those students earning a credential in specific technical and workforce-oriented areas of study.

Equity, Access, and Civic Membership Concerns

With a wide variety of value-laden program designs and goals, it is apparent why some view the "free college" movement to be a "wolf in sheep's clothing" and "a step in the wrong direction" for promoting college participation (Cochrane 2015).

Highlighting the generally negative equity implications of last-dollar Promise programs that are not restricted to students whose income is below a low-income threshold, a policy advisory issued by the Institute for Higher Education Policy highlighted that the Tennessee Promise and New York's Excelsior Promise do not "allocate scarce state dollars to the neediest students in either state, nor does it improve college affordability for them," despite expressing "a sweeping promise of free tuition" (Poutré and Voight 2018, p. 1). These types of concerns have led numerous researchers and policy analysts (Billings 2018; Davidson et al. 2018; Jones and Berger 2018; Perna et al. 2018) to emphasize repeatedly that to promote broader access and equity, Promise programs should "Invest first and foremost in low-income students. . . . Fund non-tuition expenses for low-income students. . . . [and] Avoid restrictive or punitive requirements" (among other recommendations) (Poutré and Voight 2018, p. 2).

Similarly, reports that delineate restrictive enrollment criteria call for policy changes to create more inclusive programs (Billings 2018; Holtzman et al. 2019; Jones and Berger 2018; Taylor and Del Pilar 2018). Whereas community college matriculation policies were historically designed to enable broad, open-door access, many Promise programs use a variety of criteria, including students' age, high school GPAs, college course of study, enrollment intensity and grades, and longevity of residence in a local area as factors in program participation, thereby rationing resources to meet accountability and workforce goals. The restrictions placed on eligibility for Promise program benefits suggest that broadening postsecondary access is not the sole or primary purpose of the innovation of college Promise funding generally speaking and especially in the community college sector, which in many states already provided for broad access through state-subsidized tuition and means-tested financial aid.

Neoliberal Goals

While many Promise programs lay claim to universality and the intention to serve *all* students in a particular place, this espoused value is not reflected in most program designs. In this respect, the mismatch between rhetoric and program design traces back to the early progenitor program of the Kalamazoo Promise (Miller-Adams 2009), which restricts participation and benefits based on length of residency in the program's service area. The term universal is a misnomer with respect to the Kalamazoo Promise and others that have emulated its eligibility criteria (Dowd 2008a). To be eligible for the tuition benefits of the Kalamazoo Promise, students must have been enrolled continuously in KPS schools for at least 4 years, graduate high school from a Kalamazoo Public School, and enroll in any of the 44 public postsecondary institutions in Michigan, which include community colleges, state universities, and the flagship University of Michigan. From 2006 to 2018, 1,862 (39%) students of the 4,829 who participated in the Kalamazoo Promise within 6 months of high school graduation enrolled in community colleges (Upjohn Institute 2019).

Those who complete all twelve years of schooling in the KPS system with continuous enrollment are eligible for a tuition benefit equal to 100% of the cost of college tuition and fees at the college where they enroll. As the number of years a student spent enrolled in the KPS declines, the value of the award relative to the costs of tuition and fees decreases annually in 5% increments to 65% of the cost of college, until the eligibility threshold is reached. In this way, the value of an award is based on the duration of residency over twelve years, a length of time that greatly exceeds the year (sometime two at the maximum) that is required for eligibility for in-state resident tuition rates. Following the Kalamazoo program, tiered eligibility criteria contingent on an extended duration of residency were adopted in municipal and college-specific programs established in El Dorado, Arkansas; Garrett County, Maryland; and Hammond, Indiana, all of which continued to exist in May 2019 (Perna and Leigh *n.d.*). Some programs that followed the Kalamazoo Promise model shortened the duration of residency requirement. For example, the Hammond College Bound program eligibility requires at least three years of residency and the Garrett County Commissioners Scholarship Program requires at least two. In contrast, however, as Davidson et al.'s (2018) analysis shows, all eight of the state-level Promises programs that were designated for enrollment at community and technical colleges do not impose any in-state residency restriction lengthier than one year.

Restrictive Duration of Residency Eligibility Criteria. The rationale for long-term residency restrictions is based on the economic development goals of cities and towns. Restrictive Promise programs with tiered eligibility criteria essentially create a system in which taxpayer subsidized educational resources are distributed as payments – in the form of college tuition – to resident families. In order to ward against freeloaders, these payments are zero for newcomers and are tiered in value to reward tax investments over time by long-term residents. Newcomers are important inputs, however, as they are needed to increase school enrollments and the state school subsidies viewed as a critical catalyst to economic and civic renewal (Dooley 2007). In extreme cases, as in the College Bound program of Hammond, Illinois, which requires home ownership in the city, eligibility criteria are highly regressive, taking city revenues from the sale of water and spending them on the subset of the population (typically more affluent) who can afford to own homes. Restrictive eligibility criteria based on duration of residency create a second class of non-eligible or less-eligible students, undermining principles of democratic education that call for the equal treatment of students. These programs commodify high school and college students as inputs to economic development.

A thought experiment helps to illustrate that tiered eligibility and awards based on duration of residency cannot be accurately characterized as a universal design and are restrictive requirements. Imagine a municipality or county that announces it will provide universal pre-school for children ages 3 through 6. The fine print indicates that the families of children who have lived in the area for 6 years will receive full coverage, those who have lived there for 5 years will receive 65% subsidy, 4 years 50%, and zero benefit for those residing in the area for 3 years or less. Clearly, this provision would exclude any new families or children moving into the area and few parents would be swayed that this design actually provides universal coverage. The

difference is that as minors approach adulthood, policy makers are comfortable with treating them less as children and more as economic inputs. Providing unequal educational benefits based on the economic value of children to a school system, city, or other state entity conflicts with principles of equal treatment in schooling, nondiscrimination, and school finance equity.

In Promise programs with restrictive eligibility that deny and reduce benefits to more recent residents, education is viewed from a neoliberal perspective as an input to economic development. Public schooling and higher education are used as tools to achieve economic ends. Promise programs focused on economic development lose sight of several democratic principles of education, including the goal of creating a society of equals and the strategy of providing equal educational opportunities in support of that goal.

Neoliberal Community Service Requirements. Community service eligibility and participation Promise program criteria at times also take on a neoliberal emphasis. The treatment of service requirements as unpaid wage labor becomes evident in the most recent mayorial report on the Hammond College Bound program, for example. Students performed service in the form of labor to complete “a variety of functions from office duties, conducting traffic studies, assisting in the maintenance of city parks and properties, beautification projects, and working at special events and activities” (McDermott 2016, p. 5). The report goes on to highlight that “To a certain extent, the program also saved the City the cost of hiring additional help” (McDermott 2016, p. 5). Since its inception in 2006, the program has made 4,649 awards, which are restricted to those students whose families own a home in Hammond, which in 2016 had a reported average value of \$100,000. Based on average award amounts, the scholarship adds 41% to the value of a home for those who have one child in the program (p. 2). In these ways, the public commitment to the education of children is shown to be contingent on a child’s value as an input to economic development.

In this way, community service becomes a commodity rather than an expression of moral obligation or social commitment. Argument against such “privatization” and “marketization” of education and community service “rests on the belief in the superiority of collective over individual action” (Baez 2007, pp. 3, 5). School activities and curricula that include community service are valuable to promote “substantive membership” in a community, which is defined in part by participation in communal exchanges, whether in giving or receiving (Perry 2006a, p. 37). Through service, young people can develop affinity for a community, a commitment to the shared welfare of its citizens, and recognition of their role in shaping its future. In defining the merits and uses of community service, it seems particularly important to protect the status of all students as “civic equals” within schools (Satz 2007).

A Promise Contingent on a Pledge. Promise programs that require a pledge of good academic conduct, moral stature, and citizenship are not explicitly oriented toward economic development, but they do represent (as other policies introduced in recent decades do as well) an ideological shift away from treating education as a social contract for the public good toward treating it as a civic or market exchange. Programs that require pledges diminish residency in and of itself as sufficient

grounds for membership. Pledges require students to state they will study hard, prepare for college, perform community service, and be law abiding. Those who take the pledge are rewarded with educational benefits not available to others. Collective action for the community good is recast in terms of individual actions carried out in anticipation of a future benefit.

Summary. Equal opportunity through universal eligibility strikes a rhetorical chord of inherent fairness. That eligibility criteria such as long-term residency, home ownership, community service, moral stature, and participation pledges may function to exclude some residents and direct educational resources toward more affluent families or politically dominant families is cause for concern. The conversion of schooling to an economic transaction undermines education as a universal entitlement of all minors in a democracy, irrespective of the wealth of their parents or their future economic value to a community. Under such a marketization of education, new residents are treated as second-class citizens, undeserving of full membership until they make sufficient investments in the local community and economy. Such treatment constitutes a “dignitary injury” (Satz 2007, p. 639) that undermines civic equality. The equal provision of opportunities for civic participation is as important as providing equal educational and economic opportunities. Long-term residency requirements treat new residents as second-class citizens and create an unusually high bar for achieving civic membership.

With Promise programs regularly coming up for consideration or revision in state legislatures (AASCU State Relations and Policy Analysis Team 2018) and the “free college” pledge espoused by several prominent politicians running for president and other electoral races to be decided in 2020, enthusiasm for Promise programs continues. Yet, these programs, despite seeming to make a rhetorical promise of free college to all students, do as much to extract promises *from* low-income students as to provide them with additional financial resources. Last-dollar financial aid designs function to capture resources from means-tested aid programs funded by the federal government and states. Traditional aid programs provide aid in a relatively no-strings attached manner, compared with Promise programs with residency, service, and/or moral stature criteria.

Performance-Based Funding: Policy Innovation or Failure?

While neoliberal and (some) communitarian Promise programs seek to change the terms of student access to public subsidies for community college enrollment, accountability policies seek to change the terms of public colleges’ access to state funds, by shifting the focus from enrollment to institutional performance in producing graduates (Friedel et al. 2013). In recent decades, performance-based funding (PBF) has been a popular strategy for policy makers aiming to improve higher education institutions’ performance and student outcomes. PBF policies tie a portion of state appropriations to student outcome metrics, such as retention rates, transfer rates (for community colleges), and degree production, rather than funding policies

that have traditionally focused on input measures such as enrollment (Dougherty et al. 2012, 2014).

Interest in PBF in higher education emerged in the late 1970s when Tennessee adopted the first policy linking funding to institutional performance. In the 1990s, nearly two dozen states implemented PBF but many abandoned their programs in the early 2000s amidst institutional concerns over the policies, insufficient financial incentives and vague performance indicators, lack of attention to building institutional capacity to learn and respond to performance demands, and an economic recession (Dougherty et al. 2012). This period of time marked the first wave of PBF. The second wave of performance-based funding, or PBF 2.0, began in the mid-2000s. The second wave policies were driven in part and sustained by a growing emphasis on degree completion among federal and state governments as well as policy organizations and foundations. Notably, in 2009, then President Obama announced an ambitious campaign for the United States to “once again have the highest proportion of college graduates in the world” by 2020 (Obama 2009). Complete College America, a national nonprofit launched in 2009, as well as the Gates and Lumina Foundations, all identified college completion as a major area of focus around that same time and have continued to direct substantial funds toward supporting this goal.

Learning from the first wave of PBF programs, policy makers hoping to create and develop successful second wave programs incorporated several new features. They implemented policies that rewarded success measured at intermediate milestones (e.g., retention rates, completion of developmental education or gateway courses, and credit-hour completion). Where earlier policies allocated bonus funds, PBF 2.0 policies linked base funding to outcomes and also tied the allocation of larger shares of state funding to institutional performance. The new policies included a variety of metrics that acknowledged the varied missions of different higher education institutions and included premiums for enrolling and/or graduating at-risk students (Dougherty et al. 2012).

Seeing PBF as a way to align higher education priorities with state workforce development and broader economic goals, by 2017 policy makers in at least 35 states had implemented performance funding for the 4-year sector, community college sector, or both. As of 2018, community colleges in 24 states were subject to performance funding requirements (Li and Kennedy 2018), and a more recent policy adopted in California (Fain 2018) then brought the number to at least 25 states. All of the states highlighted in Table 1 have PBF policies in place. With this growth of PBF policies, it is important to consider their intended and unintended consequences and the associated equity considerations.

The Intended and Unintended Consequences of PBF Policies

By tying a portion of state funding to student outcomes, policy makers aim to provide public higher education institutions with incentives to improve performance and encourage degree production. A fairly large body of peer-reviewed research

generally indicates that PBF has not been effective when it comes to increasing associate's and bachelor's degree production, and in some cases, degree production has even declined somewhat after PBF implementation relative to non-PBF states (Hillman et al. 2014, 2015; Li and Kennedy 2018; Tandberg et al. 2014; Tandberg and Hillman 2014; Umbricht et al. 2017). Despite the fact that the bulk of the research conducted on the topic shows a lack of effectiveness of PBF policies in meeting their intended goals, a couple of studies do indicate positive completion outcomes. For instance, Washington state's policy had a positive, though delayed, impact on associate's degree production, and a multi-state analysis found positive impacts on associate's degree completion in some states (but not others) (Tandberg et al. 2014). Another study found that newer PBF policies – those adopted during the second wave of performance funding policy making – have led to a modest increase in bachelor's degree production (Rutherford and Rabovsky 2014), indicating that tying base appropriation funds to outcomes may incentivize institutions to improve graduation outcomes. However, community colleges may face challenges, relative to other higher education sectors, under PBF policies because degree completion is not the primary goal of many community college students and student enrollment/completion patterns at these institutions are sensitive to changes in the labor market and business cycle (Romano and Palmer 2016).

PBF Policies and Long-Term Degree Outcomes. In addition to questions of effectiveness, performance funding in higher education has raised a number of equity concerns regarding how institutions respond to the incentives present in PBF policies and the resulting opportunities and resources available for students at these institutions. These equity concerns relate to (1) the type of credentials students earn, (2) access among student populations that on average are less likely to complete a degree and/or require more resources to educate, and (3) funding levels for institutions, including community colleges, that disproportionately serve these student populations.

Although PBF policies seem to have done little, at least on a large scale, to increase associate's and bachelor's degree production, a number of studies have found increases in certificate production. In Tennessee, often regarded as one of the most robust PBF policies by organizations that advocate for PBF (Callahan et al. 2017), fewer associate's degrees were awarded, but the number of certificates awarded grew after revisions in the state's PBF policy to tie more funds to outcomes (Hillman et al. 2018). In Washington state, long-term certificates declined while short-term certificates increased after PBF implementation (Hillman et al. 2015). A multi-state analysis found that policies with features common to PBF 2.0 (e.g., mission differentiation in outcome metrics, larger share of funds tied to performance, and equity metrics) resulted in an increase in short-term certificates and decrease in associate's degrees (Li and Kennedy 2018). Together, these studies indicate that institutions may respond to PBF incentives by focusing on outcomes that are the quickest to improve (i.e., short-term certificates). The increase in certificate production without accompanying increases in associate's degrees raises concerns over future labor market outcomes. Although earnings associated with certificates vary substantially by gender, length of certificate program, and field of study (Belfield and

Bailey 2017; Dadgar and Trimble 2015; Xu and Trimble 2016), they tend to be lower than returns to other college credentials.

Concerns About Restricted Access. A second equity concern arises by tying a portion of state funding to degree completion outcomes. Institutions may respond by altering admissions, placement, and/or pricing policies in an effort to enroll students who are more likely to graduate. Institutions seeking to enroll students with the greatest likelihood of completion may limit access for historically underrepresented student populations that on average have lower completion rates (e.g., those from low-income, Black, Latinx, and Native American communities and students who are first in their family to enroll, enrolled part-time, or older than traditional college age). This is more likely to happen at selective public institutions (see Umbricht et al. 2017) rather than open-access institutions, such as community colleges, that do not restrict admission. However, there is some evidence that Pell revenues decrease slightly at community colleges after the introduction of PBF, indicating institutions may be somewhat less likely to enroll low-income students when funds are tied to performance outcomes (Kelchen and Stedrak 2016).

Allocative Efficiency Concerns. Finally, PBF policies raise concerns over how state funds are allocated among public institutions. Community colleges, relative to selective and flagship institutions, typically receive less funding per student from the state (College Board 2018a). At the same time, community colleges are more reliant on state funds for support than many other institutions because they have less leverage in raising tuition and fewer opportunities than other types of institutions to pursue alternate revenue sources, such as tuition revenues, returns from endowments, private gifts and donations, federal grants and contracts.

Under PBF policies that link state funds to performance metrics, this source of funding has become somewhat precarious for many community colleges given that these institutions disproportionately serve student populations that are less likely to complete a degree on average (Shapiro et al. 2019). Uncertainty regarding funding allocations year-to-year that are linked to performance also makes planning and budgeting more difficult, especially at community colleges that are heavily reliant on state funds for support. Additionally, there are concerns that community colleges may lose out under PBF systems. At public 4-year colleges, PBF policies have benefitted high-resource institutions – namely research and highly selective universities – while penalizing lower-resource institutions – master’s, bachelor’s, less and nonselective, and rural universities – in terms of state appropriations (Hagood 2019). Using Texas’ point system through which state performance funds are distributed to community colleges, McKinney and Hagedorn (2017) found substantial variations in how much funding various students groups attracted. In this case, Black students, adult students, and students with less academic preparation procured less funding for institutions. Other research indicates that concerns over state funding cuts to community colleges have not been realized (Kelchen and Stedrak 2016), although minority-serving community colleges can be advantaged or disadvantaged when it comes to state funding depending on what performance metrics are considered (Li et al. 2018). Importantly, researchers caution that the design of PBF policies is especially important to reduce potential unintended consequences.

Minority serving institutions (MSIs), especially in the community college sector, have demonstrated success improving higher education access and attainment for students of color and promoting social mobility (Nguyen et al. 2015), but have done so with limited funding compared to their non-MSI and 4-year counterparts (Li et al. 2018). Pointedly, community college MSIs often have less funding to serve students with higher need (Li et al. 2018; Nguyen et al. 2015). Studying PBF policies enacted in Texas and Washington, Li et al. (2018) found that performance funding policies did not disadvantage community college MSIs' per-student funding, which remained on par with that of non-MSIs. The authors argued, however, that the policies are framed with horizontal equity principles when vertical equity lens is the more appropriate standard of what would constitute a just allocation of resources. The educational needs of the students being served are unequal; therefore, funding needs to be unequal as well to be considered equitable (DesJardins 2003; Dowd 2002, 2003; Dowd and Shieh 2013). Although Texas and Washington's performance funding models were less detrimental to community college MSIs, states and local funding policies are particularly impactful for community college MSIs to serve as equalizers of higher education for the focal racial and ethnic groups enrolled at these colleges.

Adding to equity concerns over funding levels for community colleges is that fact that these institutions typically have fewer financial resources to leverage in response to PBF incentives than other institutional types. At the same time, community colleges frequently serve populations of students that are underserved by the K-12 education system and often need academic supports, such as developmental education courses and additional counseling, that require resources to provide (Pretlow III and Wathington 2012). As a result, community colleges have somewhat limited capacity to improve outcomes in the absence of additional state investments. Research indicates community colleges have responded to PBF policies by directing slightly more funding toward student services (Kelchen and Stedrak 2016), though the change has been very small overall and still insufficient to the need that community college students have for counseling and advising. As community colleges are asked to do more to improve outcomes while facing potential cuts in state appropriations if outcomes do not improve, the quality of educational offerings and student learning may be threatened. For instance, colleges may direct students toward shorter academic programs instead of courses that allow them to make progress toward a degree or may be incentivized to weaken academic standards to move students toward degree completion rather than offering additional basic skills coursework.

In response to concerns over restricted access for students and funding penalties for already relatively underfunding institutions, policy makers in many states have introduced equity premiums for enrolling and/or graduating students who are at greater risk of not completing a degree (Gándara and Rutherford 2017; Kelchen 2018). These metrics include enrolling and/or graduating low-income, racially minoritized, adult, and/or academically underprepared students (Jones et al. 2017). Recent research indicates that these equity metrics may be a promising approach to mitigating unintended consequences of PBF policies by rewarding institutions that

serve students who would otherwise be at risk of being left behind in the absence of such equity safeguards (e.g., see Gándara and Rutherford 2017; Kelchen 2018). States vary substantially in what student populations are linked to equity premiums, such as low-income, adult, students with less academic preparation at college entry, and racially minoritized students (Kelchen et al. 2019).

Summary of PBF Research Practice and Policy Implications

In this section, we discuss several ways researchers and policy makers can think about the design features of PBF policies, particularly ones adopted during the second wave of PBF, and the ways in which policy design can be used to achieve intended outcomes while mitigating unintended consequences. As in our analysis of Promise programs, we consider the ideologies and belief systems that have informed PBF designs.

Combat narrowing of institutional mission. Research on PBF has repeatedly noted the unintended impacts of policies on institutions. Unintended impacts, “which constitute outcomes that are not intended by the enacting body, but which arise as side effects of funding institutions based on their performance,” include narrowing of institutional mission (for community colleges and other institutions), restriction of student admissions, and weakening of academic standards (Dougherty and Reddy 2013, p. 13). Institutional missions vary greatly between institutions. PBF policies that do not reward, or only minimally reward, the distinct missions of community college may lead narrowing of institutional missions. Dougherty and Reddy (2013) cautioned that missions focused on transfer education, general education, developmental education, and workforce training (all features of community college missions) may suffer as a result of PBF. They recommended that states specify measures relating to “all important missions” and “to also include measures pertaining to general education and continuing education, important community college missions that have been largely ignored by performance funding programs” (p. 88).

Through PBF incentives, colleges may become tempted to restrict the admission of less-prepared students and admit already-advantaged students who more likely persist and graduate, a situation that runs counter to the community college’s open access mission. To counter the likelihood that PBF policies will tempt institutions to inequitably restrict access by enrolling students who are most likely to succeed and exclude students who are most at-risk of attrition, researchers have recommended that policy makers create direct incentives for serving student populations who require more resources (Dougherty and Reddy 2013).

Such an approach is consistent with the principles of vertical equity, particularly as instantiated in the concept of adequacy. The groups prioritized through state policy to receive greater resources differs considerably from state to state, but typically include low-income students as determined by Pell or state grant eligibility, adult students, academically underprepared students based on ACT/SAT scores, and historically marginalized racial and ethnic student groups (Dougherty and Reddy

2013). According to Jones (2013), most states counter the possible negative impact of PBF programs on these student populations by giving extra weight for graduating students from populations deemed at risk. In particular, to achieve equitable outcomes for marginalized racial groups, states are advised to include outcome metrics that focus specifically on race and tie enough funds to these outcomes to provide incentives for colleges to improve access and completion outcomes for these students (Jones et al. 2017).

Paying attention to strategies to engage all stakeholders is another way to limit institutional resistance and gaming to PBF systems. Broader engagement may enable college members to participate in accountability in the spirit of PVSL, with a consideration of the responsibility to produce valued social outcomes by using valuable public subsidies effectively. According to Dougherty and Reddy (2013), gaming can take the form of setting low goals and deceptive compliance, for instance, by focusing on short-term outcomes such as certificates at the expense of associate's degrees. Policy makers can reduce institutional resistance and gaming by clearly communicating valid responses to performance funding demands or by inspecting how institutions respond more closely. However, Dougherty and Reddy (2013) suggest that fostering institutional buy-in could reduce resistance and temptation to game the system. By engaging stakeholders in the design stages, faculty and staff are more likely to feel responsible for and in support of the program and feel more empowered to carry out the community college mission of providing broad access.

Another recommendation by researchers stresses the importance of rewarding institutions based continuous improvements along performance metrics, rather than a fixed goal. Friedel et al. (2013) distinguishes between the different performance indicators. Outcome indicators include graduation rates, degrees or certificates awarded, and job placement rates, among others. Progress indicators, on the other hand, reward institutions for students completing 12, 24, 48, and 72 semester credits, developmental course completion, or transfer rates for community colleges. Other types of indicators can also include subgroup outcome indicators (low-income status, first generation, racial/ethnic minority group status, etc.) and high-need subject outcome indicators (STEM fields, nursing, and job placement in other high need areas). Incorporating indicators that track progress can help students succeed by rewarding step-by-step progress and can also help ease the early years after implementation (Jones 2013).

As PBF policies are implemented, policy makers should not expect institutions to improve their outcomes in the first year(s). Especially in early years of implementation, researchers have stressed the importance of rewarding short-term improvements along progress indicators (Jones 2013). Friedel et al. (2013) recommend that PBF policies be implemented gradually to allow institutions time to adjust their data collection and reporting strategies and prepare for meet policy demands. Additionally, Friedel et al. (2013) suggested incorporating a "learning year" when indicators are measured and the state is provided feedback on the outcomes before funding is attached to outcomes, or including a stop gap, or stop loss, mechanism in early years to prevent major funding losses. Such mechanisms should be incorporated into the

implementation process but should be temporary and only transitional in nature. Additionally, policy makers should recognize that broader economic changes can shape access and graduation outcomes, independent of colleges' efforts, by driving students into or out of community colleges.

To improve a program's odds of success, it is crucial that all stakeholders – policy makers, higher education leaders and faculty members – be included in the design and implementation of funding systems (National Conference of State Legislatures 2014). Engaging stakeholders early incorporates different perspectives and considerations and provides the opportunity for stakeholders to identify necessities for their institutions to make changes, while also building a support base for the program (Dougherty and Reddy 2013).

Build the Capacity of Colleges to Respond to Performance Funding.

Dougherty et al. (2014) examined theories of action espoused by PBF advocates and found that policy makers mainly focused on providing financial incentives and communicating information about state goals to building institutional support and spur institutional change. However, policy makers paid too little attention to other policy instruments, such as providing information on institutional performance to the colleges and building institutions' capacity to engage in organizational learning and change (McDonnell and Elmore 1987). Tandberg and Hillman (2013) urged policy makers to develop, and be able to articulate, a compelling theory of action that speaks to how program characteristics will change institutional behaviors. Additionally, the theory of action must state how the program will address obstacles, such as building capacity for organizational learning, and unintended consequences, such as restrictions of institutional mission (Dougherty et al. 2014).

Although policy makers and other advocates of PBF espoused theories of action commonly focusing on financial incentives, wave one programs typically offered between 1% and 6% of base state funding while wave 2.0 programs often tie 5% to 25% (and sometimes more) into the base state funding of higher education (Dougherty et al. 2014). Financial incentives clearly need to be sufficient enough to create a significant incentive for change (Friedel et al. 2013). According to Rutherford and Rabovsky (2014), strong financial incentive and long-term stability may be among the most critical components for PBF policies. Additionally, PBF should be consistent over a long period of time. Such policies are less likely to build support and produce changes from institutions if the policies are seen as temporary or likely to be terminated (Friedel et al. 2013). College administrators may not respond to PBF incentives if they see these policies as temporary. At underresourced institutions like community colleges, campus leaders may hesitate to make substantial changes unless they are sure there will be a financial return.

Although financial rewards create incentives, they do not in themselves build institutional capacity to respond effectively to accountability requirements. Dougherty et al. (2014) found limited evidence that policy makers and PBF advocates envisioned building institutions' capacity to respond to the policy demands. PBF relies on a pay-for-performance theory of change. That design reflects an ideological policy movement known as New Public Management (NPM), a "radical" reform of public administration that sought to upend the established Progressive-era

emphasis on bureaucratic control and professionalism (Wallis and Gregory 2009, p. 255). The NPM philosophy argues it is necessary to free managers to exercise real leadership, yet at the same time hold them responsible for results through market-like contracts and accountability metrics. In US higher education, this attempt at “reinventing government” is referred to as the “new accountability movement” (Hillman et al. 2014, p. 827). With its reliance on market-like strategies, this approach can also be characterized as a neoliberal reform strategy (Pusser 2006, 2011).

Despite its rhetoric, NPM does not seem to have fostered innovation; instead the emphasis on accountability for bad outcomes has encouraged risk aversion and dampened the potential for innovations that might lead to good outcomes. Therefore, Wallis and Gregory (2009) contended that it is necessary to involve educators and other organizational insiders in self-reflective research to bring about organizational change. They referred to this policy approach as Public Value Seeking Leadership (PVSL). Through PVSL, they argued, leaders will be better positioned to take responsibility for results and mobilize professional networks (horizontally and vertically) to achieve those results. NPM and PVSL are similar in arguing for a shift in decision authority from the center to local leadership (e.g., from system offices to individual campuses) and from a focus on standardized procedures of bureaucratic control to a focus on outcomes. But where NPM is designed to strengthen “answerability” and the ability to assign blame for negative outcomes (Wallis and Gregory 2009, p. 253), PVSL is designed to enhance the sense of responsibility local managers have to achieve goals.

In advancing PVSL over NPM as a reform philosophy, Wallis and Gregory (as well as the Organisation for Economic Co-operation and Development, whose agenda the authors cite) envision a shift from outcomes reporting to accountability designs that will foster actual responsibility for outcomes. In such a policy environment, “accepting responsibility” for outcomes involves local leaders in “engaging other networked actors in . . . deliberative processes when a judgment is made that a proposed initiative could create public value” (2009, p. 261). Through these deliberative processes, local leaders take responsibility for good outcomes as well as bad. They are positioned to demonstrate their good faith efforts at making improvement by iteratively identifying and communicating the organizational learning processes that produced the good and the bad outcomes (Wallis and Gregory 2009).

In the national postsecondary policy discussion, the themes of new accountability and public-value seeking leadership are both frequently sounded. It is not unusual for higher education leaders to express responsiveness to an external policy (such as PBF) while at the same time emphasizing (and insisting on) autonomy for good public stewardship of the educational enterprise. In many states where it was implemented, PBF attracted the support of state higher education coordinating boards and local campus leaders who wished to engender public trust (and financial investment) by communicating their responsiveness to state concerns. In some cases, higher education coordinating system offices spearheaded voluntary adoption of PBF in order to ward off a legislatively imposed accountability program that might fail to take the system’s good stewardship of resources into account

(Cavanaugh and Garland 2012). Similarly, the American Association of Community Colleges promoted the use of a voluntary accountability plan, called the Voluntary System of Accountability (VSA) (AACC n.d.). By taking responsibility for results, college leaders become rhetorically aligned with elected leaders who emphasize the need for the effective and efficient administration of governmentally funded agencies. By aligning themselves in this way, leaders may be better positioned to incorporate equity indicators into PBF metrics.

Directions for Future Research

This chapter has highlighted that although there is tremendous variation among states in the systems of community college financing, generally speaking state investments have declined as a share of total revenues over time, while private investments (in the form of tuition payments, net of institutional financial aid) have increased. Though smaller in magnitude, local governmental funding in states that have a local role has remained relatively steady. The federal government, through the means-tested Pell Grant, has played a role in bolstering finance equity since the 1960s. In more recent decades, federal policies and initiatives have helped to drive the college completion agenda by publicizing and funding particular types of institutional policies and programs, often in partnership with educational foundations. Despite these public investments, many students, particularly community college students, face substantial financial hardship while in college (Goldrick-Rab et al. 2019). Moreover, the complexity associated with applying for federal student aid may deter many students from accessing grants and loans for which they are eligible (Burdman 2005, 2012; Delisle 2017; Dynarski and Scott-Clayton 2006; Rosinger and Ford 2019).

Detailed examinations of two postsecondary financing policy innovations – college Promise programs and performance-based funding – served to tease out the new complexities and contradictions that community colleges and community college students face in an era of heightened competition for public dollars. Two dozen states and hundreds of localities and private organizations have launched Promise programs, which reduce or eliminate tuition charges for eligible students, and around half of the states operate performance-based funding policies, which link a portion of state funding for higher education for community colleges to student outcomes.

John Rawls' (1971) conception of justice posits that any inequality that exists – for instance, in how colleges are financed and in who has access to them – should exist to improve the well-being of the least well-off members of a community. Moreover, equity entails justice not merely in resource allocation but in the benefits of civic participation as well, including opportunities to build substantive membership in communities through education. Building on these philosophical foundations, community college financing and financial aid policies have often been designed to direct relatively more funds to institutions and students who have been historically undersupported or excluded from participation. As new terms of participation and access are set by policy makers, conceptions of community, merit, and

belonging have become increasingly important considerations in the design of policy and adopted in ways that may be constraining the community college's open access mission.

The design complexities of Promise programs and PBF provided a rich context to explore ideological tensions and threats to equity in the contemporary college financing landscape. The terms of these policies, discussed in comparison to the provisions of state appropriations and means-tested aid, demonstrate that the terms of the social contract (between the state and community colleges and the students community colleges serve) is changing. These changes and the prominence of these two potentially contradictory policies (one ostensibly focused on access, the other on completion) raise a question about the interaction of these two policies and what their terms imply for the community college sector more broadly.

If Promise programs attract a group of students with greater educational and financial need into the community college sector, will these institutions then be penalized under PBF systems that reward outcomes? Given that the majority of Promise programs provide funding as last-dollar aid, which does not further reduce costs for low-income students, a different scenario is also possible. Promise programs may lead better prepared students on the margin of attending a 4-year college to enroll at a community college instead, a trend that would be favorable for colleges when PBF is rewarding degree completion, as the better prepared students will have higher graduation rates.

How Promise programs are designed – and who is eligible for Promise benefits – varies substantially. In comparison with means-tested financial aid programs that seek to expand access for any student with financial need, many Promise programs introduce stricter restrictions on eligibility, giving preference to those who can study full time, make continuous progress term after term toward degree completion, meet mentoring or advising requirements, and perform community service. In eligibility criteria such as these, the policy overlap between state-level Promise designs and the outcomes emphasis of PBF comes into view. This alignment shows that one policy is not about expanding access while the other is about completion, but rather that both are about the new terms for resource allocation and that both use market-like mechanisms (e.g., financial incentives, contracts) to shape individual and organizational behavior. Under both policies, the inputs (student enrollments) may change but the quality or behavior of an institution – arguably what PBF is intended to alter – may not.

Community colleges serve a socially and economically vulnerable population, so any policies or set of policies that change the terms through which these institutions and students are financed warrant close consideration. In concluding our chapter, we frame a future research agenda that follows from our discussion of the equity implications of Promise programs and PBF policies.

Future Studies of Promise Programs

As shown in our discussion of Promise programs, all Promises are not the same. Although studies of well-resourced and longer standing programs such as the

Kalamazoo Promise provide evidence of positive and at times equitable impacts through expanded college access and enrollment (Billings 2018), in the absence of a commitment to equity, Promise programs are not likely to make a meaningful difference in college affordability for students with financial need because greater resources are not directed toward those students than would be otherwise (Poutré and Voight 2018). To establish such a commitment, policy analysts have repeatedly emphasized, Promise funds should be directed toward low-income students, include coverage of non-tuition expenses, avoid restrictive participation requirements, expand the range of institutions and the duration of time during which students can use Promise funds (including 4-year options), and complement rather than supplant existing means-tested financial aid programs (Billings 2018; Davidson et al. 2018; Holtzman et al. 2019; Jones 2019; Jones and Berger 2018; Taylor and Del Pilar 2018). Given the now quite extensive variation in how Promise programs are designed and who is eligible, future research should continue to examine how these and various aspects of Promise program designs impact access, degree completion, and the overall college experience for low-income and racially minoritized students (Perna and Leigh 2017). This line of causal effects research remains vital. As in prior work, findings can be formulated to inform subsequent Promise program adoption in ways that promote equity.

Further, scholars should study the political rhetoric surrounding negotiations of policy adoption and implementation. Most studies to date of the equity implications of Promise program design have taken an economic or rational policy perspective, assuming that policy makers want “to do what is best for the most people at least cost” (Doyle 2007, p. 400). An alternative view takes political self-interest into account, understanding that politicians are attending to the concerns of voters in their districts, with an eye also toward re-election. Additional studies are needed that take a political economic perspective in order to examine “the strategic motivations and limitations of policymakers, voters and other actors in the system” (Doyle 2007, p. 400). Such a focus “can tell us much more about both the effects of our current higher education policies, and where those policies come from in the first place” (Doyle 2007, p. 400). Repeatedly emphasizing that last-dollar Promise program financial aid designs will not promote equity is not likely to sway voters and policy makers whose interests and ideologies do not rest on creating a more equitable community college system.

Studies of the negotiation that occurs when Promise programs are being designed would help to illuminate the type of bargaining and arguments community college leaders and equity advocates must take up in order effectively promote equity. We concur with Eddy (2013), who emphasized “Community college scholars need to focus on critiques of underlying causes that contribute to organizational outcomes and recognize the sources of power and control” (p. 131). Asking questions such as the following would elaborate the nature of underlying negotiations with richer detail: What is the relationship between negotiations over means-tested financial aid and for Promise programs. Who is involved? To what extent are community organizers, educational foundations, community college board members, workforce interests, school board members, and parent leaders involved? If not at all or not very

much, why not and how might negotiations change if additional groups were present? What tradeoffs are articulated and which are not? Studies of discourse in communicating community college missions and goals, such as those conducted by Ayers and Carlone (Ayers 2005; Ayers and Carlone 2005), help to illuminate underlying ideologies for policies that are adopted and those that fail, thereby informing policy recommendations. Such studies may inform our understanding of the current status of community colleges in their historically celebrated role as “democracy’s college” (Diener 1994; Rhoads and Valadez 1996), what that term means to different community college stakeholders today, and the potential contributions of community college students to democratic institutions.

The financial benefits of free tuition are obvious and often considerable to those who receive them. However, the economists’ adage that there is no such thing as a free lunch is relevant when we examine the costs and benefits of Promise programs. The social costs are somewhat harder to discern, but appear to be considerable as well. A number of questions that should be asked in the design and funding of place-based tuition guarantees include “What are the selection criteria for participation? Who is included/excluded? On what grounds?” As Korpi and Palme (1998) pointed out, “While the institutions of the welfare state are to an important extent shaped by different types of interest groups, once institutions are in place they tend to influence the long-term development of definitions of interests and coalition formation among citizens” (p. 665). The negative effects of treating schools and colleges as incubators for economic development rather than as democratic institutions are likely to accumulate in negative ways over time.

Through the last-dollar aid design of Promise programs, middle- and higher-income students become eligible for additional financial aid to attend community colleges than would have been available to them in the absence of these programs. Under these conditions, taxpayer equity (St. John 2003) appears to be the form of equity addressed foremost by Promise programs, in that a broader segment of the population becomes eligible for a greater share of public subsidies that were previously directed toward low-income and impoverished students. Such arrangements may carry the benefit of enlisting taxpayer support for public higher education. Typically, universal eligibility criteria for publicly funded programs garner enhanced support for public programs by aligning the interests of poor and affluent residents and promoting coalition building. The “size of the pie” and the budget available for redistribution to students with financial need may ultimately increase (Korpi and Palme 1998). Studies should investigate whether perceptions among the “median voter” group (Doyle 2007, p. 358) of universal access to community colleges lend political support for funding other types of means-tested policy instruments, such as tax protected college savings accounts with an initial governmental savings deposit and loan forgiveness for low-income students.

When Promise programs require long-term residency (thereby excluding new residents) and require moral stature pledges and lawfulness tests in exchange for access to higher education, scholars should conduct research to characterize the lived experience of those excluded (especially community newcomers), the nature of the services to be performed, and the experience of moral regulation as a condition of

college access. Research into the quality of experience of service roles and required hours by Promise program participants could show whether these provide opportunities to build community relationships and exercise civic agency, or whether they diminish perceptions of equal liberty and access to the bases of self-respect through education. Researchers should study whether community service requirements are created in tandem with policies that have restrictive eligibility requirements and therefore preclude opportunities for students to establish substantive membership.

Restrictive membership criteria may problematically overlook individuals who are engaging in reciprocal and mutually beneficial relationships with their political community. For localized political communities served by Promise programs and community colleges, residency and sustained time in a political community is an important factor for engaging in cultural and material exchanges and developing a sense of belonging (i.e., developing substantive membership). New residents benefit communities (e.g., increased school enrollments and entrepreneurial activity). Participating in educational institutions can help new residents develop into substantive members. Time spent in a community alone does not equate to membership development. Rather, membership is developed through social, cultural, and material exchanges. When Promise programs require extended residency requirements, exchanges between new and current residents are limited and the benefits of substantive membership for both individuals and communities hindered. Scholars should build on Perry's (2006a, b) work to advance comprehensive frameworks of membership to inform future criteria for inclusion in the distribution of community college resources, whether in the form of in-state resident tuition, Promise program funds, and programmatic benefits such as mentoring and advising.

Future Studies of PBF

PBF policies have changed the terms through which community colleges receive state funds – shifting from funding based on enrollments or previous funding levels to tying a portion of appropriations to students outcomes (Dougherty and Natow 2015; Friedel et al. 2013). As with Promise program variations, PBF systems differ in what metrics are considered (intermediate outcomes such as retention or transfer and long-term outcomes such as graduation versus solely long-term outcomes) and what student groups are targeted through equity premiums (e.g., adult, low-income, minoritized students).

PBF policies have generally not led to improvements in degree outcomes as intended (e.g., Hillman et al. 2014; 2015) and have raised a number of equity concerns regarding the type of credentials students earn (Hillman et al. 2015; 2018, Li and Kennedy 2018), restricted access to more selective institutions for low-income and minoritized students (Umbricht et al. 2017), and potentially exacerbated disparities in funding for institutions that disproportionately serve these student populations (e.g., community colleges, less selective institutions, and minority serving institutions) (see Hagood 2019; Kelchen and Stedrak 2016; Li et al. 2018; McKinney and Hagedorn 2017, for various findings regarding funding). Given the

popularity of PBF policies nationwide, future research should carefully consider how variations in the design of PBF policies shape outcomes in an effort to craft more equitable funding policies, particularly for community colleges that serve large shares of low-income and minoritized students (see Kelchen et al. 2019, for a more detailed discussion of these types of analyses).

In the PBF 1.0 era, policy makers did not attempt to tell college leaders how to run colleges. College leaders and practitioners remained responsible for deciding and implementing the changes in local policies and practices that were necessary to achieve the desired outcomes (Dougherty and Natow 2015). In comparison to K-12 accountability, where federal and state regulations had become more tightly coupled with specific policies and practices within schools (e.g., curriculum design, lesson planning, testing) (Spillane et al. 2011), accountability design and educational practice were still loosely coupled in postsecondary education. Later designs adopted during the second wave of PBF adoption in the early 2000s attempted to bring about a tighter coupling, for instance, by incentivizing colleges to focus on both intermediate (e.g., retention or transfer rates) and longer term (e.g., degree completion) outcomes.

That many states discontinued one performance funding design and later readopted another shows that implementation of the PBF policy innovation has occurred in fits and starts as it has been contested among various advocacy coalitions (Dougherty and Natow 2015). Understanding PBF as a form of public value-seeking leadership helps to explain why this policy innovation has remained popular (AASCU State Relations and Policy Analysis Team 2013), even as independent analyses demonstrate that the shift in funding from inputs to outcomes has not led to demonstrable improvements in degree completion rates.

This history of contested PBF adoption and resistance highlights that community college leaders cannot sit on the sidelines of accountability debates. They risk diminishment of available funds or of institutional quality if they do not engage these issues. Conducting research that will illuminate community college leaders' roles in advocating for funding, whether through Promise programs as we noted previously or PBF, may inform future negotiations such that policy designs are more favorable to low-income, racially minoritized, and undocumented students. Future research could continue to examine a public value-seeking leadership policy approach to Promise program and PBF design, as this approach aims to enhance the sense of responsibility that campus leaders have to achieve goals (rather than assigning blame when outcomes do not improve) (Wallis and Gregory 2009). Researchers might consider what elements are or could be incorporated in community college finance policies that would support this approach.

Researchers have pointed to the need for improved institutional research (IR) systems that can generate necessary data and institutional faculty and staff to analyze performance data as key components to building institutional capacity for organizational learning (Dougherty et al. 2014; Dougherty and Reddy 2013; Dowd et al. 2012; Dowd et al. 2018). It is crucial that colleges be able to obtain and generate data that is accurate, useful, and legitimate. In order for college leaders and practitioners to recognize improvements that need to be made, they need to be aware of their

institution's performance and outcomes. Stakeholders want to understand how their college performance on measured indicators align not only with state goals but with their vision for the enactment of their own college mission as well.

Dougherty et al. (2014) found some evidence that policy makers envisioned using data to inform institutions' performance outcomes, but found no evidence that states dedicated efforts to build institutional capacity to generate such accurate, useful, and legitimate data. However, Pheatt et al. (2014) found that even when data is available, many institutions have an inadequate capacity to analyze data, identify gaps, determine cause, and devise solutions. States will also need to develop research offices and train faculty and staff to analyze the data, devise solutions, and assess performance. Recognizing the costs associated with this, an existing centralized state data system in some cases can supplement or replace campus efforts. This is a particularly important element for community colleges that historically receive less state support than other institutional types. As part of improving organizational learning, PBF systems and campus administrators also need to continuously evaluate policies and practices. The equity concerns outlined above may be better identified and mitigated through continuous evaluation and early detection.

Finally, additional research is needed to determine the costs to institutions to meet state funding demands such as improving institutional research capacity, generating and analyzing data, developing effective organizational learning capacity, mounting initiatives to improve performance, and evaluating results of such initiatives (Bensimon 2005; Bensimon and Malcom 2012; Dowd and Liera 2018; Eddy 2013; Kezar 2011, 2014). According to Dougherty and Reddy (2013), such research would help determine "whether the costs to institutions of performance funding outweigh the revenue benefits and therefore whether states need to make concerted efforts to offset those costs if they wish performance funding to be welcomed by colleges" (p. 88). At community colleges and other underresourced institutions in particular, states seeking to improve outcomes may need to provide financial resources or reallocate the time of existing personnel to offset the costs associated with improving the capacity of institutions to respond to PBF.

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Privatization as the New Normal in Higher Education

11

Synthesizing Literature and Reinvigorating Research Through a Multilevel Framework

Kevin R. McClure, Sondra N. Barringer, and Joshua Travis Brown

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Abstract

Privatization in US higher education has recently been framed as the new normal, or something scholars treat as the default state of affairs with little expectation of change in the foreseeable future. In this chapter we synthesize the literature on privatization, calling for a renewed research agenda that challenges this normalization and reinvigorates study of this important topic. More specifically, we analyze the conceptualizations, origins, catalysts, and manifestations of privatization in the literature. We advance five arguments about the privatization throughout the chapter, underscoring conceptual murkiness, fragmented lines of inquiry, unanswered questions, and methodological limitations. We propose a multilevel framework to understand the privatization literature and bring together disparate strands of inquiry. We conclude by outlining a renewed research agenda on privatization, highlighting several directions for future research and advocating for improved data and research methods.

Keywords

Privatization · Higher education · College · University · Corporatization · Research · Framework · Commercialization · Financialization · Neoliberal · Market · Revenue · Academic capitalism · Policy · Finance · Funding · Inequality · State · Federal · Financial aid

Few topics in the study of US higher education received as much scholarly attention in the first decade of the twenty-first century as privatization. A significant share of scholarly works on privatization in higher education was published during this 10-year span. Now approaching the end of the century's second decade, the urgency around privatization has waned. Once described in calamitous terms, privatization has recently been framed as the new normal (Doyle and Delaney 2009), or something scholars treat as the default state of affairs with little expectation of change in the foreseeable future. Consequently, privatization has become a contextual feature within studies of other phenomena, rather than a focal point of research and coherent line of inquiry. The purpose of this chapter is to synthesize the literature on privatization, calling for a renewed research agenda that challenges this normalization and reinvigorates study of this important topic.

More specifically, we analyzed the conceptualizations, origins, catalysts, and manifestations of privatization in the literature and, in so doing, we: (1) bring order to the voluminous body of work on the topic and promote dialogue among disparate

lines of inquiry; (2) develop a framework for understanding the privatization literature, drawing on existing conceptualizations and research to highlight the multilevel nature of this phenomenon; (3) critically review the literature on the manifestations of privatization using the four levels that we highlight in our framework: national, state, institutional, and sub-institutional, (4) identify key limitations and unanswered questions in the literature; and (5) highlight future directions for research that address these limitations, capitalizing on more nuanced data and methodological diversity to constitute a renewed research agenda focused on privatization and its implications for institutions¹ and the constituents they serve.

Our synthesis of the literature was informed through a two-stage literature collection and review approach. In the first stage we extracted peer-reviewed articles using variations of “privatization in higher education” search terms in 13 education databases.² While the query yielded 229 articles that employed variations of the keywords,³ a total of 199 were excluded due to either a focus on international higher education ($n = 159$) or insufficient information and duplicate records ($n = 40$). In our assessment of the 30 confirmed privatization articles, we determined: (1) the low number of peer-reviewed journal articles that empirically examined privatization were not representative of the broader scholarly discussion on the topic; (2) the peer-reviewed journal articles discussed privatization interchangeably with other terms, such as markets/marketization, outsourcing, commercialization, and corporatization, among others; and (3) the peer-reviewed journal articles empirically examined privatization at different levels of analysis (i.e., national, state, institutional) and across institutional types (i.e., public, private, community college, research university). We used these findings from the first stage to inform our second stage of literature collection and review.

In the second stage of literature collection and review, we took a wide-angle lens to privatization with regard to publications and terms of inclusion. First, we expanded publications to include scholarly books, government reports, edited volumes, and nonprofit reports. Second, we did not limit our synthesis to works with variations of “privatization” in the title, as many studies relate to privatization without using the term. Rather, we located these publications using a variety of keywords and related concepts that were discovered in the peer-reviewed articles (i.e., corporatization,

¹We reflect the literature and use “institutions” to refer to higher education organizations, including both colleges and universities, throughout this work.

²The 13 search indexes were comprised of seven sub-indices of EBSCO Host (Academic Search Complete, Academic Search Ultimate, Education Research Complete, ERIC, Psychology and Behavioral Sciences Collection, SocINDEX, and Teacher Reference Center), as well as six additional indices that included ProQuest Education Database, Academic OneFile, Educators Reference Complete, JSTOR, and PsycNET. The search parameters begin with 1986 as it was the earliest year for the ERIC search index, which restricted all others.

³Initial queries included peer-reviewed works that used variations of privatization within the body of the article, but in our evaluation of the content, we discovered that the overwhelming majority of these works employed the term privatization in order to *contextualize* the study while examining something else of interest (i.e., the new normal). Thus, we limited queries to articles that only employed the term in the title, abstract, or keywords.

commercialization, and marketization) and particular manifestations we identified and discuss below (i.e., outsourcing of auxiliary services). Thus, our first and second stages of literature collection and review yielded a corpus of approximately 300 scholarly works for analysis that address the privatization of higher education or its manifestations directly or indirectly.

Main Arguments of the Chapter

Based on our review of the literature, we developed five main arguments which are weaved throughout the chapter. We outline each argument in turn before providing an outline of the chapter. First, we argue that the privatization literature is characterized by a murkiness around how to best conceptualize the phenomenon, resulting in confusion about the meaning and effects of privatization. This lack of clarity is partly due to scholars using multiple terms interchangeably with privatization, including commercialization, corporatization, marketization, and financialization (e.g., Eaton et al. 2016; Russel et al. 2016; Schultz 2015; Steck 2003; Taylor et al. 2013; Teixeira and Dill 2011). Moreover, there have been few efforts in the past decade to refine or extend conceptualizations of privatization in light of new policies and practices. The literature reveals the need for additional clarity about the relationships among various terms. We draw upon some of the most frequently used conceptualizations to develop a multilevel framework for understanding the privatization literature and establishing distinctions and commonalities among these terms.

Second, we contend that the prominence of privatization in the literature has diminished, and its fragmented nature results in limited dialogue across lines of inquiry. Almost all of the books that directly addressed privatization were published between 2000 and 2010 (Bok 2003; Canaan and Shumar 2008; Donoghue 2008; Duderstadt and Womack 2003; Gould 2003; Kirp 2003; Mophew and Eckel 2009; Newfield 2008; Priest and St. John 2006; Rhoads and Torres 2006; Schrecker 2010; Slaughter and Rhoades 2004; Washburn 2005; Weisbrod et al. 2008). While research on privatization has not disappeared, there has been an ebb in scholarship that explicitly addresses the topic. Studies published in peer-reviewed journals have often failed to link phenomenon to privatization and have treated privatization as a taken-for-granted feature of the higher education landscape. Normalization has resulted in scholars turning to more clearly measurable variables (e.g., completion or student loan debt) and more tangible consequences of privatization, such as the search for alternative revenues (e.g., Barringer 2016; Leslie et al. 2012; Li 2017; Webber 2017). As a result of both conceptual murkiness and the frequent use of privatization as a contextual factor, the privatization literature is disjointed and lacks the type of coherence that promotes incremental advances in understanding.

Third, we argue that there are a number of limitations to the literature on privatization and many unanswered questions. The normalization of privatization and its diminished prominence in the literature is not because privatization has been exhausted as a topic of study. Rather, conceptual murkiness and the fragmented nature of the research have left debates and questions unaddressed. The existing

research has started to unpack empirical questions that can be connected to privatization. However, this research relies heavily on descriptive analysis, anecdotes, and quantitative analyses that are limited to those aspects of privatization that can be operationalized as measurable variables. We argue that there is a need for additional data, as well as more complex and multidimensional methods (e.g., social network analysis and mixed-methods designs), to address some of the shortcomings of the current literature and advance understanding of privatization. The combination of emerging questions and limitations in the literature suggests the need for a renewed research agenda on privatization, which we outline in the final section.

Fourth, we argue that privatization is manifested at four different levels in US higher education: national, state, institutional, and sub-institutional. Privatization is occurring along these levels simultaneously, and it is possible for privatization at one level (e.g., state policies) to influence the degree and nature of privatization at another level (e.g., institutional). Research has often focused on manifestations of privatization along one level (e.g., institutional) without tracing these manifestations back to policies at the state or national level. Although some conceptualizations of privatization implicitly address multiple levels, there has been no attempt to systematize this understanding or explicitly acknowledge privatization as a phenomenon involving multiple, interrelated levels. We contend there is a need for a framework for understanding the literature that can account for the multiple levels implicated in privatization.

Fifth, even as the currents of scholarly interest drift toward new topics, privatization continues along multiple levels and in various forms, raising concerns about the consequences of performance-based funding, increased competition for students, and private third-party service providers (e.g., Grawe 2018; Hillman 2016; Slaughter and Rhoades 2004; Taylor and Cantwell 2019; Webber 2017). Many contemporary manifestations of privatization point to rising inequality between institutions and within institutions (Taylor and Cantwell 2019), as well as mounting barriers to access and affordability for marginalized populations of students. As inequality increases within the organizational field, privatization may have real consequences for the diversity of the US higher education system, which has long been one of its key strengths (e.g., Harris 2013; Labaree 2017). Furthermore, as scholars attempt to identify policies and practices that create opportunities for an increasing share of Americans to move to and through higher education, privatization should be a major line of inquiry as a factor that may be limiting those opportunities. We argue for a return to privatization as an essential research topic and suggest five future directions as part of a renewed research agenda.

These arguments carry through the four main sections of this chapter. First, we begin the chapter by categorizing and discussing influential conceptualizations of privatization within the literature. As part of this section, we propose a multilevel framework for understanding the privatization literature, which we then use to organize the remaining sections. In the second section, we summarize the historical origins of privatization and discuss the political, economic, and sociocultural catalysts scholars have linked to privatization. In the third section, we analyze empirical literature on the manifestations of privatization across four levels, beginning with the

national and state levels, then proceeding to the institutional and sub-institutional levels. Fourth, we evaluate the limitations and gaps in the literature, which help to justify a renewed research agenda and call for improved data and methods necessary to understand the complexities of privatization. We conclude with a brief summary of the key contributions of this work.

Conceptualizations of Privatization

This section provides definitions for terms associated with privatization and reviews influential conceptualizations of privatization in the literature. Conceptualizations, for the purposes of this chapter, are those efforts that authors have engaged in to explain how or why privatization has occurred in US higher education. Consistent with one of our main arguments, the majority of conceptualizations appeared between 2000 and 2010, with few conceptualizations published in the last decade. We discuss these conceptualizations in three parts. We begin by reviewing terms that are often used interchangeably or in conjunction with privatization. As we argue above, the intermingling of these terms with privatization reduces clarity about what privatization means. We offer succinct definitions of these terms and describe how they connect to privatization more broadly. Following this clarification, we identify limitations in all three categories of conceptualizations, and in the third part of this section, we describe the multilevel framework we developed to address these limitations and make sense of the literature.

Privatization and Associated Terms

Scholars use myriad terms in place of or in conjunction with privatization, which we argue reduces the clarity and coherence of this literature. Specifically, we focus here on four terms that are used most frequently within the literature, defining each in turn: (1) commercialization, (2) corporatization, (3) marketization, and (4) financialization (see Table 1 below). We contend these terms, while being central to understanding privatization, do not, by themselves, constitute privatization. These terms explain change processes that are related to privatization, yet fail to fully capture the phenomenon. In other words, corporatization is one part of privatization, but corporatization alone would not adequately capture the broader phenomenon of privatization. We include these change processes in our framework to better understand the privatization literature.

Commercialization is a term often used in conjunction with privatization. For example, Bok (2003) used this term in his frequently cited book, defining it as: “efforts within the university to make a profit from teaching, research, and other campus activities” (p. 3). As this definition demonstrates, commercialization is frequently used to denote institution-level activities designed to earn net revenues, or margins, sometimes referred to as “profit.” Gumpert and Snyderman (2006) also discussed commercialization as academic activities designed to earn an institution net revenue. They

Table 1 Terms associated with privatization

Change process	Definition	Levels implicated
Commercialization	The process of offering or managing a university activity or service principally for net financial gain, as well as policies designed to encourage such activities or services	National, state, institutional, sub-institutional
Corporatization	The process of transforming the organizational cultures of institutions – including their management, values, and practices – so that they more closely resemble for-profit corporations	Institutional, sub-institutional
Marketization	The process of increasing market coordination or interaction to promote competition among buyers and sellers of higher education products and services	National, state
Financialization	The process of investing resources in financial markets to generate wealth and incur debt to achieve institutional goals	National, state, institutional

maintained that commercialization of research, such as spin-off companies created through university discoveries, and commercialization of instructional activities, including scaled-up online degree programs, have contributed to a hybridization of institutional forms in which features of public, private nonprofit, and for-profit colleges and universities are increasingly blurred. Based on this literature, *we define commercialization as the process of offering or managing a university activity or service principally for net financial gain, as well as policies designed to encourage such activities or services.* Not all revenue-generating activities in higher education represent commercialization, but those primarily geared toward net financial gain to support the institution would meet this definition. This definition suggests that commercialization can take shape in policies and practices at the national, state, institutional, and sub-institutional levels. The prioritization of net financial gain, similar to private firms seeking profits, suggests commercialization is a change process connected to privatization.

A second term commonly used along with or in place of privatization is *corporatization* (Giroux 2002; Gould 2003; Schultz 2015; Steck 2003; Washburn 2005). According to Schultz (2015), corporatization has been the “defining characteristic of higher education in the last forty years” and has “transformed” these institutions from a shared governance model into “a top-down bureaucracy that is increasingly managed and operated like a traditional profit-seeking corporation” (p. 21). Scholars often describe corporatization as a change to organizational culture (e.g., Giroux 2002; Steck 2003). For example, Steck (2003) emphasized organizational culture in his definition of corporatization: “the corporatized university is defined as an institution that is characterized by processes, decisional criteria, expectations, organizational culture, and operating practices that are taken from, and have their origins in, the modern business corporation” (p. 74). In light of this literature, *we define corporatization as the process of transforming the organizational cultures of institutions – including their management, values, and practices – so that they more closely resemble the organizational cultures of for-profit corporations.* Importantly,

this transformation entails giving greater authority to managers and top-level administrators, which is why many studies using this term raise concerns about shared governance and academic freedom (Schrecker 2010; Washburn 2005). Additionally, the profit-motive central to corporations means that commercialization aimed at contributing to the maximization revenues is often related to the cultural transformation under corporatization. Because we define it primarily in terms of organizational culture, corporatization takes place mainly at the institutional and sub-institutional levels. Since it entails the organizational cultures of institutions increasingly mirroring the organizational cultures of for-profit corporations, corporatization represents an important part of privatization.

References to *marketization*, markets, quasi-markets, market forces, market mechanisms, market regulation, market competition, and market discipline are rife in privatization literature (Dill 1997; Jongbloed 2003; Marginson 2007, 2013; Slaughter and Rhoades 2004; Taylor et al. 2013; Teixeira and Dill 2011). In many cases, marketization refers to governments “devising policies trying to strengthen the (internal and external) efficiency of the higher education system by appealing to the use of market forces” (Teixeira and Dill 2011, p. vii). These policies often involve institutions competing for private resources instead of relying on government resources (Slaughter and Leslie 1997). The encouragement of competition, it is theorized, will lessen the probability of social over- or under-investment in higher education and “provide discipline to institutional decisions about costs, prices, and product quality” (Dill 1997, p. 168). Several scholars have provided nuanced analyses of the ways in which universities are not the same as private firms, and higher education does not function as a true economic market (Marginson 2013; Winston 1999). Given this literature, *we define marketization as the process of increasing market coordination or interaction through policies to promote competition among buyers and sellers of higher education products and services*. As this definition indicates, marketization is usually discussed in reference to policies at the national and state levels. Marketization underscores the effectiveness and efficiency of competitive markets and private over public investment in higher education, which ties it to privatization.

In recent years, several scholars have described *financialization* in the context of US higher education (Eaton et al. 2016; Russel et al. 2016). Generally, financialization refers to the increased use of financial transactions to allocate capital (Eaton et al. 2016). This process has amplified the power of the financial sector, including the people and firms that manage money and investments for organizations like colleges and universities. Although there is a tendency to focus on the growth of financial returns for wealthy institutions under financialization, the process also captures increasing costs associated with financial transactions and greater reliance on debt to finance institutional operations. As Russel et al. (2016) noted, financialization “has a number of disturbing consequences for higher education, including increases in overall borrowing by institutions, increases in the cost of interest payments on debt on a per-student basis, and a concentration of endowment assets at a small group of the wealthiest institutions” (p. 1). *We define financialization primarily as the process of investing resources in financial markets to generate wealth and to incur debt to*

achieve institutional goals. National and state policies reflect financialization, as do institutional strategies for covering operational expenses with loans. Accordingly, financialization implicates national, state, and institutional levels. Financialization relies on financial markets, drawing a clear connection to marketization, and competing in these markets for wealth generation depends upon organizational cultures that develop as a result of corporatization.

We contend that marketization, commercialization, corporatization, and financialization are not equivalent to privatization, but rather are possible change processes in response to the catalysts we outline below. Each change process is an important part of understanding privatization, but cannot, by itself, fully capture the phenomenon. In effect, privatization, then, is an umbrella concept within which these change processes occur, interact, and in some cases, influence one another. These change processes implicate different levels to varying degrees, in that marketization primarily takes shape in the form of policies at the national and state level, while commercialization is manifested at all levels. We describe and visualize these relationships in the third part of this section, as we outline the framework we developed for synthesizing the literature. However, first we will outline several conceptualizations of privatization in the literature that ground our framework.

Conceptualizations of Privatization

The literature on privatization reveals three ways in which this phenomenon has commonly been conceptualized: (1) conceptualizations based on resources and governance; (2) conceptualizations based on hybridity or competing legitimating ideas; and (3) comprehensive conceptualizations. Within this section, we review each of these categories and highlight three limitations that cut across all three. First, they rarely explain the multilevel nature of privatization, but rather focus on a single level, particularly state- or institution-level changes. Second, only a few conceptualizations tie privatization to wider social forces – they direct attention to what privatization means in terms of institutional responses rather than addressing the origins and catalysts of privatization. Lastly, some conceptualizations too narrowly focus on a single variable, such as resources.

Conceptualizations based on resources and governance. The first category of conceptualizations views privatization principally in terms of changes in the distribution of public versus private funds in the revenues of public institutions (e.g., Ehrenberg 2006b; Franklin 2007; Lyall and Sell 2006; Meyer 2006; Morphew and Eckel 2009; Priest and St. John 2006). Resource-based conceptualizations hinge upon the government no longer being the primary investor in public higher education. For example, Lyall and Sell (2006) described privatization as a collection of budget and revenue decisions, which “have made states increasingly smaller shareholders in their public colleges and universities. At the same time, the influence of other shareholders – parents, donors, alumni and corporations – is growing” (p. 6). Typically, the notion of increased reliance on private money features prominently in resource-based conceptualizations, but for some scholars it is the primary way of

understanding privatization. Priest et al. (2006b) reflected the centrality of private money in their definition of privatization as “the process of transforming low-tuition institutions that are largely dependent on state funding to provide mass enrollment opportunities at low prices into institutions dependent on tuition revenues and other types of earned income as central sources of operating revenue” (p. 2). Increasing tuition reliance is frequently positioned as a crucial aspect of resource-based conceptualizations of privatization.

Many of the conceptualizations in this category are not just focused on resources but also center on the role of state governments in funding higher education, meaning they are conceptualizations partly premised on policy decisions (Kaplan 2009; McLendon 2003a; McLendon and Mokher 2009). A few conceptualizations recognize this relationship between resources and policy by underscoring the importance of state governance in privatization. For example, McLendon and Mokher (2009) identified multiple ways in which state policy encourages privatization, including increased reliance on private sources of revenue to finance public higher education. Eckel and Morphey (2009b) contended that much of the existing literature focuses on privatization as a fiscal or economic phenomenon, which fails to account for how privatization also includes changing state oversight and regulatory agreements. Moreover, Kaplan (2009) emphasized that privatization often entails deregulation, or institutions striving to achieve greater “distance from the state and more flexibility in budgeting and price setting” (p. 109). As these examples illustrate, some conceptualizations of privatization emphasize where colleges and universities get their money and the role of state governments in funding and regulating institutions.

Resources and governance are important considerations in privatization. However, we contend that conceptualizations based only on resources and governance are too narrowly conceived to provide a nuanced understanding of the complex phenomenon of privatization. This is primarily because these accounts almost exclusively focus on public institutions, and they emphasize a small set of organizational characteristics (e. g., tuition reliance and the search for alternative revenue streams). Privatization is occurring across the field of higher education and is, therefore, not strictly a process that affects only public institutions or just the financial behaviors of these institutions.

Conceptualizations based on hybridity and competing legitimating ideas. A second group of conceptualizations describes privatization as a process whereby public institutions and private nonprofit institutions become more similar, or public institutions acquire characteristics commonly associated with for-profit or private nonprofit sector organizations. This conceptualization extends resource and governance-based conceptualizations in the sense that it encompasses both public and private nonprofit institutions. However, the focus is still on public institutions becoming more like private nonprofit institutions, rather than both types of institutions being arranged at various positions along a continuum of privatization. For example, Gumpert and Snyderman (2006) acknowledged the ways in which public institutions and private nonprofit institutions differ, yet they also saw evidence to suggest that the boundaries between the two sectors are blurring into “hybrid organizational arrangements.” Lowry (2009) contrasted important characteristics of public and private universities along four dimensions, including ownership of

land and assets, sources of operating funds, formal limits to discretion, and authority to exercise discretion. After drawing distinctions between public institutions and private nonprofit institutions, he conceptualized privatization in terms of “proposals that include a significant shift toward the characteristics associated with private universities along one or more of the dimensions” (p. 52). For some scholars, privatization is a process whose effect is to diminish distinctions between public institutions and either private nonprofit institutions or private for-profit organizations. One weakness of conceptualizations based on hybridity is that, despite the incorporation of private nonprofit institutions within the conceptualization, most of the change is attributed to public colleges and universities, suggesting that privatization does not occur among private nonprofit institutions.

Conceptualizations based on the logics or legitimating ideas of higher education – in contrast to those based on resources, governance, or hybridity – focus on higher education as a field and thus incorporate private nonprofit and for-profit institutions, along with public institutions. Gumport (2000) reflected this conceptualization in her examination of academic restructuring, arguing that higher education is transitioning from the “dominant legitimating idea of public higher education...as a social institution” and “toward the idea of higher education as an industry” (p. 70). She defined legitimating ideas as taken-for-granted understandings that constitute parameters for what is expected, appropriate, and sacred, and these understandings advance distinct propositions about what is valued, problematic, and in need of reform. The legitimating idea of higher education as a social institution has been historically dominant within the field and views institutions as devoted to a wide array of social functions. These functions include individual learning and development, the cultivation of citizens and political loyalties, and the preservation and transmission of knowledge (Gumport 2000). On the other hand, the legitimating idea of higher education as an industry “primarily views public colleges and universities as quasi-corporate entities producing a wide range of goods and services in a competitive marketplace” (Gumport, p. 71). The main tasks of higher education leaders, then, are to enrich customer satisfaction, increase efficiency and flexibility, and carefully weigh costs and benefits. Privatization gives primacy to the legitimating idea of higher education as an industry, emphasizing short-term economic needs over a wider range of social responsibilities and compromising the long-term public interest.

Conceptualizations based on legitimating ideas usefully highlight the role of institutional logics in motivating privatization and are not exclusively focused on public institutions. However, they often suffer from a lack of detail regarding the specific manifestations of privatization, as well as the mechanisms – beyond legitimacy – driving the phenomenon. Therefore, we now turn to the final group of conceptualizations, those we characterize as comprehensive.

Comprehensive conceptualizations. There are a number of conceptualizations that are more comprehensive than those discussed in the previous two sections. These are more comprehensive because they address the field of US higher education and not certain institution types, account for several levels and often multiple variables, dimensions, or tendencies, while also recognizing factors beyond

legitimacy that drive privatization. In this section, we describe five comprehensive conceptualizations: (1) Johnstone's (2000) privatization as a tendency on multiple dimensions; (2) Ball and Youdell's (2008) endogenous and exogenous privatization; (3) Slaughter and Rhoades's (2004) academic capitalist knowledge/learning regime; (4) Weisbrod et al.'s (2008) two-good framework; and (5) Lambert's (2014) foundations of privatization model. We then conclude with a brief reflection on these models before turning to our multilevel framework of privatization, which brings together aspects of all of these conceptualizations and expands on them to fully account for this complicated literature.

Johnstone (2000) conceptualized privatization as a movement along several continua and was developed out of his research on cost-sharing in higher education. Cost-sharing involves shifting of some of the higher education cost burden from governments (or taxpayers) to students and families. Johnstone described cost-sharing as a global phenomenon, finding evidence of the introduction of or sharp increases in user fees (i.e., tuition) in and beyond the United States. This shift in cost-sharing forms one part of his conceptualization of privatization. According to Johnstone (2000), the key dimensions of privatization are: (1) mission or purpose, (2) ownership, (3) source of revenue, (4) control by government, and (5) norms of management. Institutions fall somewhere between high "publicness" and high "privateness" for each of these dimensions. For example, in terms of ownership, high "publicness" institutions are publicly owned and can be opened or closed by the state; however, high "privateness" institutions are for-profit and owned by shareholders. In contrast, in terms of sources of revenue a number of public research universities have a high level of "publicness" despite their public ownership. This conceptualization allowed Johnstone to specify several tendencies of institutions undergoing movement toward high "privateness," including a greater orientation to the student as a consumer and attention to image, competitor institutions, and "market niches" (para. 1). Although these tendencies primarily focus on how privatization is manifested at the institutional level, dimensions in his conceptualization, including "source of revenue" and "control by government," are designed to capture changes at the state and national level. Johnstone (2000) also identified and incorporated the change processes of marketization, commercialization, and corporatization into his conceptualization.

Like Johnstone, Ball and Youdell (2008) described privatization through reference to tendencies, but they emphasized policy tendencies on the part of governments globally, in contrast to Johnstone's emphasis on institutional tendencies. Although their conceptualization speaks to all levels of education, we believe it provides insights into privatization of US higher education. An important argument in Ball and Youdell's conceptualization is that some policy tendencies are named as privatization, but others are articulated in terms of "choice," "accountability," or "devolution." They contend these latter tendencies draw on techniques and values from the private sector and, therefore, constitute a type of "hidden privatization." Ball and Youdell specified two types of privatization: endogenous and exogenous. The endogenous type, or what they call privatization *in* public education, "involves the importing of ideas, techniques and practices from the private sector in order to

make the public sector more like business” (p. 8). By contrast, the exogenous type captures privatization *of* public education, or the “opening up of public education services to private sector participation on a for-profit basis and using the private sector to design, manage or deliver aspects of public education” (p. 9). Privatization tendencies reflected in these two types change how education is managed and organized, how students and teachers are evaluated, how curricula are designed and delivered, and how teachers are prepared and what their employment conditions are. More than a set of technical changes, Ball and Youdell noted that privatization tendencies provide a new language and a new set of incentives in public education, and it introduces new actors into education services and education policy, such as consultants and foundations.

Slaughter and Rhoades’s (2004) academic capitalist knowledge/learning regime also recognizes the role of new actors and organizations, though it was not specifically framed as a conceptualization of privatization. Academic capitalism began as a study of public universities in Australia, Canada, the United States, and the United Kingdom between 1970 and 1995. In *Academic Capitalism: Politics, Policies, and the Entrepreneurial University*, Slaughter and Leslie (1997) concentrated upon changes to the nature of academic labor in response to the emergence of global markets and reductions in government funding for higher education. Such external conditions “precipitated campus reactions of a resource-dependent nature,” made manifest as “faculty and institutions began to compete or increased their competition for external funds” (p. 209). It was in this initial work that Slaughter and Leslie popularized the phrase “academic capitalism,” which was chiefly designed to capture the encroaching motive to earn net revenues in public higher education. New income was pursued through what they called market and market-like behaviors. Market behaviors referred to activities to generate net revenues, such as patenting and collecting royalties, founding spin-off companies from research commercialization, and selling products and services. On the other hand, market-like behaviors were responses to competition for external money, including the pursuit of grants and contracts, endowment funds, and student tuition and fees. The first volume of *Academic Capitalism* did not attempt to generate theory, relying instead upon preexisting work on organizational resource dependence, or the idea that “the internal behaviors of organizational members are understood clearly only by reference to the actions of external agents” (Slaughter and Leslie 1997, p. 68).

In the second volume, *Academic Capitalism and the New Economy: Markets, State, and Higher Education*, Slaughter and Rhoades (2004) more explicitly conceptualized academic capitalism in US higher education. Using resource dependency as a conceptual foundation, Slaughter and Rhoades (2004) drew upon the scholarship of Michel Foucault, Horace Mann, and Manuel Castells to articulate how academic capitalism “focuses on networks. . . that link institutions as well as faculty, academic professionals and students to the new economy” as well as the “new investment, marketing and consumption behaviors” of those within these institutions that also create connections with the new economy (p. 15). One of the assumptions on which academic capitalism hinges is that universities cannot be separated from a global economy that treats knowledge as a raw material that can be marketed, sold,

and owned like property. The knowledge-based economy, they maintain, was constructed through a partnership with industry and the neoliberal state, whose initiatives aimed at privatization, commercialization, deregulation, and reregulation were at times indirectly or directly endorsed by higher education leaders. In this way, academic capitalism is one of the few comprehensive conceptualizations that explicitly connects to wider social forces. The theory of academic capitalism brings to the fore the work's chief claim: that universities have shifted to an "academic capitalist knowledge/learning regime," from a "public good knowledge/learning regime." The academic capitalist knowledge/learning regime "values knowledge privatization and profit taking in which institutions, inventor faculty, and corporations have claims that come before those of the public" in contrast to public good values, such as basic science, academic freedom, and separation between public and private sectors (p. 29).

Similar to those within the academic capitalism tradition, Weisbrod et al. (2008) focused on understanding the behaviors of higher education institutions as they navigate their environments. To understand this behavior, the authors build what they refer to as the two-good framework, which focuses on understanding how universities navigate the tension between pursuing their mission and obtaining the revenues needed to survive in higher education's increasingly competitive conditions. This framework argues that higher education institutions pursue two types of goods, mission goods and revenue goods. Mission goods are those that are aligned with the mission of the institution but generally do not make a substantial amount of money for the institutions, such as graduate education, basic scientific research, and public service. Revenue goods are those that universities pursue because they provide excess revenues that institutions can use to subsidize the provision of mission goods.⁴ Weisbrod and colleagues argued that institutions must pursue both goods to sustain themselves. However, institutions struggle to obtain mission goods as a result of privatization and increased competition. Consequently, to sustain themselves, institutions increasingly pursue revenue goods which leads to concerns that they are engaging in privatizing behaviors inconsistent with their mission.

Lambert (2014) focused more on the internal dynamics of an institution in his work on privatization, which contrasts with the emphasis on responding to changes in environments in the two previous conceptualizations. After analyzing and comparing privatization in six US states, Lambert (2014) identified six foundations of privatization, each of which is a continuum with two poles: "public focus" and "private focus." Lambert modeled his foundations of privatization model after Maslow's hierarchy of needs, in the sense that it is visualized as a pyramid, with each additional layer being influenced by the one below it. This model is designed to help examine privatization at the institution level. The first foundation, which is weighted as most important,

⁴The authors acknowledge the presence of hybrid goods due to the fact that not all, or even the majority of, goods will fit clearly in the revenue or mission goods category. However, they maintain that the two-good framework is useful in highlighting the fact that "all schools can be expected to seize opportunities to enhance profits" (Weisbrod et al. 2008, p. 69).

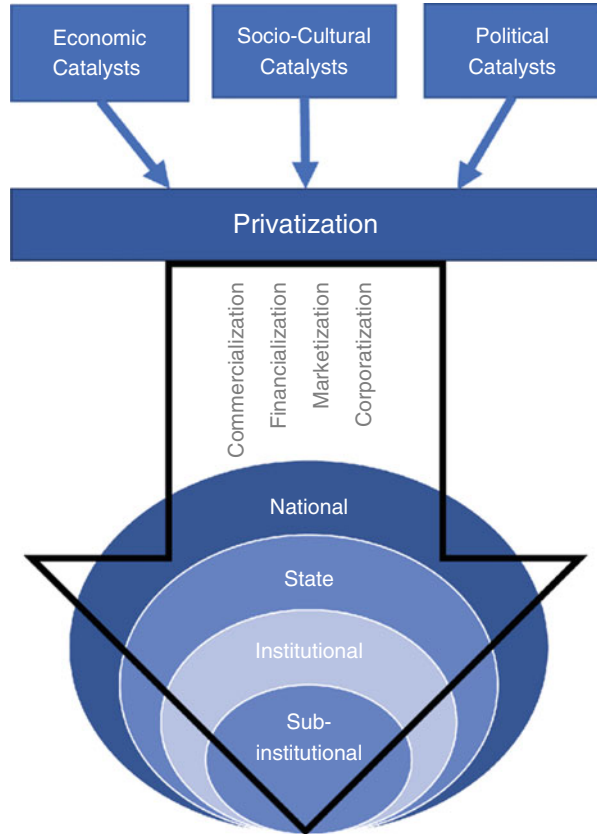
consists of an institution's mission, history, and culture – together known as state context. Institutions with a public focus would have a strong public agenda and would be viewed as a “public good,” while those with a private focus would be viewed as a “private good” and the public would perceive it as “someone else's” university. The second foundation is vision and focus, which describes whom the institution sees as its “publics” or whom or what the institution serves. Departing from conceptualizations that prioritize resources and governance, Lambert's model positions autonomy and finance as the third and fourth foundations – not the first and second. The fifth foundation is enrollment and access, with “publicly focused” institutions enrolling more in-state and Pell-eligible students and emphasizing accessibility, while “privately focused” institutions pursued selectively and served more out-of-state students. The final foundation is leadership, or “those selected to lead the institution, interpret the issues facing it, and make sense of how best to maintain the public focus even while pursuing private means to achieve it” (p. 23). Although leadership is at the top of the pyramid, it is not less important. Rather, it signifies that lower foundations help to interpret leadership. By including institutional mission, access, enrollment, and leadership, Lambert's model specifies elements of privatization given only cursory treatment in other conceptualizations.

These comprehensive conceptualizations clearly demonstrate that scholars have attempted to situate privatization at certain levels of analysis. Typically, these conceptualizations seek to explain institution-level responses, and a few (e.g., Slaughter and Rhoades 2004; Johnstone 2000) describe these responses as a result of broader social forces, such as the advent of the global knowledge economy. However, missing from all of these conceptualizations, and the literature more broadly, is an explicit acknowledgment that privatization implicates multiple levels of manifestation and subsequent analysis. Several conceptualizations, such as Gumport's (2005) legitimating ideas and Slaughter and Rhoades's (2004) academic capitalist knowledge/learning regime, acknowledge the influence of broader cultural, political, and economic conditions that gave rise to privatization. However, these fail to explicitly acknowledge the multiple, interrelated levels that give rise to these changing legitimating ideas and knowledge regimes. Other conceptualizations are too reductionist, treating privatization as little more than changing resource patterns or state-level approaches to decision-making. Nevertheless, all of these conceptualizations highlight key aspects and processes that are critical for understanding privatization. We argue there is a need for a framework that synthesizes key aspects of these conceptualizations, while also expanding on them to incorporate the catalysts of privatization and its multilevel nature.

A Multilevel Framework for Understanding the Privatization Literature

Instead of proposing a new conceptualization that would only serve to further complicate the literature, we propose a framework within which the existing conceptualizations can reside to help make sense of the literature. We propose that

Fig. 1 A multilevel framework for understanding the privatization literature



privatization in US higher education can be understood within a framework – visualized in Fig. 1 below – that systematizes privatization processes and draws upon the conceptualizations discussed above. This framework also allows us to build on these conceptualizations to acknowledge both the levels across which privatization is manifested and the societal forces, or catalysts, underlying privatization. This framework, through its various facets, also pulls together the disparate strands of the literature on privatization and creates connections between otherwise fragmented pieces of the literature. There are three essential facets of the framework: catalysts, privatization and its change processes, and the four levels along which privatization is manifested and can be analyzed.

Our framework begins by recognizing the broader political, economic, and sociocultural *catalysts* that created enabling conditions for the initiation of privatization change processes – conditions that commenced during the closing decades of the twentieth century. These catalysts have been recognized to various degrees in the existing conceptualizations (Gumport 2000; Slaughter and Rhoades 2004), but different authors have focused on one or another catalyst. We synthesize the literature as a whole to develop the three groups of catalysts that we describe in the next

section. The political, economic, and sociocultural catalysts we focus on are the broader phenomena that influence multiple sectors of a society, including its systems of education, healthcare, welfare, and industry (Brown 2017, 2018). Given the embedded nature of societies, these broader forces influence, or catalyze, events across progressively smaller organizing levels – from nations to states, to organizations, to groups. Moreover, because these levels are embedded within each of the broader forces of which society is comprised, they are simultaneously subject to and influenced by multiple catalysts.

Central to our framework, and consistent with many of the above conceptualizations, we argue that privatization is fundamentally about *change*, meaning entities undergoing privatization are dynamic, adaptive, and moving or shifting in structure, purpose, and goals. However, we acknowledge that these changes can look different at different institutions and at different levels. Therefore, unlike other conceptualizations, we do not propose that privatization can be understood as a narrow set of changes (e.g., state disinvestment), or hypothesize a single root cause (e.g., changing knowledge regimes), but rather acknowledge that these changes take shape in multiple ways on multiple levels. Additionally, unlike other conceptualizations, we explicitly incorporate commercialization, corporatization, marketization, and financialization as a subset of processes that are part of privatization. These processes have occurred because privatization has created the “space” for them, and we situate them as falling under the umbrella of privatization. Therefore, we understand and conceptualize commercialization, corporatization, marketization, and financialization as key processes that fall under privatization, but are not terms that are interchangeable with privatization. For this reason, we show in Fig. 1 that these four processes flow from, and are part of, the larger process of privatization.

Perhaps the most significant contribution of this framework, and also the most explicit departure from the conceptualizations above, is our specification of four levels across which privatization can be manifested in different ways and to different degrees. The four levels are national, state, institutional, and sub-institutional. Taken together, our framework situates privatization as a consequence of societal level catalysts that gave rise to the process of privatization that is manifested at four different levels within US higher education. Within this framework higher-level manifestations of privatization (e.g., national) can influence lower levels (e.g., institutional). For example, at the national level privatization is manifested in the federal policies, such as the Bayh-Dole Act, that incentivized the commercialization of research at the institutional level by allowing institutions to keep revenues earned through intellectual property. At the same time, privatization is manifested at the state level via state disinvestment in higher education, which has led to financial manifestations at the institutional level (e.g., diversifying revenue streams and altered tuition prices). Figure 1 depicts these levels as nested to highlight that higher levels can exert influence lower levels.

This multilevel framework allows us to organize the fragmented literature in an attempt to capture the breadth of the literature, while also more clearly articulating the diverse manifestations of privatization along each of these levels and across institutions in some detail. In the next section, we trace the historical origins that

established the conditions in which privatization developed, as well as the broader economic, political, and sociocultural forces that catalyzed the phenomenon. As highlighted in Fig. 1, these broader societal forces influence the manifestation of privatization at multiple embedded levels. In this vein, the manifestation section progressively presents the various outcomes of privatization along the descending levels of analysis, commencing with the national and state levels and proceeding to the more granular institutional and sub-institutional levels.

Origins and Catalysts of Privatization

One notable shortcoming of the privatization literature is that it rarely chronicles the historical origins that gave rise to the phenomenon. Although the privatization of US higher education is a contemporary phenomenon, it possesses origins that date back to the establishment of the country's earliest postsecondary institutions, when the distinction between public and private institutions had yet to be formally established. The literature also lacks a synthesis of the broader societal forces that scholars identified as having catalyzed the phenomenon. We show here that at the close of the twentieth century, a combination of broader economic, political, and sociocultural forces catalyzed persistent reductions in public funding across multiple sectors of society, including its systems of education, healthcare, welfare, and industry – a complex, multifaceted process that came to be known as privatization. This section addresses both shortcomings by first tracing the origins of privatization and then proceeding to synthesize the literature that covers the economic, political, and sociocultural forces that catalyzed privatization processes.

Origins of Privatization

The origins of privatization in US higher education are grounded within five historical eras. In the first era, during the colonial period, it was commonplace for colleges to receive a mix of funding from private sources as well as public subsidies from their respective state legislatures. In the second era, a ruling by the Supreme Court of the United States in 1819 established the public and private division for colleges which delineated matters of institutional governance, property rights, and autonomy. The public and private sectors of higher education underwent a period of considerable organizational expansion during the third era in the nineteenth and early twentieth century as they were supported by resources from two different social institutions – the state and the church. In the fourth era, substantial federal financial investment following World War II ushered in the golden era of postsecondary public resource allocation, which was then succeeded in the 1970s by the fifth, and present, era of state disinvestment. We argue, consistent with the literature, the present phenomenon of privatization in higher education commenced during the fifth era of state disinvestment. This section addresses the notable historical gap in the privatization literature and succinctly delineates the five eras that gave rise to privatization.

In the first historical era, colleges were autonomous from the state, but they were dependent upon a mix of private and public funding sources to survive (Kerr 1990). The public sources of funding came in the form of government subsidies that included cash, land, direct subsidies, and tax exemptions that were financed through excise taxes, lotteries, and government enterprises (Bennett 2014). For example, the Massachusetts legislature and courts provided Harvard with multiple cash subsidies and 2,000 acres of land, as well as 200 years of consistent revenues from the Charles River ferry and bridge tolls (Rudolph 1962). Also, the subsidies provided to Yale accounted for approximately 12% of the legislative budget (Beck 2006). In addition to the land and monies it was allocated as part of its charter from the British Queen Mary, the College of William and Mary continued to receive annual subsidies in the amount of £2,300 (Bennett 2014). Scholars have estimated that from the end of the seventeenth century to the American Revolution that one-third to two-thirds of the annual operating budget for the colonial colleges was accounted for by government subsidies (Cheit and Lobman 1977). The precedent for government involvement in the financial sustainability of a college or university has existed since the colonial era. However, government subsidies brought about governance liabilities for some universities.

During the second historical era, continued government financial support resulted in increased power struggles between colleges and early state lawmakers who sought to secure an element of control over a number of the private universities and eventually led to the establishment of the public/private divide. One historian noted that the time period at the close of the eighteenth century was characterized by “repeated efforts to bring the existing colleges under some sort of direct government control” (Brown 1903, p. 31). The University of Pennsylvania was the first to experience such struggles in 1779, followed by Yale, Harvard, William and Mary, Columbia, and the most notable case – Dartmouth College (Bennett 2014). In 1819 the Supreme Court ruled in *Trustees of Dartmouth Coll. V. Woodward* (17 U.S. 518) that because the college was established via a land grant from the British Crown, the New Hampshire state legislature did not have the authority to amend the charter, which was deemed a contract between a private corporation and the British Crown. The ruling safeguarded the founding and property rights of a private college and strengthened institutional autonomy such that a private college was free from legislative purview (Tewksbury 1932; Trow 2010). Some have attributed this defining moment as the official entrée of capitalism into higher education (Herbst 1975; Cohen and Kisker 2010). The Dartmouth ruling defined the public/private divide in higher education and decreed that an entire sector would remain free from government control.

In the third era, the public and private sectors of US higher education both experienced substantial expansion throughout the nineteenth and early twentieth century due to resources from two different social institutions – the church and the state. The growth of the private sector predominantly occurred through the formation of myriad religious colleges, each denomination having established its own institution, such as the founding of Baylor University by Baptists and the establishment of Villanova University by Catholics (Lucas 1994). With little regulatory oversight in place, the barriers to entry were minimal, which further encouraged the proliferation of hundreds of denominational colleges. The era of private expansion and innovation brought about increased

competition, duplication, and high instances of “exit rates,” or college closure particularly during the Civil War (Bennett 2014; Cohen and Kisker 2010). The public sector also substantially expanded during this time, but through Congressional involvement and not denominational involvement.

The public sector expansion during this same period primarily occurred as a result of three Congressional acts – the Morrill Act (1862/1890), the Hatch Act of 1887, and the Smith-Lever Act of 1914. The Morrill Act of 1862 allocated 30,000 acres of federal land to each state for the express purpose of establishing a public university with specific emphases on agriculture, engineering, and military training. These institutions became known as “land grant” colleges and universities. The second Morrill Act was passed in 1890 and established 17 historically black colleges and universities (HBCUs). The Hatch Act allocated funds to land grant colleges to further develop agricultural and experimental research centers, whereas the Smith-Lever Act established programs designed to apply laboratory research findings to the farms, households, and businesses within the local community, such as cooperative extension programs (Gavazzi and Gee 2018). Taken as a whole, the three Congressional acts leveraged federal resources to establish public universities with the express purpose of developing a more educated citizenry, particularly those from the industrial class, which included, women, African Americans, and immigrants (Lambert 2014).

During the fourth historical era known as the “golden age of higher education,” the US system of higher education began a period of “massification” of the public good in the years immediately following World War II when funding shifted from an emphasis on establishing universities to supporting scientific research and providing increased access through student financial aid (Peterson 2007). Federal research funding was primarily provided in two waves – the first through the National Science Foundation and the National Institutes of Health, and the second through the National Defense Education Act (1958). Substantial research and defense spending developed what some have termed “the Cold War university” (O’Mara 2004). The federal government also expanded access by providing direct funding to students in the form of financial aid. The 1944 Servicemen’s Readjustment Act (GI Bill) provided 2.25 million veterans with college tuition and benefit payments and quickly burgeoned student enrollments at most institutions (Loss 2011; Thelin 2011). These benefits were extended beyond veterans to include all students as a result of the Higher Education Act (HEA) of 1965. The collective funding efforts across federal, state, and local governments significantly increased opportunities for access, research, and service to the community in an era characterized as the strengthening of the public good.

The fifth era, which continues today, began in the early 1970s when support for US public higher education began its seismic shift toward privatization (Geiger and Heller 2012). This commenced with the release of three national reports (Newman Commission 1971; Carnegie Commission on Higher Education 1973; and the Committee for Economic Development 1973) that suggested state legislatures change from a low-tuition policy to a need-based means of allocation for individuals (Chen and St. John 2011). In response to these reports, two fundamental changes

occurred, which we briefly introduce here, as they will be discussed further in the manifestations section below. financial aid funding First, at the federal level, the Higher Education Act of 1972 introduced legislation that established the foundations of the present financial aid system. The policies expanded the limited system of grant, loan, and work-study options as well as broadened the types of institutions eligible to include vocational education, community colleges, trade schools (Loss 2011). By the turn of the twenty-first century, student loans became the primary form of financial aid allocation, shifting the primary burden of covering the cost of college attendance to individuals (Baum et al. 2014; Dennison 2003; Dynarski and Scott-Clayton 2013). Second, state legislatures reduced the amount of public funding they allocated for higher education. State governments faced rising costs across multiple social services and programs, specifically Medicaid, prisons, and the P-20 system of education (Ehrenberg 2006b; Levy 2013; Titus 2009). Taken together, the changes in federal and state financing fundamentally altered the resource environment for colleges and universities in ways that required them to focus on securing private sources of revenue to sustain themselves (Brown 2010).

In sum, the origins of privatization in US higher education can be traced across five historical eras that include colonial subsidization, the establishment of the public/private divide, substantial public/private expansion, massification of the public good, and state disinvestment. The historical eras serve as a benchmark that broadly highlights how resources have changed at the societal level over time and address a notable oversight within the literature. Scholars contend that the societal changes in the present era of privatization (i.e., fifth era) were driven by various economic, political, and sociocultural catalysts. Next, we synthesize the three groups of catalysts before turning to the manifestations of privatization in US higher education.

Economic Catalysts of Privatization

While the context for privatization developed across the formative eras of the US system of higher education, scholars have contended that broader economic, political, and sociocultural catalysts ultimately set privatization into motion at the close of the twentieth century and continue to sustain the phenomenon. The economic catalysts of privatization in higher education relate to two fundamental transformations – improvements in communication and transportation which ushered in an era of globalization and the change in the structure of the national economy from a manufacturing-based emphasis to a knowledge-based emphasis.

Remaining competitive amidst globalization. The latter decades of the twentieth century introduced a widespread societal transformation known as globalization. Globalization is an interconnected set of processes that cross nation-state boundaries – such as the flows of capital, people, and ideas – which transformed the social, political, cultural, and economic facets of nations (Clotfelter 2010; Hearn et al. 2016; Kauppinen and Cantwell 2014; Rhoads and Torres 2006). The global transformation in communication and transportation impacted how people moved within and across

nation-state boundaries. These transformations had significant implications for US higher education institutions, as students and faculty from abroad entered institutions to secure a credential or experience within the US system of higher education (Stein and de Andreotti 2016). Some public universities welcomed the available supply of full-paying international students to offset declines in state appropriations (Lee 2008; O'Mara 2012). As globalization forces have persisted over time, institutions have had to compete to retain international student enrollments given competitive advancements from foreign universities in the areas of enrollment, productivity, and rankings (Clotfelter 2010; Shin et al. 2011).

Scholars noted that transformations in communication and transportation resulted in a dramatic increase in global competition, which meant organizations changed more rapidly to keep pace with one another by improving products, streamlining production processes, and responding to new market opportunities (Zumeta et al. 2012). To remain competitive in an era of globalization, institutions were required to comply with a new set of normative expectations and practices. Decision-making was no longer driven solely by local or state factors, but a new set of exogenous global logics, which heavily influenced institutional strategies. Governments worldwide required institutions to connect their activities to economic growth and development (Hearn et al. 2016). The role of the university and its relationship with the economy changed to focus on the development of human capital and knowledge production as many multinational corporations moved US jobs to overseas facilities. Moreover, a global economy placed a greater importance on the production and application of knowledge over manufacturing, an emphasis which further underscored the importance of higher education institutions and its interconnectedness to economic matters.

Transition to a knowledge economy. In the knowledge economy, US society shifted in its emphasis from an industrial manufacturing-based economy to a post-industrial service-based economy. The major structural features of the industrial economy – capital and labor – were replaced with the structural features of information and knowledge (Bell 1976). During this era, financial capital was leveraged to generate new forms of knowledge and technology that were easily commodified and resulted in sizable increases to the national productivity output. Given that knowledge was vital to establishing both productivity and value, companies began to identify various types of “human capital” owned by employees in order to strategically transform it into “structural capital” controlled by the company (Newfield 2008). Companies increasingly leveraged forms of human capital that generated additional wealth for the firm. Scholars contended that companies desired a specific type of education in prospective employees that “. . . had to be technical, adaptable, and, perhaps most important, responsive to market pressures rather than abstract intellectual goals” (Newfield 2008, p. 8). This type of education provided individuals with increased levels of human capital and a competitive advantage in the new knowledge-based economy that yielded material benefits in the form of increased wages. As a result of the added capital and advantages, it was increasingly seen that the individual, not the state, should bear the cost of human capital development.

Political Catalysts of Privatization

The literature also highlights that the development of privatization of higher education was driven by political catalysts – broad forces that influence states and organizations. The convergence of a complex array of political and economic ideologies in the form of neoliberalism replaced educational values with market values as privatization took hold. Additionally, there was a movement to “reinvent government” and improve public service delivery that has altered notions about how public higher education should be governed to focus on accountability, efficiency, and responsiveness.

The neoliberal state and culture wars. During the latter decades of the twentieth century, many Western democracies experienced an “economization” of their constituent elements and processes, an ideological transformation known as neoliberalism. Harvey (2007) defined neoliberalism as a constellation of practices based on the idea that “human wellbeing can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets, and free trade” (p. 2). The mode of reasoning within the neoliberal paradigm seeks to economize social spheres governed by other values (i.e., liberty, justice, fairness, rule of law, public good, citizenship, etc.) and replace them with market values (Brown 2015; Giroux 2002). Neither entirely political nor entirely economic neoliberalism is described as “a complex, often incoherent, unstable and even contradictory set of practices that are organized around a certain imaginary of the ‘market’ as a basis for the universalization of market-based social relations, with the corresponding penetration in almost every single aspect of our lives of the discourse and/or practice of commodification, capital-accumulation, and profit-making” (Shamir 2008, p. 3).

Scholars purport that neoliberalism emphasizes the capture and reuse of the state (Peck 2010). Some have conceptualized this reuse as a “Schumpeterian workfare state” whose core objectives include “the subordination of social policy to the demands of labor market flexibility and structural competitiveness” (Jessop 1993, p. 9). The neoliberal state transformed a variety of its social sectors and services, including welfare, healthcare, and education (Giroux 2005; Kamerman and Kahn 1989). It sought to redefine or dismantle big government, positioning itself in negative relation to the bureaucratic welfare state and its perceived inefficiency (Morrow 2006). Across these social sectors, the state jettisoned the financial responsibility of developing and reproducing human capital as it shifted the costs to the individual who acquired the good or service – loans for higher education, fees for public infrastructures, and personal savings for social security (Brown 2015). Those who embraced a neoliberal ideology advocated that state agencies and services should function more like private firms that emphasize profit, competition, and evaluation (Ehrenberg 2006c). For example, traditional metrics of education quality were replaced with economic ones that emphasized return on investment or “best value” (Brown 2015). Through neoliberalism the constituent elements of the state were remade to resemble those of the corporate firm, while citizenship became a private affair that produced self-interested individuals (Giroux 2002). Neoliberalism

influenced views on how to best structure and deliver public services, giving rise to a movement to “reinvent government” through reforms borrowed from the private sector.

The “reinventing government” movement. In the 1980s and much of the 1990s, public higher education was implicated in critiques that the top-down, bureaucratic approach to providing state services resulted in poor performance, responsiveness, and accountability (McLendon and Mokher 2009). These critiques gave rise to a movement to “reinvent government” through a new model of public sector governance in order to promote effectiveness and efficiency (Thompson and Riccucci 1998, p. 231). The movement resulted in reforms to public sector management and service delivery, many of which were inspired by the private sector, including decentralized government, flattened bureaucratic hierarchies, greater public entrepreneurship, enhanced organizational competitiveness, emphasis on internal markets, and increased measurement of performance (McLendon et al. 2007). This model of public sector governance is frequently referred to as new managerialism, or New Public Management (NPM) (Deem and Brehony 2005). According to Deem et al. (2007) NPM promoted “a form of ‘market populism’ in which free markets and private business enterprise were regarded as universal and infallible solutions to the governmental and organizational problems that continued to beset advanced capitalist societies” (p. 9). Many of the initiatives that came to fruition as a result of NPM were based upon knowledge and experiences that were developed in business management and related disciplines and transferred to the public sector (Verger and Curran 2014). McLendon and Mokher (2009) suggested the combination of structural and cultural changes occasioned by NPM fostered the privatization of higher education, especially at the state level.

Sociocultural Catalysts of Privatization

The final group of catalysts highlighted by the literature is sociocultural in nature. These catalysts, which helped to bring about privatization processes in higher education institutions, are the result of broader changes in the way society thinks – or logics – about education and economics. They also include changes in the way society moves – or demographic shifts, which helped to catalyze and shape the privatization of higher education.

Changing social logics: Public good versus private good. Scholars note that higher education is an influential institution that serves society by generating knowledge and developing citizens with the capacity to create knowledge. Because these two emphases – generating knowledge and developing citizens – benefit all of society rather than a single individual, therefore they are understood to be “public goods” which are provided by higher education. Public goods are collective and equal, such as police protection and air pollution control (Labaree 1997). The American university provides society with public goods by carrying out its organizational mission, one that is focused on research, teaching, and service (Owen-Smith 2018). Yet, colleges and universities often experience tension between advancing

their public mission and obtaining necessary funding (Weisbrod et al. 2008). In contrast to a public good, a private good is one that is accrued by an individual for his or her own benefit. Private goods are selective and differential, such as property and patents (Labaree 1997). The more of a private good a person acquires, the more one can competitively differentiate oneself from other individuals in the marketplace. Recent years have seen a broader social shift whereby a college education became predominantly viewed as a private good rather than a public good. This has been chronicled by a variety of scholars and therefore will not be discussed in detail here (e.g., Kezar et al. 2015; Labaree 1997; Marginson 2011; Owen-Smith 2018). However, the societal shift has resulted in education increasingly being viewed as a commodity to secure, particularly if one can secure the type of educational credential that is highly valued or stratified, rather than something that should be supported because of its contributions to the public good. This shift was a necessary condition in privatization becoming normalized in US higher education.

Despite this shift, universities continue to receive funding from federal and state governments because they play a key role in developing citizens and advancing the collective human capital of society. However, because obtaining a college education has been increasingly viewed as securing a private good that permits a person to earn increased wages in the labor market, state legislators have argued that the students receiving the benefits should bear the cost of obtaining the degree, driving the continued rise of tuition prices (Dennison 2003). The emphasis that an individual user pays for the production of the good or service used has been applied to other government services beyond higher education and highlights a distinct societal change in logic.

Changing social logics: Homo economicus. Scholars also contend that a distinct change in the social perception of capitalism also influenced higher education privatization processes. This shift in logic is evidenced by the transitory state of homo economicus, or “economic man,” an ideal typology of a figurative person developed to explain the role of individuals in a capitalist society. Homo economicus is a conceptual tool employed to discuss the behavior of the “average” individual – or rational actor – within economic principles and economic phenomena. In the present era, homo economicus is characterized by a shift from human capital to financialized human capital, which places an emphasis on enhancing one’s portfolio value through efforts of self-investment or securing investors (Brown 2015). The financialized logic of enhancing one’s portfolio – or future value – is no longer reserved solely for investment banks or corporations. Rather, individuals also extend a mindset of enhancing one’s future value into many areas of life, such as monetizing actions, leveraging rankings (i.e., choosing a college), quantifying value (i.e., credit scores), securing social media influence (i.e., followers), and evaluating activities (Feher 2009). The typology of homo economicus has transformed from an emphasis on basic economic exchange to financialized human capital. The two most recent caricatures of homo economicus, which focus on human capital and financialized human capital, highlight the extent to which individuals in a competitive marketplace seek to not only advance their present position but also their future position by applying a corporate logic to multiple areas of life, including higher education. As discussed in the following section, this shift in logic is seen via the manifestations of privatization across multiple levels.

Changing demographics. The dynamic patterns of a population over time – known as demography – influence the actions of colleges and universities. Grawe (2018) argued that three demographic patterns influence the financial sustainability of colleges and universities – birth rates, immigration, and interstate migration. Not only did the World War II era bring about the G.I. Bill that initiated the “golden age” of higher education financing, it also brought about an increase in birth rates as servicemen returned from the war. Consequently, institutions experienced these two broad consecutive expansions leading up to the era of privatization. The expanded higher education campuses were immediately confronted with a drop in the college going population in the late 1970s and 1980s, which resulted in increased competition among institutions seeking new financial resources amidst declines in government funding (Grawe 2018). The demographic changes prompted institutions to adopt innovative enrollment strategies in order to leverage the federal financial aid that was distributed on a per-student basis (Kraatz et al. 2010). Institutions entered what researchers have come to call the “enrollment economy,” a phenomenon where public and private institutions see themselves as similar to corporations that seek to maximize tuition revenues while minimizing costs (Jaquette 2013).

To date, national birth rates never returned to the post-War “boom” level. Higher education institutions remain embedded in an enrollment economy and have responded to increased levels of competition with additional enrollment strategies such as leveraging out-of-state students (Jaquette and Curs 2015) and online programs (Ortagus and Yang 2018). Moreover, some demographers have cautioned that the drop in birth rates since the 2008 Financial Crisis is a “birth dearth” that will significantly impact the financial sustainability of higher education institutions beginning in the mid-2020s (Grawe 2018). These demographic changes suggest that competition among individual institutions for students and resources will continue to increase over the next decade, thus continuing to drive practices in privatization. Whereas catalysts of privatization represent the broad social forces that preceded and enabled privatization, we use “manifestations” to describe what privatization actually entails, what forms it takes, and how it affects governments, organizations, and people.

Manifestations of Privatization

A central premise of our framework is that privatization is manifested across four different levels: national, state, institutional, and sub-institutional. “Manifestations,” in this sense, refers to the policies, practices, activities, services, values, and goals that constitute the change processes and attendant consequences associated with privatization. Our conceptualization proposes that higher-level manifestations can influence lower-level manifestations. For example, disinvestment in public higher education is a state-level manifestation of privatization that influences institution-level privatization because it has resulted in a diversification of financial behaviors. Despite this relationship between levels, we argue that policies, regulations, and reforms at the national and state levels are themselves forms of privatization that affect higher education institutions and other organizations.

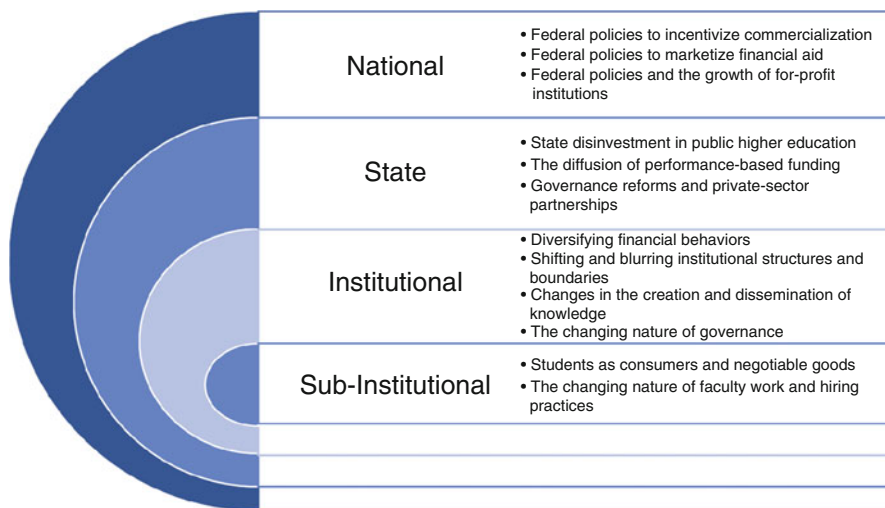


Fig. 2 Manifestations of privatization across four levels

In this section, we synthesize empirical literature on manifestations of privatization, organizing the section into four subsections according to the levels in our framework. Figure 2 provides a visualization of each level and the categories of manifestations we identified in the literature. National-level manifestations center on federal strategies, policies, and court cases that have direct implications for higher education institutions. At the state level, privatization is manifested as state disinvestment in public higher education, the diffusion of performance-based funding, as well as governance reforms and private-sector partnerships. The diversification of finances due to state disinvestment represents a manifestation of privatization at the institutional level, along with the blurring and shifting of organizational boundaries. Changes in the nature of governance and – in response to federal policies encouraging commercialization – new patterns in the creation and dissemination of knowledge represent the final institution-level manifestations. Lastly, sub-institution-level manifestations of privatization focus more on two important stakeholder groups within institutions, documenting efforts to target students as revenue sources and view them as consumers, as well as changes to faculty work and hiring practices. Our multilevel framework makes it possible to identify these various manifestations and link them back to privatization, creating connections that are not always evident in the literature.

National-Level Manifestations of Privatization

Literature on privatization at the national level is limited compared to the other levels. This is partly a function of the highly decentralized system of higher education in the United States, where the states generally have more influence

over governance and finances of public institutions than the federal government (Kelchen 2018). Nevertheless, the literature has emphasized three ways in which the privatization of higher education takes shape at the national level: (1) federal policies to incentivize commercialization; (2) federal policies to privatize financial aid; and (3) federal policies that influenced the growth of for-profit higher education. The literature on commercialization is most frequently tied to privatization, while the relationship between privatization and both financial aid policy and for-profit higher education has received less attention and fewer explicit ties to privatization. Although several seminal studies related to national policies promoting research commercialization were published in the first decade of the twenty-first century (e.g., Geiger and Sá 2008; Slaughter and Rhoades 2004; Washburn 2005), the literature on national-level manifestations is less concentrated in a particular time period. Because there has been less research on privatization at the national level, there are a few significant gaps in the empirical literature to which we return in the section on future directions for research.

Federal policies to incentivize commercialization. Several studies demonstrate that the federal government played a significant role in incentivizing the commercialization of research and instrumentalizing academic science for economic growth (e.g., Berman 2011; Geiger and Sá 2008; Slaughter and Rhoades 2004; Washburn 2005). Berman (2011) showed that up until the 1970s, linkages between the academic science produced by universities and the marketplace were scarce due to a range of legal and financial barriers, and there was little expectation that institutions contributed to economic growth. However, by the late-1970s, “policy decisions began to change universities’ environment in ways that removed many of these barriers and in some cases replaced them with incentives” as economic conditions changed (p. 2). Industrialized countries experienced low growth rates in the 1970s, exacerbated by oil crises in 1973 and 1979. In the United States, unemployment and inflation steadily increased, resulting in an economic phenomenon known as “stagflation.” Meanwhile, economic productivity decreased until the late 1980s (Harvey 2007). By contrast, competition from Pacific Rim states as their economies grew encouraged markets to become increasingly global (Slaughter and Leslie 1997). The United States fared poorly in the face of such competition, running a trade deficit for the first time in almost a century and losing shares of the world market (Cohen 1993). According to Berman (2011), “policymakers, desperate for a way out, began arguing that this was, at least in part, an innovation problem, and that policies that explicitly connected science and technology with the economy could help close a growing ‘innovation gap’ with countries like Japan” (p. 3). As a result, the federal government developed a policy agenda focused on innovation for economic competitiveness (Slaughter and Rhoades 2004).

The literature demonstrates that one part of this policy agenda involved reorienting federal research funding to applied research and industrial partnerships (Berman 2011; Geiger 1993; Washburn 2005). Before the problems of the 1970s, there was dramatic growth in federal financial support for university research (Labaree 2017). In fact, between 1960 and 1968, federal funding for university research grew at a 14% rate annually (Washburn 2005). According to Washburn

(2005), because of the Vietnam War, a global energy crisis, and economic stagflation, the expansion of federal support for academic science slowed and began to shift to applied projects starting in the 1970s. In 1972, President Nixon called on the National Science Foundation (NSF) and other federal agencies to foster university-industry partnerships and spur industrial innovation through applied research. After experimenting with a few university-industry partnerships, NSF launched in 1978 the University-Industry Cooperative Research Projects Program. Grants under this program required joint funding from industrial partners and collaborative work with corporate sponsors. Many industries were unprepared for the importance of knowledge creation in economic competitiveness, and they found a solution in “closer ties to federally financed researchers at the universities, who could provide access to cutting-edge science at deeply discounted prices” (Washburn, p. 59). Within the government’s supportive policy environment, “[e]conomic competitiveness and technology transfer became the cornerstones of an emerging consensus on university research” (Geiger 1993, p. 305). The proportion of university research money coming from private industry doubled between 1972 and 1990, with the greatest period of growth between 1979 and 1986 (Berman 2011).

Perhaps the most common piece of federal legislation related to privatization referenced in the literature is the University Small Business Patent Procedures Act, otherwise known as the Bayh-Dole Act (Berman 2011; Rooksby 2016; Slaughter and Rhoades 2004; Washburn 2005). Passed in 1980, the Bayh-Dole Act was a way of incentivizing universities to facilitate economic competitiveness and address the “innovation gap.” Prior to this landmark legislation, few universities saw research products as intellectual property or sought to patent discoveries. With the passage of Bayh-Dole, both small businesses and universities were able to claim rights of ownership over inventions discovered with the help of federal research money. Although the US Supreme Court ruled in *Stanford v. Roche* that faculty, not institutions, have primary ownership over inventions, many institutions altered contracts to ensure that faculty disclosed discoveries that could be patented (American Association of University Professors 2014). One indicator of commercialization of research is the number of patents awarded to universities, which tripled between 1984 and 1994. Fewer than 100 patents were issued to universities by the 1960s, but by 1999 the total number had risen to 3,300 (Berman 2011). The number of technology-transfer offices increased from 25 in 1980 to 200 in 1990. According to Washburn (2005), “by giving universities the opportunity to generate royalties and other revenues – indeed, positively encouraging them to do so – Bayh-Dole introduced a profit motive directly into the heart of academic life” (p. 70). In the same year that Bayh-Dole was passed, the US Supreme Court ruled in *Diamond v. Chakrabarty* that living organisms could be patented, and the following year it ruled that software could be patented, which encouraged universities to pursue research in the emerging field of biotechnology (Rooksby 2016).

Subsequent policy provided the legal infrastructure to better protect industry-university ventures and consortia from antitrust litigation. Additionally, the Internal Revenue Service in 1981 issued a private-letter ruling that royalties from licensing names, logos, and insignia were not taxable, and the 1982 US Court of Appeals case

University of Pittsburgh v. Champion Products, Inc. propelled the growth of federal trademark registrations in higher education (Rooksby 2016). Increasing numbers of institutions established trademark and licensing programs staffed with full-time professionals. The number of federal trademark registrations issued to higher education institutions per year has increased from less than 100 in 1980 to 1,000 in 2010 (Rooksby 2016). Also beginning in the 1990s, universities were able to copyright digital information (e.g., databases) and various services and products (e.g., courseware) that could then be traded internationally. In the words of Slaughter and Rhoades (2004), “although universities were not the focus of this legislation, they restructured to intersect the new policy thrust. Networks within universities. . . began developing intellectual property, technology transfer, and economic development offices, bringing their institutions into closer alignment with the new economy” (p. 56). Through legislation, administrative directives, and court rulings, the federal government fostered the commercialization of various university activities and products.

Federal policies to privatize financial aid. There is some discussion in the literature about federal financial aid policies as a form of privatization (Doyle et al. 2010; Mumper et al. 2016; Slaughter and Rhoades 2004; Slaughter and Rhoades 2016). However, federal financial aid policies are not frequently linked back to privatization. Since the early 1970s, these policies have manifested privatization by creating quasi-markets, including a market for students receiving financial aid vouchers and a secondary market for student loans (Slaughter and Rhoades 2004). Quasi-markets are planned markets to provide a public service, such as voucher systems in K-12 education (Le Grande 2011). Federal policies have also financialized government support for higher education by increasing the percentage of loans compared to grants in total financial aid awarded. In 1972, the Higher Education Act of 1965 was amended so that financial aid was awarded directly to students, not institutions. Doyle et al. (2010) referred to this legislation as “policy privatization,” or abroad shift in public policy that strategically situated the burden of financial responsibility for higher education on individuals and families rather than the state. According to Slaughter and Rhoades (2016), “[w]hen students were able to spend their grants at the institution of their choice, proponents. . . argued that they were introducing market discipline to institutions of higher education, forcing colleges and universities to provide better services at lower costs to attract students” (p. 507). This approach was designed to provide students with choice about where to enroll and use their financial aid, thereby promoting competition among institutions (Peterson 2007). Federal financial aid could be used at both public and private institutions, meaning government money was also making it possible for students to use grants at elite private institutions. This change established precedence whereby both public and private institutions would function within the same funding structure and therefore influence one another, an approach that individual states later followed (Curs et al. 2011; Goldin and Katz 1998).

The 1972 reauthorization of the Higher Education Act introduced market principles into the system that have contributed to stratification among institutions. Although this piece of legislation has been frequently discussed in the literature

(Goldrick-Rab 2016; Kelchen 2018; Lumina Foundation 2015; Mumper et al. 2016; Slaughter and Rhoades 2004), its connection to privatization is underresearched. The 1972 reauthorization of the Higher Education Act created the Federal Family Education Loan (FFEL) program, which was a system of private loans guaranteed and subsidized by the federal government through a public-private partnership. The guarantees were designed to protect private lenders from default and subsidies were designed to keep interest rates low. An important part of this system was a government-sponsored enterprise called the Student Loan Marketing Association, also known as Sallie Mae. A government-sponsored enterprise is a for-profit, privately operated corporation chartered by the government to increase investments in a specific sector of the economy. According to Dillon (2007), Sallie Mae sought to “increase the supply of lendable funds under the then-decade-old federal student loan program,” by serving as a secondary market, “buying and managing loans from banks and other lenders that used their proceeds from Sallie Mae to make new loans.” (p. 1). Sallie Mae grew at a phenomenal rate, and by the early 1990s, it held 27% of federally guaranteed student loans, making it the largest originator and servicer of student loans in the nation. As part of the Student Loan Marketing Association Reorganization Act of 1996, Sallie Mae was granted the ability to undergo full privatization, and it achieved complete independence from the federal government in 2004. The FFEL program and creation of Sallie Mae are examples of the federal government encouraging marketization and incentivizing private-sector participation in financial aid.

The creation of government-sponsored enterprises like Sallie Mae, the expansion of loan eligibility and limits, and steadily increasing tuition prices contributed to significant growth in student loans (Lumina Foundation 2015). Throughout the 1970s and 1980s, policymakers were pressured to expand the benefits of financial aid to a wider range of students (Mumper et al. 2016). As the price of college increased, financial aid in the form of grants failed to keep pace (Goldrick-Rab 2016). Consequently, students and families have relied more heavily on loans to finance higher education, and loans as a percentage of total federal financial aid has steadily increased. In the words of Mumper et al. (2016), “what had been a grant-centered system was transformed into a loan-centered system. . . [which] resulted in shifting limited federal resources away from the neediest students toward less-needy students” (p. 220). The Taxpayer Relief Act, passed in 1997, further assisted middle- and upper-class families in paying for college by creating tax-sheltered college savings accounts and penalty-free IRA withdrawals for college-related expenses. According to Slaughter and Rhoades (2004), these programs promoted competition among universities for preferred customers who use nonpayment of taxes to access and pay for prestigious schools. The result, they argue, is that federal policies have contributed to market segmentation in higher education. However, the relationship between college savings accounts and institutional stratification or inequality has not been subject to empirical evaluation. Similar to financial aid, federal policies regarding for-profit institutions are a national-level manifestation of privatization and discussed in the next section.

Federal policies and the growth of for-profit institutions. The third area in which privatization has been manifested at the national level is through policies that encourage the expansion of for-profit institutions in recent years. The literature makes clear that one of the most striking trends of the first decade of the twenty-first century was the growth in for-profit higher education (Beaver 2017; Cottom 2017; Klor de Alva and Rosen 2017). Between 1990 and 2010, enrollments at for-profit institutions increased by 600% (Beaver 2017). Of the 4.4 million new students who enrolled between 2000 and 2009, 28% enrolled in a for-profit institution. During the previous decade (1990–1999), just 7% of new students enrolled in for-profit institutions (Klor de Alva and Rosen 2017). Federal policies supported this dramatic expansion while efforts to regulate this sector of the higher education industry have been inconsistent due to changing politics over this period. The 1972 reauthorization of the Higher Education Act allowed students to use federal financial aid at for-profit institutions for the first time, sparking a surge in for-profit enrollments in the 1980s (Beaver 2017). Concerns with recruitment practices of for-profit institutions led to regulations in the 1992 reauthorization of the Higher Education Act banning for-profit institutions from awarding bonuses or other types of compensation based on recruiting students. However, these regulations were weakened in 2002, allowing for-profit institutions to adjust the salaries of recruiters twice per year so long as the adjustment was not based solely on the number of students they recruited or how much financial aid was awarded. The combination of federal policies allowing students to use federal financial aid at for-profit institutions and weak regulations fueled the for-profit sector's growth in higher education.

The federal government represents the largest investor in for-profit higher education. According to Kelchen (2018), in 2010 nearly 40% of for-profit institutions received between 80% and 90% of their revenue from federal financial aid. This is partly a reflection of the large numbers of low-income students that attend for-profit institutions, but also a result of “unsavory practices to maintain the flow of taxpayer dollars” by “marketing to veterans and low-income students eligible for the maximum amount of federal financial aid” (Shireman 2017, para. 2). These practices led to efforts to regulate for-profit higher education. The 1992 reauthorization of the Higher Education Act included a provision limiting the percentage of revenue that for-profit institutions could earn from federal financial aid to 85%. This was expanded to 90% in 1998, resulting in the rule being called “90/10” (Kelchen 2018). Surpassing this threshold for two consecutive years results in a for-profit institution losing eligibility for federal financial aid for 2 years. Even with these regulations, all for-profit institutions receive at least 70% of their revenues from the federal government in the form of financial aid (Kelchen 2018).

The Obama administration assumed a more active role in regulative for-profit higher education (Deming et al. 2013). Changes to federal regulations led to several for-profit institutions closing and declining enrollment in for-profit higher education broadly. Enrollments at for-profit institutions have declined every year since 2015, often with annual reductions of 10% or more (National Student Clearinghouse Research Center 2018). In the wake of allegations of misconduct and institutions closing, the US Department of Education introduced borrower defense regulations to

erase the student loan debt of defrauded students at for-profit institutions. However, federal policies regulating the for-profit higher education sector may be short-lived. In 2018, US Department of Education Secretary Betsy DeVos ended the gainful employment rule implemented during the Obama administration. Additionally, the Department of Education is reconsidering borrower defense regulations, potentially restricting eligibility for loan forgiveness. Federal policies played an important role in the growth of for-profit higher education, and efforts to regulate the industry have been effective but subject to changing political priorities. Volatility produced by changing administrations means that new issues related to for-profit higher education are emerging regularly, and the literature suggests that this area needs additional attention from researchers to understand these changes and their effects. Whereas federal policies contributed to privatization by enabling the growth of for-profit higher education, state-level manifestations would portend more immediate consequences for public nonprofit institutions.

State-Level Manifestations of Privatization

There is a rich scholarly tradition examining the relationship between states and higher education institutions (e.g., Kaplan 2009; Kelchen 2018; McGuinness Jr. 2016; McLendon 2003b), and studies of privatization have often focused on describing and conceptualizing changes to this relationship (Ehrenberg 2006b; Franklin 2007; Lyall and Sell 2006; McLendon and Mokher 2009; Mophew and Eckel 2009). Not surprisingly, most of this research focuses on public institutions over which state governments have more authority than state-level manifestations of privatization that also affect private nonprofit institutions. Substantial scholarly attention has been paid to the causes, trends, and effects of state disinvestment. There is also a growing body of literature on performance-based funding and changing approaches to state governance as manifestations of privatization. The heyday of research on determinants of state appropriations to public higher education was between the late 1990s and 2010, with research thereafter mainly examining the effects of the Great Recession. The first part of this section focuses on state disinvestment in public higher education.

State disinvestment in public higher education. Declining state appropriations to higher education since the late 1970s is among the most studied manifestation of privatization in higher education research (e.g., McMahon 2009; Newfield 2008; Slaughter and Leslie 1997; Tandberg 2008; Tandberg 2010a; Tandberg 2010b; Tandberg and Griffith 2013; Weerts and Ronca 2012). Research frequently notes that public higher education institutions, faced with ever-increasing costs, competed with other state budget priorities for scarce state funds (Archibald and Feldman 2014; Burke and Minassians 2002; Delaney and Doyle 2011; Hovey 1999; McLendon et al. 2006; Zumeta 2001). The literature uses multiple metrics to indicate that states have reduced their investment in public higher education over the last 30 years, including inflation-adjusted state appropriations per student to higher education, the share of public institutional income coming from state appropriations, and

state funding per \$1,000 of personal income (Lambert 2014; Lyall and Sell 2006; McLendon and Mokher 2009; McMahon 2009; Tandberg and Griffith 2013; Weerts and Ronca 2012). Webber (2017) calculated that the average public university has seen its inflation-adjusted, per-student state appropriations decline by 30% over the past 30 years. State disinvestment has contributed to greater tuition dependence and calls among some public institutions for greater autonomy in setting tuition prices. These and other consequences of state disinvestment are discussed extensively in the institutional manifestations section below.

One state-level consequence of declining state support for public higher education identified in the literature was the delegation of greater tuition-setting authority to institutions (Kelchen 2018; Marcus 1997; McBain 2010; McLendon and Mokher 2009). Because public institutions lack authority to determine levels of state funding, providing them with greater autonomy in setting tuition levels has been viewed as a state-level policy response to compensate for declining state appropriations. New Jersey was one of the first states to allow all four year institutions to determine their own tuition prices, which then had to be approved by the state board of education. Texas and Florida both passed legislation to allow governing boards at public institutions to propose differential tuition rates, so long as a portion of the revenue was invested into financial aid (McBain 2010). Other state policies have been more restrictive, only allowing public research universities to set their own tuition or only providing greater autonomy for nonresident or graduate tuition. Virginia provides various levels of autonomy to public institutions, including tuition-setting authority, in exchange for reduced state appropriations and compliance with several state goals (McBain 2010). According to McLendon and Mokher (2009), “despite these differences in the degree of autonomy granted to colleges in each state, together these policies represent a general movement away from the more highly centralized tuition setting processes of the past and towards greater institutional control” (p. 13). Recently, many state legislatures have become concerned with rising tuition prices and pursued tuition freezes or capping tuition for in-state undergraduate students (Pingel 2018a). Some policy leaders have also sought greater control over tuition-setting, but as Pingel (2018b) noted, “Very few states maintain legislative control of tuition-setting, with more states decentralizing this authority over time” (p. 1). State disinvestment is a state-level manifestation of privatization that paved the way for a redefinition of the state-institution relationship, allowing for institutions to have greater autonomy in setting tuition prices (McLendon 2003a; Marcus 1997).

The diffusion of performance-based funding. Numerous studies have argued that the “new accountability” movement and, in particular, performance-based funding are offshoots of New Public Management and represent state-level manifestations of privatization (Harbour and Jaquette 2007; McLendon et al. 2006; Orphan 2018). State-level governance of higher education has typically been a balancing act, with legislatures and governing boards seeking to ensure institutional autonomy while also providing oversight of the use of public resources (McLendon 2003b). Until the 1980s, governance focused on the design of systems to effectively regulate the flow of resources to institutions and the decision-making of campus leaders (McLendon et al. 2006). For the past three decades, state legislatures and

higher education governing boards have started to “look more critically at institutional roles, at the availability and distribution of functions, at effectiveness, and at educational and operational costs” (Schmidlein and Berdahl 2005, p. 75). As part of a “new accountability” movement in public higher education, policymakers and state system leaders are concerned not only with inputs like enrollment and resources but also outcomes (Burke and Minassians 2002; Kelchen 2018). They increasingly seek to influence institutional behavior to improve performance on graduation rates, access measures, learning outcomes, licensure pass rates, student diversity, and job placement rates (McLendon et al. 2006). This influence has recently been exercised through performance-based funding (PBF) initiatives, which directly tie state appropriations to performance on outcomes (Kelchen 2018). However, it is important to note that studies on PBF rarely connect this policy trend back to privatization.

There has been a surge of research on PBF, and studies can be grouped into three categories: (1) origins and diffusion (Dougherty et al. 2013; Hearn 2015; Hillman et al. 2015; Gandara et al. 2017; Li 2017; McLendon et al. 2006; Miller and Morphew 2017), (2) evaluation of effectiveness, and (3) concerns about unintended consequences and equity. Kelchen (2018) noted that performance funding started as early as 1979 in Tennessee, and by 1997 ten states had adopted similar systems. The number of states adopting performance funding systems grew significantly after the Great Recession, with 34 states using some form of performance funding by 2015. Kelchen (2018) attributed this wave of what some scholars call “PBF 2.0” to support from governors, but also influence from foundations like the Bill and Melinda Gates Foundation, which viewed PBF as a means to encourage institutions to focus more on college completion. Multiple studies have sought to explain the diffusion or adoption of PBF. McLendon et al. (2006) examined the drivers of three types of performance accountability policies and found that states with consolidated governing boards and larger Republican presence in state legislatures are more likely to adopt PBF. Some scholars have analyzed whether neighboring states are more likely to adopt PBF, with results showing no relationship (McLendon et al. 2006) or that a higher proportion of bordering states with PBF reduces likelihood of adoption (Li 2017). Lastly, there is substantial evidence that intermediary organizations, including philanthropic foundations and policy organizations, encouraged the spread of PBF (Dougherty et al. 2013; Gandara et al. 2017; Hearn 2015; Hillman et al. 2015; Miller and Morphew 2017). Accordingly, evidence shows that, due to a variety of influences, the majority of states have embraced the “new accountability” movement in the form of PBF. Most of these studies focused on explaining the spread of PBF or assessing its outcomes. Although the research often references state disinvestment in tandem with these accountability policies, as we note above, scholars rarely situate PBF as a form of privatization.

Performance-based funding is premised on the logic that institutions will become more effective and efficient because of financial incentives. Research suggests that institutions are changing the ways they budget, advise students, collect and analyze data, and engage in strategic planning, which could result in improved performance (Dougherty and Reddy 2011; Kelchen 2018; Li and Zumeta 2016). Nevertheless, the effectiveness of PBF has been called into question due to limited evidence, to date,

that the systems improved key outcomes. Hillman (2016) reviewed the 12 quantitative studies evaluating the effectiveness of PBF and concluded: “research comparing states that have and have not adopted the practice has yet to establish a connection between the policy and improved educational outcomes.” Whether looking at graduation rates or degree production in two- and four-year institutions, the literature has thus far failed to show that states adopting PBF outperform those that do not (Hillman et al. 2014; Volkwein and Tandberg 2008; Tandberg and Hillman 2014; Umbricht et al. 2017).

Research on the unintended consequences of PBF point to equity concerns, leading for calls to center equity in accountability policies. Several studies point to institutions that are subject to PBF systems becoming more selective and enrolling fewer low-income students (Dougherty et al. 2013; Kelchen and Stedrak 2016; Orphan 2018; Umbricht et al. 2017). Scholars have also argued that PBF systems disadvantage minority-serving institutions (MSIs) (Boland and Gasman 2014; Jones 2014), though one study of two-year MSIs in Texas and Washington found these institutions are not disadvantaged compared to non-MSI institutions (Li et al. 2018). McKinney and Hagedorn (2017) examined PBF policies for two-year institutions in Texas and predicted that the funding model would incentivize institutions to enroll larger percentages of white and higher income students. Similarly, Hagood (2019) analyzed the flow of resources and found evidence that PBF benefited wealthy institutions and imposed financial burdens on low-resource institutions. The literature on the unintended consequences of PBF suggest that these policies may exacerbate inequality between institutions and disadvantage institutions serving marginalized student populations. PBF was not the only privatization-oriented governance reform at the state level that sought to achieve better efficiency and performance.

Governance reforms and private-sector partnerships. A few studies have pointed to governance reforms and efforts to promote private-sector partnerships as examples of privatization at the state level (Kaplan 2009; Marcus 1997; McClure 2017; McLendon and Mokher 2009). There was a wave of reforms to state-level higher education governance in the 1980s and 1990s with the goal of improving effectiveness, efficiency, and performance (McLendon 2003a). Many of these reforms stemmed from the “reinventing government movement,” which critiqued public sector governance for its poor performance and lack of responsiveness. This movement borrowed private-sector management ideas, fostering reforms and partnerships that McLendon and Mokher (2009) described as state-level privatization. McLendon (2003a) noted that during this period “a diverse array of higher education ‘reorganization’ and ‘restructuring’ initiatives” were launched, which after decades of postwar centralization amounted to “a countertrend toward decentralization of decision authority from the state to more local levels of campus control” (p. 480). Not all reforms were geared toward decentralization, such as Minnesota’s move to consolidate its public two-year and four-year colleges (excluding the University of Minnesota) under a new governing board and New Hampshire’s decision to merge six of its seven technical colleges into three two-campus regional institutions (Marcus 1997). However, there was an increasing number of reforms aimed at

decentralization and deregulation, including: “flexibility legislation” to give institutions more control over select management functions, designating institutions as hybrid public-private entities or public corporations (e.g., Hawaii and Maryland), and dismantling statewide coordinating systems in the 1990s. Between 1981 and 2000, at least 16 states passed laws decentralizing authority from the state to the campus level (McLendon 2003a).

States have also pursued reforms aimed at procurement processes and have encouraged more partnerships with the private sector. However, the literature on these structural reforms and public-private partnerships is underdeveloped. A 2010 survey of procurement officers at public institutions reported concerns with state regulations that created “bureaucratic ‘red tape’” and impeded efforts to contain costs and achieve efficiency (American Association of State Colleges and Universities [AASCU] 2010). The report recommended that states give institutions more autonomy with procurement policy, make participation in state purchasing contracts voluntary, and allow institutions to form group-purchasing consortia. The report highlighted how Colorado, Kansas, and Virginia reformed procurement regulations to “provide cost savings, increased flexibility, improved purchasing power, and better quality of products and services” (p. 29). More recently, Illinois passed procurement reform making it easier for public institutions to purchase goods and services necessary for research projects, and the Iowa Board of Regents has pursued procurement reform after the consulting firm Deloitte suggested improving their procurement system to cut costs (McClure 2017). In addition to procurement reform, state policies have encouraged partnerships with the private sector to decrease costs and improve service delivery. For example, several states made it easier for public institutions to pursue public-private partnerships, particularly as a way to construct residence halls (McClure et al. 2017a). In Kentucky, legislation created a framework and regulations for state and local governments on public-private partnerships, which includes public colleges and universities (AASCU 2018). Moreover, New Jersey passed law as part of the Higher Education Institutions Public-Private Partnerships Program allowing public institutions to enter into arm’s length agreements with private developers. McClure et al. (2017a) suggested that state policies to promote partnerships are premised on bringing certain practices and management functions of higher education institutions closer in form to those of the private sector, connecting them to privatization. However, research on public-private partnerships in higher education is limited, as well as studies explicitly articulating their relationship to privatization.

The main contours of state-level privatization were reduced state investment in public higher education, reforming public sector governance to encourage entrepreneurship, marketization, efficiency, and accountability systems based on performance metrics. The result of these changes has been greater institutional autonomy and decentralization of certain functions (e.g., tuition-setting authority) yet higher expectations for institutional efficiency, productivity, and performance. In sum, state-level privatization exemplifies the common refrain among public higher education leaders that they are expected to do more with less support.

Institutional-Level Manifestations of Privatization

Despite the fact that privatization is increasingly viewed as an “entrenched phenomenon,” or the new normal that few are questioning (Eckel and Morphey 2009b; Priest et al. 2006b; Stater 2009, p. 154), there has been limited discussion of how privatization affects organizational behaviors within the literature. Therefore, the focus of this section is on enumerating the various ways in which institutions are manifesting privatization, and in some cases, the consequences of those manifestations to address this limitation in the literature. It is important to note, however, that institutions are not simply reacting to privatization. As Slaughter and Rhoades (2004) argued, they are also actors who are initiating privatization.

Additionally, in reviewing this literature, it is clear that how privatization affects institutions is fundamentally dependent on the organizational mission of the institution. For example, how privatization is manifested at a large public research university is likely to be, and should be, different than how it takes shape at a public, open-access regional university or at a private nonprofit liberal arts college (Morphey and Eckel 2009). For this reason, there is not a consistent set of behaviors, cultures, and practices that are indicative of privatization across all higher education institutions. Instead, because each institution is engaged in varied configurations of research, teaching, and service according to their mission (Eckel and Morphey 2009a; Harris 2013), the specific manifestations of privatization differ substantially across institutional types and sectors (Eckel and Morphey 2009a). For example, research universities are organizational anarchies that have more space and slack to absorb privatization (Cohen et al. 1972), and privatization is occurring across different aspects of these complex institutions (Eckel and Morphey 2009a). In contrast, smaller public regional universities do not have the same slack or resources with which they can respond and adapt to privatization – in essence their choice set of responses is heavily constrained relative to public research universities. The diversity of responses is perhaps most clearly seen in the various ways that privatization is manifested at public and private nonprofit institutions. As Breneman (2005) argued, all sectors are being forced to become more entrepreneurial in the face of economic pressures, including privatization. Institutions in all sectors are experiencing manifestations of privatization, but it takes shape in different ways and to different degrees, depending on the particular opportunities and constraints of a given institution.

We begin where much of the discussion of privatization starts, first outlining the various financial behaviors that institutions are engaged in which manifest privatization. From there we outline the changing nature of institutional boundaries that has resulted from, for example, the increased engagement in partnerships that bridge industries and sectors. From there we discuss the changes in the creation and dissemination of knowledge. We conclude our discussion of institutional manifestations with an examination of the manifestations of privatization within the governance of these institutions before turning to the manifestations of privatization at the sub-institutional level. As the breadth of these topics might suggest, we are pulling from a diverse set of literature. Not all of these studies are explicitly tied to privatization, which speaks to our argument regarding the disjointed nature of this literature. This is also consistent with our

argument that privatization has become a taken for granted condition within the literature.

Diversifying financial behaviors. Empirical investigations of privatization have focused heavily on state disinvestment and the various ways in which institutions have responded financially to these changes (e.g., Barringer 2016; Hearn 2006; McMahon 2009; Newfield 2008; Slaughter and Leslie 1997; Tandberg 2010b; Tandberg and Griffith 2013; Weerts and Ronca 2012). However, understanding the finances and financial behavior of higher education institutions is also critical to understanding their behaviors and decision-making beyond the finances of these institutions (Weisbrod et al. 2008). Therefore, exploring how privatization has manifested in the financial behaviors of institutions has implications for balance sheets but also beyond them, which is why we start here. We focus on four manifestations in this section: (1) the increased emphasis on revenue generation, (2) the increasingly competitive environment of these institutions, and (3) the increased reliance on alternative sources of revenue, and (4) changes in the boundaries of institutions as they develop interstitial organizations and seek to generate additional auxiliary revenues.

First and foremost, the literature indicates that the privatization of higher education has led to a shift in the priorities of institutions toward ensuring that they are generating sufficient revenues (Hearn 2006; Mophew and Eckel 2009; Priest and St. John 2006; Weisbrod et al. 2008). While this has been a long-standing focus for private nonprofit institutions (Toutkoushian 2009), this is a more recent shift for public institutions (e.g., Kaplan 2009; Priest and St. John 2006). As state funding for public institutions has declined, these institutions have been forced to rely on sources other than state support, which has resulted in public institutions becoming increasingly like private nonprofit institutions in terms of both their revenue profiles and their emphasis on cost reduction (Hearn 2006; Priest and St. John 2006; Weisbrod et al. 2008). In essence, the patterns of educational subsidies are becoming increasingly similar between public and private nonprofit institutions (Toutkoushian 2009). These shifts are evident in the changing revenue profiles of public four-year institutions. As Barringer (2016) showed there is a clear tradeoff for public institutions in their reliance on state appropriations and tuition, on average, between 1986 and 2010. However, she also highlighted how there is substantial variation around those averages as these institutions are adapting in different ways to declining state appropriations. This shift in emphasis toward revenue generation has increased competition within the field as a whole, and some have argued it has also changed the nature of competition, which is a manifestation of privatization at the institutional level (e.g., Rosinger, et al. 2016b; Taylor et al. 2013; Taylor and Cantwell 2015).

Privatization, due to both declining state funding and a change in the underlying behavioral logic of organizations, has led to an increase in the competitive conditions faced by institutions, such that “competition permeates every facet of the higher education industry” (Gumport 2000; Hossler 2006; Slaughter and Leslie 1997; Weisbrod et al. 2008, p. 110). In the case of government funding, competition has increased due to a declining resource pool (Lambert 2014; Lyall and Sell 2006; McLendon and Mokher 2009; McMahon 2009; Tandberg and Griffith 2013; Weerts

and Ronca 2012). However, higher education institutions also compete in a multitude of market places wherein competition has increased as more institutions have been forced to continuously search for alternative revenue streams as traditional sources of funding have declined (e.g., state appropriations) (e.g., Hearn 2006) and become more unstable (e.g., endowment and investment income) (Cantwell 2016). These competitive markets include, but are not limited to, the markets for students, including out of state and international students; productive and renowned faculty; research funding and collaborations from both government and nongovernment sources; athletic success; and private donations and endowment income (Gumport 2000; Hossler 2006; Slaughter and Leslie 1997; Weisbrod et al. 2008). In short, the decline in state funding has increased competition for this funding stream directly while also indirectly increasing competition for other sources of revenue as institutions that historically were not part of the market for donations or external research funding, for example, moved into these markets as they attempt to make up for declining government funds through diversifying their financial resources (e.g., Barringer 2016; Hearn 2006). Therefore, though increased competition originated with state disinvestment, it affects both public and private nonprofit institutions as institutions shifted into new markets.

As competition has increased, and state funding has declined, the literature on alternative revenue streams for public institutions has primarily focused on two sources: private donations along with endowments and tuition revenues. Donations are increasingly important to higher education (Weisbrod et al. 2008). Institutional advancement has become a central component of public institutions, especially larger institutions with presidents frequently highlighting this as one of their central concerns (Conley and Tempel 2006). Drezner (2010) has gone so far as to say that philanthropy “is central to the mere existence and daily function of academe” (p. 194). However, the nature of donations (i.e., the size, focus, source, etc.) and their impact on these institutions is not well understood. For example, we know there are differences in the levels of giving generally, and alumni giving specifically, across public and private institutions (Conley and Tempel 2006; Weisbrod et al. 2008; Zeig et al. 2018). Furthermore, Zeig et al. (2018), in their study of trustee philanthropy at eight public institutions, found that trustees do engage in institutional advancement in different ways and for different reasons. Their findings suggest that public institutions are increasing their focus on institutional advancement and thus expanding into university fundraising, which has historically been dominated by private universities (Zeig et al. 2018). In short, higher education institutions of all types are increasingly engaging with donors and philanthropists as they seek to capitalize on this alternative source of revenues.

Higher education institutions, in addition to their increased reliance on donors, have routinely turned to philanthropic foundations as another source of donative revenues and to achieve goals ranging from construction projects to sponsoring research (Clotfelter 2007; McClure et al. 2017b). McClure et al. (2017b) explored philanthropic giving on the part of foundations to institutions in North Carolina in 2013 and found that high status universities are in a better position to both compete for and obtain donations from foundations. This suggests that as donative revenue becomes more prominent as an

alternative revenue stream within the field this could exacerbate existing inequalities. This is consistent with Cheslock and Gianneschi (2008), who found a positive relationship between state appropriations and private giving, suggesting that the institutions that are more successful at obtaining state funding are also more successful in obtaining private gifts. Furthermore, they found that the level of institutional inequality in private giving exceeds the institutional inequality in state appropriations. Therefore, if private donations replace state revenues this could “increase resource inequality across public institutions” (Cheslock and Gianneschi 2008, p. 224).

Closely tied to this emphasis on donations are endowments and endowment management which have become more critical in response to both privatization and increased competition (St. John and Priest 2006; Weisbrod et al. 2008). The research on endowments, much like the research on philanthropy, is limited with the bulk of this work taking the form of technical reports, how-to guides, or reports prepared for key stakeholders (e.g., trustees and presidents) (Cantwell 2016). However, there is substantial evidence that higher education institutions are increasingly turning to money managers and more aggressive investment practices in order to increase endowment returns (e.g., Weisbrod et al. 2008). For example, Cantwell (2016) used a structural analysis to show that current endowment management practices are a form of financial-academic capitalism in which “universities engage in market activities to generate profit in order to secure advantage over competitor institutions by amassing wealth, which is in turn associated with prestige and field status” (Cantwell 2016, p. 173). For example, Eaton et al. (2016) showed that while there has been growth in the financialization of higher education, the investment returns are concentrated at wealthy institutions while the increased costs of financing were outpacing returns at poorer institutions between 2003 and 2012. In short, while this literature is still developing, the findings so far on the use of endowments by higher education institutions echoes findings on private donations which show that increased reliance on these revenue streams has substantial potential to increase stratification across institutions.

Perhaps the most discussed consequence of privatization has been the increases in both tuition and fees that public institutions have undertaken to recuperate some of the decline in state funding that have occurred in recent decades (Ehrenberg 2006b; Hearn 2006; Kaplan 2009; Toutkoushian 2009; Webber 2017). In addition to the widespread policy of increasing tuition, there has also been an increase in attempts to differentiate tuition as universities have obtained greater authority over tuition setting, as we discussed above (McLendon and Mokher 2009). Hearn (2006) argued that universities, in their desire to diversify their revenue streams and increase tuition income, will begin to differentiate tuition not only by level (i.e., graduate vs. undergraduate price differences) but also by delivery mode, major, or college and school. This has become much more common at the undergraduate level in recent years (Weisbrod et al. 2008). Consistent with the literature as a whole, the work on tuition increases highlights the diversity of ways in which states (discussed above), and institutions, are attempting to capture additional tuition revenues and thus diversify their revenue profiles.

Athletics is another source from which universities are looking to increase revenues; however, this is not something new per se. According to Slaughter and Rhoades intercollegiate athletics has been in the business of academic capitalism for “a long time” (2004, p. 256) to the extent that athletics being seen as a “big business” is no longer in doubt (Weisbrod et al. 2008, p. 218). It has been widely acknowledged that athletic success can be critical for supporting the goals of many institutions both directly (e.g., revenues from ticket sales, contracts, and licensing) and indirectly (e.g., increasing status or promoting identity and loyalty with students, alumni, community members) (Lifschitz et al. 2014; Weisbrod et al. 2008). However, it is important to realize that the benefits of athletics as a “big business” are not distributed evenly (e.g., Weisbrod et al. 2008). Cheslock and Knight (2015) contended that intercollegiate athletics is an area of higher education where “divergent returns,” coupled with “cascading expenditures” and the “ensuing subsidies,” while beneficial to a small number of schools, is a source of growing financial strain for the majority of institutions and their students. Athletics, while it has long been a part of higher education, is increasingly seen as an alternative source of direct and indirect revenues for institutions as traditional revenues have declined or become increasingly competitive in light of privatization. At the same time, concerns about the ways in which athletics are reaffirming or increasing stratification across institutions is unlikely to dissipate as institutions are unlikely to step away from athletics *en masse*.

A fourth area in which universities are financially adapting to privatization is via the cultivation and expansion of their boundaries to include interstitial organizations that are designed to obtain additional revenue streams as well as auxiliary services.⁵ Interstitial organizations are a relatively new organizational form that span the boundaries between different higher education institutions, corporations, and the state (e.g., technology transfer and fundraising divisions) (Slaughter and Rhoades 2004). Researchers have argued that these organizations are most likely to be created closer to the periphery of institutions, rather than within their core activities or divisions (Eckel and Morphew 2009a) and are generally developed with the goal of increasing the revenues of an institution. Auxiliary enterprises on the other hand have been a long-standing practice in higher education (Doane and Pusser 2005), and these units are playing “increasingly significant roles in the modern American university in recent decades” (Priest et al. 2006a, p. 189). This takes many different forms across institutions ranging from banking services and insurance (Hearn 2006) to having grocery stores on campuses (Weisbrod et al. 2008) and universities capitalizing on their real estate and other assets through the creation of retirement communities, renting out their facilities, or even authorizing natural gas drilling (Hearn 2006; Weisbrod et al. 2008). Privatization is also manifested in efforts to extract an increasing amount of revenues from auxiliary services like campus dining,

⁵Research commercialization, which can also be a source of alternative revenues for some schools, is discussed in the section on the changing nature of the creation and dissemination of knowledge below.

student housing, and bookstores. Research has begun to show that these changes to auxiliary services may increase the prices students pay to access higher education (McClure et al. 2017a), which we will return to in the sub-institutional manifestations section below. However, literature on these changes is still underdeveloped.

In sum, the key concern with this shift away from state funding and toward private sources of revenue as outlined above is that institutions will change their behavior in ways that are “socially troubling” or not in the public interest (Dill 2003; Weisbrod et al. 2008, p. 103). In the case of financial behaviors discussed so far, it is clear that these changes will continue to increase inequality between institutions (e.g., Cantwell 2016; Cheslock and Gianneschi 2008; Cheslock and Knight 2015; Weisbrod et al. 2008). There is also substantial evidence that changes in finances lead to alterations in the organizational structure of universities (Clark 1998; Eckel and Morphew 2009a; Slaughter and Leslie 1997) which, along with institution boundaries, is the focus of our next section.

Shifting and blurring institutional structures and boundaries. In addition to the changing financial behaviors of higher education institutions, privatization has manifested in a blurring of the boundaries between higher education institutions and external organizations, as well as an expansion of the boundaries (e.g., by incorporating activities not historically part of the mission of higher education) of these organizations. For example, Slaughter and Rhoades (2004) argued that “[t]he ‘fire-wall’ that once separated public and private sectors has become increasingly permeable” (p. 27). Eckel and Morphew argued that institutions, in particular research universities, have opened their borders to a “range of external influences” (Eckel and Morphew 2009a, p. 100). This blurring and expanding of the boundaries of these institutions has significant potential to shift the “organizational patterns and modes of production within universities” (Cantwell and Kauppinen 2014, p. 6; McClure 2016). This expansion and blurring of organizational structure and boundaries can take many forms; however, we focus on two here: (1) partnerships with various external entities (e.g., corporations and other universities) and (2) the emergence of interstitial and affiliated organizations. We briefly discuss each in turn before turning to how these practices vary within and between institutions.

Institutions have engaged in partnerships for decades around research, education offerings (e.g., partnerships to offer degrees across institutions), and economic development (e.g., with the state or local communities) with a variety of partners, including corporations, other universities, nonprofits, and state and local governments (Slaughter and Rhoades 2004). Industry partnerships have focused on a range of activities including research collaborations; the generation of specialized programs that fit firm needs; continuing or distance education; or economic development (Etzkowitz and Leydesdorff 2000; Lyall and Sell 2006; Pusser et al. 2005; Slaughter and Rhoades 2004; Weisbrod et al. 2008). A key realm in which this is undertaken is around research collaborations. Research on university-industry collaborations and joint ventures suggests these can be beneficial to both the universities, companies, and in some cases the economic development of the surrounding area.

Institutions have also undertaken joint ventures with corporations in a number of areas beyond research. These ventures range from facilities-management and public-

private partnerships in university housing to the creation of a learning services company, InStride, by Arizona State University and The Rise Fund, to name a few (Green 2019; McClure et al. 2017a; Weisbrod et al. 2008). There are also numerous examples of this within the realm of continuing education, which has been one of the key areas in which universities are engaging in “profit seeking behaviors” either via the creation of internal divisions or via partnerships with external organizations (Breneman 2005; Pusser et al. 2005). Institutions can also capitalize on existing external organizations in other areas as they outsource existing services in an attempt to cut costs and increase profits (Phipps and Merisotis 2005). This has been undertaken in a number of areas including, but not limited to, operation of hotels and university housing, food services, laundry services, and operating other affiliated facilities (Doane and Pusser 2005; McClure et al. 2017a; Priest et al. 2006a; Weisbrod et al. 2008). However, the extent to which this is beneficial to these institutions remains unclear despite the ubiquitous nature of these practices due to a lack of research in this area (Phipps and Merisotis 2005).

Institutions are also collaborating with one another and nonprofit research and policy organizations in a number of areas. Many of the collaborations between universities have existed for decades or more in the form of simple research partnerships around particular grants to shared library resources and joint degree programs. However, in recent years, universities have expanded their collaborations to include joint ventures, such as the Pittsburgh Life Science Greenhouse, which is a partnership between the University of Pittsburgh and Carnegie Mellon University to foster economic development in life sciences in the region (Cohen 2002; Pittsburgh Life Sciences Greenhouse 2019). A number of institutions also have long-standing partnerships with their local communities or states around economic development initiatives as well (Harris and Holley 2016). For example, Holley and Harris (2017) argued and show how universities can help cities retool around the knowledge economy in their recent case study. Etzkowitz et al. (2000) used two university cases to highlight the different ways universities can contribute to economic development via academic entrepreneurship.

Another form of partnership that deserves mention is the relationship between institutions and affiliated nonprofit organizations (ANPOs), such as alumni associations/foundations, research foundations, endowments, and athletic associations (Taylor et al. 2018). These organizations have existed almost as long as universities, but their numbers have increased substantially in recent years, particularly in the areas of academics and research (Taylor et al. 2018). However, this strategic response is diffusing across public and private universities in ways that are patterned by resources and status suggesting that the changing ties between universities and ANPOs are consistent with academic capitalism, specifically that increased competition leads to heightened stratification between institutions over time (Slaughter and Cantwell 2012; Slaughter and Rhoades 2004).

In summary, as institutions have increasingly engaged in partnerships in a variety of ways and with different entities, it is clear that the boundaries and structures of universities are not all changing in the same ways. This is consistent with the larger discussion of privatization that manifestations will take different forms across

institutions and also occur at different rates both between and within organizations. Research on ANPOs and research commercialization highlights how the benefits of these strategic adaptations are concentrated within a small number of institutions (e.g., Powell et al. 2007; Powers 2006; Taylor et al. 2018). Within universities there is also an uneven distribution of commercialization and privatization with those units (both academic and nonacademic) that are closer to the market being most likely to benefit as they are able to capitalize on their proximity and “built-in advantages” (Eckel and Morphew 2009a; Slaughter and Rhoades 2004, p. 27). These inequalities that occur as a result of these manifestations can have real consequences for institutions, and they can potentially alter the power dynamics within institutions, concentrating power within already advantaged units, and increasing stratification both within and between institutions (McClure 2016; Rosinger et al. 2016a; Taylor et al. 2018; Taylor et al. 2013).

Changes in the creation and dissemination of knowledge. Privatization has also had implications for how knowledge is created and disseminated through its impacts on research behaviors and practices, as well as academic structure and curriculum.⁶ This is manifested within institutions in two primary ways: first, within the changing nature of the academic structure and the ways in which resources are allocated within this structure, and second, through the research behaviors of institutions. We discuss each in turn highlighting key findings from this literature.

Academic departments are “the focal point of academic work” (Hearn 2007, p. 224), which both makes them central to higher education institutions and also makes these institutions “bottom heavy” organizational forms (Hearn 2007). Understanding the nature of academic restructuring, resource allocations, and how departments are interfacing with university leaders sheds light on the changing norms, dynamics, and priorities of higher education institutions over time as a result of privatization. For example, research by Slaughter (1993) has demonstrated that academic restructuring has shifted resources toward departments, colleges, and schools that are already resource-rich, exacerbating existing inequalities within these institutions (Hearn 2007; Slaughter 1993; Slaughter and Leslie 1997). Research has shown that departments have been under increased pressure to generate new/more revenues and increase efficiencies (e.g., Slaughter et al. 2004; Slaughter and Rhoades 2004), which suggests that privatization had infiltrated the academic core of universities. This becomes even clearer when we look at the studies of internal resource allocations. Research by Pfeffer and Salancik (1974) suggested that a department’s ability to accumulate power and obtain external research funding are critical to obtaining additional resources. Volk et al. (2001) highlighted the unequal flows of resources within universities, establishing the fact that this benefits those departments that already possess substantial resources and also those departments that have more male and full-time faculty, graduate degrees, and research funding. This echoes previous findings from Slaughter (1993) showing that the gendered

⁶It has also done this via the impacts it has on the nature of faculty work, which will be discussed below.

nature of departments plays a role in resource allocations. These shifts are also evident in the growing adoption of incentive-based budgeting systems, particularly at public institutions (Priest et al. 2006b; Priest and Boon 2006; Toutkoushian 2009). These budgeting systems are being undertaken in an attempt to increase accountability and transparency within higher education institutions and are part of the shift toward greater accountability and increased efficiencies discussed in the state-level manifestations section above (e.g., Hearn 2006; Toutkoushian 2009).

Institutions have also altered the norms and priorities of research activities in response to privatization in ways that contribute to inequalities between and within institutions. As Powell et al. (2007) put it, there is “little doubt that U.S. universities are focused on commercialization” (p. 123). Slaughter et al. (2004) argued that universities increase the commercialization of research (i.e., increase patenting, research partnerships, and the formation of startups) as a result of federal and state policy changes that legitimized these activities in an attempt to bolster economic development and competitiveness (Powers 2004, 2006; Slaughter and Leslie 1997). As noted above, since the 1970s, and especially since the Bayh-Dole Act in 1980, the nature of university research activities has changed as institutions now have the potential to profit from research undertaken by their faculty that is funded by the federal government. This, in turn, moved universities closer to the market as they became more entrepreneurial, resulting in the boundaries between universities and these external entities (e.g., corporations) beginning to “blur” (Powers 2006; Slaughter et al. 2004, p. 129; Slaughter and Leslie 1997). This is not to say that the blurring has been uncontested, of course. Owen-Smith referred to technology transfer within universities as a “big, controversial business” administered by managers that are part of a “profession in the making” (Owen-Smith 2011, p. 71). However, Owen-Smith (2003) demonstrated how the relationship between commercial and academic systems, despite this initial tension, has resulted in an integration of public and private science between 1981 and 1998, such that the success of both public and private science is interdependent.

In addition to changes in the norms and priorities of research activities, practices are also changing with respect to copyright practices and industry-funded research. For example, within the realm of copyright practices, Slaughter and Rhoades’s (2004) analysis showed that, while historically faculty have held copyrights over their intellectual property, this may be changing, particularly as the prevalence of online education course content (e.g., for courses as well as certificate and degree programs) grows. They argued that this shift represents another way in which universities are engaged in the “aggressive pursuit of external revenues based on instruction and curriculum” (Slaughter and Rhoades 2004, p. 132). This pursuit has occurred through the expansion of continuing and distance education across campuses nationwide, as well as the pursuit of certificate programs. Similar shifts are seen in the acceptability of research funding from industry. Whereas previously this money would be considered questionable based on its source, it has become more acceptable and even sought after (Slaughter et al. 2004). In a similar vein, Owen-Smith and Powell (2001) highlighted the importance of faculty considerations about

institutional support for commercialization as they decide whether or not to disclose and patent new inventions.

Much like the situation with finances and academic structures, these behaviors and practices are not occurring evenly across and within universities; in fact, success in research commercialization is concentrated among only a handful of universities (Powell et al. 2007; Powers 2006). Within universities the bulk of patenting has occurred in or around the biomedical fields (Owen-Smith and Powell 2003; Powell and Smith 2002). Others have characterized technology transfer as occurring in those fields that are closest to the market (Eckel and Morphew 2009a; Slaughter and Rhoades 2004). Across universities the extent to which universities are engaging in these practices differs dramatically, ranging from research universities, which Eckel and Morphew characterized as “quasi-private organizations” that are heavily engaged in research commercialization to smaller public and private nonprofit institutions that are barely engaged in research commercialization at all (Eckel and Morphew 2009a, p. 88; Weisbrod et al. 2008).⁷ Furthermore even among those universities that are heavily engaged in this practice, it has only been highly profitable for a small number of schools (Powell et al. 2007; Powers 2006; Weisbrod et al. 2008). The spread of research commercialization and associated practices, despite its uneven nature, has had significant consequences for the nature of faculty work. However, before addressing these sub-institutional manifestations of privatization, we turn to the manifestations of privatization in the governance of these institutions to close out our discussion of institutional manifestations.

The changing nature of governance. Privatization has resulted in substantial changes in the governance of higher education institutions; however, these manifestations and their implications have been shortchanged in the literature due to the “strong focus on the fiscal dimensions or privatization” (Eckel and Morphew 2009b, p. 89) and the emphasis on research commercialization in the wake of Bayh Dole. Privatization has, particularly for public institutions, come with the implicit understanding that as government support declines their role in governance should also decline (Kaplan 2009). We see this as states’ attempts to modify the governance systems of higher education have increased since the mid-1980s (McLendon and Mokher 2009; Travis 2012). As discussed above, this has taken the form of states decentralizing their governance structures moving decision-making authority to campuses, providing institutions with greater autonomy and weakening statewide coordinating boards (McLendon and Mokher 2009). We focus on three key ways in which privatization has been manifested in governance at the institutional level here: (1) the increased complexity this creates for the individuals and groups managing and governing these institutions, (2) how administrators manifest and promulgate privatization through their actions and decisions, and (3) the changing nature of university trusteeship in light of the spread of privatization.

⁷Though they are likely engaged in privatization and academic capitalism in other areas including athletics or competition for students (Slaughter and Rhoades 2004).

The clearest manifestation of privatization in governance is the increased complexity that the administrators of these organizations (e.g., presidents, provosts, trustees, deans) are facing. For example, the challenges for university presidents have increased substantially since the 1990s (Harris and Ellis 2018), as institutions, particularly public institutions, are in more complex environments than in earlier times (Gagliardi et al. 2017; Priest and Boon 2006). Presidents are frequently expected to manage financial crises precipitated by state disinvestment and secure new revenue sources (McClure 2016). These pressures, which arise from state-level manifestations of privatization, may be contributing to greater turnover among presidents, creating difficult conditions to properly govern institutions. This is clear in the work of Harris and Ellis (2018), which showed that while average presidential tenure has remained unchanged, there has been an increase in involuntary turnovers since 2008. The seven reasons for turnover in their study include financial controversy, loss of board confidence, poor judgment, and athletics controversy, suggesting complexity is a key factor in understanding this increase. Recently, the president of a major university system described being president as the “toughest job in the nation” (Thomason 2018, para. 1).

This is not to say that presidents and other administrators are simply reacting to privatization. In fact, Slaughter and Rhoades (2004) argued the opposite, asserting that “institutions could not engage in academic capitalism without the involvement of university presidents,” who are actually becoming more important to institutions in light of the complexity, particularly at research universities (p. 207). For example, some university presidents have been advocates for increasing in-state tuition and recruiting out-of-state students, both of which are practices aligned with privatization (Hossler 2006). Furthermore, McClure (2016) illustrated the key role administrators play in facilitating academic capitalism as they fostered entrepreneurship and innovation at a public research university.

Privatization has also manifested in the changing nature of university trustees as well. Research has shown that universities are becoming increasingly tied to the knowledge economy via their trustees’ affiliations and the involvement of both trustees and their affiliated firms within the universities that they steward (e.g., Barringer and Slaughter 2016). This is because trustees, at least at public and private research universities, are no longer buffers between institutions and their environments but rather are “boundary spanners” (Barringer and Riffe 2018) that benefit from the ability to scan the research activities of universities and to benefit the universities via the connections and resources that they bring with them (Pusser et al. 2006; Slaughter and Rhoades 2004). Trustees no longer simply govern these institutions, but also, as part of the micro-foundation of universities, shape their behaviors, structures, and policies through donations and involvement in both new and existing initiatives and in some cases via their trustee-affiliated organizations (Barringer and Riffe 2018). For example, Mathies and Slaughter (2013) and Slaughter et al. (2014) demonstrated that the affiliations of trustees are related to the research and patenting behaviors of elite private research universities and suggest that the potential for institutional conflict of interest has increased as a result. Furthermore, Barringer et al. (2019) showed that trustees of elite research

universities have an extensive network of connections to external organizations in industry, as well as government and nonprofit organizations. These patterns of connections differ substantially across sectors and institutions, as well as over time, in ways that suggest a relationship between the governance and financial resources of these universities. In short, trustees are serving as networks of power and knowledge that universities can draw on and take advantage of as other resources decline or become less stable. They may offer universities, as the research above suggests, connections to industry and government organizations as well as additional avenues for securing resources that would allow institutions to solidify their position or increase their prominence within the field (Barringer et al. 2019; Slaughter and Rhoades 2004).

As this literature suggests, privatization has been manifested in a variety of ways across both public and private nonprofit institutions. We specifically address manifestations of privatization at the institutional level in four areas: financial behaviors, shifting boundaries and structures, changes in knowledge creation and dissemination, and the changing nature of governance. As we argue and show above, the literature on manifestations of privatization, in particular institutional manifestations, tends to treat privatization as a taken-for-granted aspect of these institutions and is also disjointed and frequently not in a collective dialogue on these issues. It is for these reasons that while we have some knowledge of how privatization is manifested at the institutional level, a number of unanswered questions remain. We elaborate on these below after discussing the sub-institutional level manifestations of privatization.

Sub-institutional-Level Manifestations of Privatization

In addition to institution-level manifestations, privatization has also been manifested at the sub-institutional level via the conditions experienced by the employees and students of these institutions. We focus on two groups which appear most frequently in the literature, students and faculty, discussing the manifestations of privatization for each in turn.

Students as consumers and negotiable goods. Students, as privatization has become the new normal, have become both revenue targets and consumers; in an extreme sense they are “negotiable goods” that can be traded with corporations for resources via contracts for sports, test beds, single product agreements, and direct marketing (Gumport 2000; Kleinman and Osley-Thomas 2016; Slaughter and Rhoades 2004). Competition for students has increased as institutions have become increasingly reliant on tuition revenues and are therefore recruiting across a wider geographic area than ever. Some institutions are intentionally targeting international students and, in the case of public universities, are targeting out-of-state students who net higher revenues for institutions (e.g., Hossler 2006; Jaquette and Curs 2015).

There has been a substantial amount of research on the enrollment economy that has evolved in the wake of privatization. This is because state disinvestment is

forcing public institutions to behave like the historically tuition-dependent private institutions, and thus institutions in both sectors are now exerting substantial energy and resources to attract “paying customers” (i.e., students) (Jaquette and Curs 2015, p. 536). There is also evidence that higher education institutions are increasing recruitment of international students in response to resource constraints (e.g., Coco 2015; Mamiseishvili 2011). This is a strategy that does result in increased tuition revenues for some institutions but not for others (Cantwell 2015). Research has shown that the enrollment economy is causing public universities, in particular public research universities, to increasingly recruit out-of-state students as they seek to increase their tuition revenues (Jaquette and Curs 2015). The increased competition for students has also led to mission drift on the part of private liberal arts colleges that are becoming universities in an attempt to deal with declining enrollments and other environmental changes (Jaquette 2013). Increased competition has also led to the increased pursuit of master’s and professional programs at public research universities (Eckel and Morphew 2009a). Echoing the themes above from our discussion of institutional manifestations, these shifts also have substantial implications for inequality, but in this case, it is argued that the increased reliance on tuition revenue, and the associated shifts we discussed above, can challenge equal access. Researchers have demonstrated that as privatization has spread, advantages (e.g., resources and cultural capital) accumulate to those who are already advantaged (McDonough and Fann 2007). This is compounded by the fact that as admissions criteria become more selective, access is even further out of reach (McDonough and Fann 2007; Posselt et al. 2012). In short, the institutional manifestations of privatization, in particular the diversification of resources, also have direct impacts on access and affordability.

The changing nature of faculty work and hiring practices. While institutional manifestations of privatization can impact faculty in a number of ways, it is important to realize that faculty can also be agents of privatization. For example, Cantwell (2014) shows how faculty in the natural sciences serve as the “building blocks” of academic capitalism via their role as part of the microfoundations of their institutions, which we discuss below. As institutions of higher education have acclimated to privatization by changing their finances, academic structures, research behaviors, and governance structures as we outline above, this has significantly impacted the balance of power within these institutions (Gumport 1993; McClure 2016). In general, these changes have led to a change in staffing arrangements and a growth in the nonfaculty professionals within institutions in areas such as technology transfer development, student admissions, and financial aid (Conley and Tempel 2006; Eckel and Morphew 2009a; Hossler 2006; Owen-Smith 2011; Rhoades 1998, 2007; Slaughter and Rhoades 2004). The growth in these “managerial professionals” has, according to Rhoades (1998), directly challenged faculty authority to such a degree that faculty have now become “managed professionals” who are managed by these managerial professionals. Faculty are also experiencing substantial pressures to pursue economic opportunities to generate additional revenues for their institutions (Rhoades 2007; Slaughter and Rhoades 2004). This has resulted in two key manifestations of privatization for faculty: (1) the changing nature of faculty work

and (2) the changing nature of faculty hiring practices. We address each before turning briefly to how research has tied these manifestations to increased faculty stratification.

The nature of faculty work has changed in light of privatization as faculty are increasingly involved in market-like behaviors and, as this happens, the boundaries between, first, institutions and, second, faculty and the market are blurring (Slaughter et al. 2004). This has led to quandaries, particularly for those faculty in the fields closest to the market, as they reside in nonprofit organizations but are being increasingly urged to generate revenues and profits (Slaughter et al. 2004). Hermanowicz (2016) argued that as a result of these changes, institutional priorities have shifted such that the institutions “valorize shiny things” that are closer to the market rather than “knowledge of its own accord” (p. 324). Furthermore, McClure (2016) showed that when administrators enact academic capitalism, it “generates tension and creates a hierarchy of faculty work based upon their contributions to revenue generation” (p. 538). However, again faculty, like administrators, can contribute to the spread and reinforcement of these shifts and, as Cantwell (2014) demonstrated, the “establishment and maintenance of academic capitalism” (p. 488).

While faculty can be agents of privatization and academic capitalism, the nature of faculty work has also changed in response to institutional manifestations of privatization such as changing structures and boundaries of higher education institutions and the changes in the creation and dissemination of knowledge. Privatization is manifested in the nature of faculty work perhaps most prominently in the unbundling of the faculty role such that there is both growth in research-focused positions such as postdocs as well as the creation of new positions that specialize in research or teaching only (Cantwell and Taylor 2015; Eckel and Morphew 2009a). Privatization has also increased the financial incentives to hire nontenure-track faculty across all types of institutions. This practice, of hiring part-time and full-time nontenure-track faculty, has been on the rise since the 1970s (Ehrenberg 2006a; Hurlburt and McGarrah 2017b); however, the extent to which universities are doing this varies (Eckel and Morphew 2009a; Hurlburt and McGarrah 2017a). Despite these established trends, we still know little about the lives of these faculty (Kezar and Sam 2013; Kezar 2013; Rhoades 2007) and the impact of these changes on students. Additionally, it is unclear to what extent rising reliance on part-time a nontenure-track faculty serves as a cost savings tactic on the part of universities (Hurlburt and McGarrah 2017a).

It is important to realize that institutional and sub-institutional manifestations of privatization are not distributed evenly across or within institutions. For example, the faculty in different fields are engaging in market-like behaviors to different degrees and in different ways as privatization is manifested to different degrees in different fields depending on their proximity to the market or periphery of the organizations (Morphew and Eckel 2009; Slaughter and Rhoades 2004). For example, market-like behaviors, at least in the realm of the commercialization of research, are occurring most frequently in the life sciences and STEM fields (e.g., Rhoades 2007; Slaughter and Rhoades 2004). Different fields and disciplines have also experienced different conditions within institutions based on their proximity to, or distance from, the

market and the availability of external research funds within their fields leading to greater horizontal segmentation within institutions (e.g., Rosinger et al. 2016a; Volk et al. 2001). This is also manifested at the sub-institutional level as different institutions are utilizing contingent faculty to different degrees, and there are also growing gaps in faculty salaries across different institutional types and between different groups of faculty (Curtis 2019; Ehrenberg 2006a; Hurlburt and McGarrah 2017b; Johnson and Taylor 2018). Furthermore, different departments and fields are using contingent faculty to different degrees (Kezar and Sam 2013; Rosinger et al. 2016a). These inequalities can reinforce or exacerbate differences within and across institutions from the bottom up as privatization is manifested at the institutional and sub-institutional levels within these institutions.

Future Directions for a Renewed Research Agenda on Privatization

We argue in this chapter that privatization has become the new normal within US higher education research. Privatization, as conceptualized here, is a process by which both the resources – including their power, sources, modes of allocation – and logics of higher education have changed such that it was both possible, due to the changing logics, and desirable, due to resource changes, for the commercialization, marketization, financialization, and corporatization of higher education to occur. Privatization and its attendant change processes occurred not simply within institutions or at the state level but rather across four interrelated levels – national, state, institutional, and sub-institutional. We argue, and show above, that the particular way in which privatization is manifested across these four levels differs. Based on our multilevel framework of privatization and its manifestations, we use this section to articulate the (1) limitations and tensions within the literature on privatization; (2) five directions for future research based on this synthesis of the literature; and (3) the methodological approaches that we assert will be necessary to advance the literature on privatization, its manifestations and its consequences in the directions outlined here.

Tensions and Limitations Within the Privatization Literature

While there has been a substantial amount of scholarship related to privatization, this research is concentrated in a few areas, or it is not explicitly connected to privatization. The institutional manifestations section highlights the varied levels of empirical inquiry within the privatization literature. For example, the work on research commercialization and enrollment management is considerable, whereas work in other areas, such as state-level governance restructuring and public-private partnerships is more limited. Furthermore, privatization, along with its manifestations (e.g., increased competition, declining state funding, and marketization of financial aid), is frequently used as a way to contextualize research studies in a wide range of areas, particularly

research on higher education organizations. However, frequently this work is not explicitly linked back to privatization, such that the literature on privatization as a whole is disjointed. In essence, much of the empirical research on privatization, at least at the organizational level, is studying the manifestations and their consequences, without clearly linking these manifestations back to their source – privatization.

The disjointed nature of this scholarship, in addition to the normalization of privatization, contributed to a tapering off of research that explicitly focused on privatization after the mid- to late-2000s. Ironically, throughout the privatization literature, there are calls for more research, particularly around how privatization is impacting higher education institutions and their stakeholders (e.g., students, faculty, employees, trustees) (e.g., Eckel and Mophew 2009b; Rhoades 2007; Weisbrod et al. 2008). For example, Eckel and Mophew made an explicit call for more research when they argued that “a deeper and more nuanced understanding of how privatization interacts with the organizational structure of public research universities is needed” (Eckel and Mophew 2009a, p. 89). As we show above, even though it is not explicitly focused on privatization per se, research on manifestations and consequences, particularly at the state, institutional, and sub-institutional levels, is ongoing. It is simply that researchers have stopped studying it under the mantle of privatization and instead studied the changing nature of institutional boundaries, faculty work, research commercialization, and so forth. This has resulted, as we will show below, in the identification of a number of frontiers for research on privatization but has left them relatively unexplored.

In addition to its limited nature, the privatization literature lacks conceptual clarity as we argue above. This is partially a result of the focus on manifestations and their consequences as opposed to privatization itself. However, this conceptual murkiness is also a function of the intermingling of terms like commercialization, financialization, corporatization, marketization, and privatization. The comprehensive conceptualizations of privatization do little to improve this ambiguity. Two of these are clearly situated in the privatization literature: Johnstone’s (2000) privatization as a tendency on multiple dimensions and Ball and Youdell’s (2008) endogenous and exogenous privatization. However, the other two, Weisbrod et al.’s (2008) two-good framework and Slaughter and Rhoades’s (2004) academic capitalist knowledge/learning regime, are grounded in larger shifts and tensions that are part of privatization but distinct from the literature on it. Specifically, Weisbrod et al. (2008) focused on the tension between mission and revenues, which is a function of privatization and increased competition, which is a direct result of privatization. Thus, while this is a theory of organizational behavior and how institutions respond to privatization, it is not framed as such. The same is true for academic capitalism. Academic capitalism is a theory of higher education organizations and how they have integrated themselves into the knowledge economy in light of their new and shifting financial constraints (e.g., Kauppinen 2012; Rhoades and Slaughter 1997; Slaughter and Leslie 1997; Slaughter and Rhoades 2004; Slaughter and Taylor 2016). The literature on academic capitalism is extensive, exploring these processes at the micro, meso, and macro levels in the United States and across a number of countries (e.g., Barringer et al. 2019; Cantwell 2014; Cantwell and Kauppinen 2014;

Mars and Rhoades 2012; McClure 2016; Mendoza 2012; Metcalfe 2010; Taylor et al. 2018). In essence, academic capitalism is a theory of how colleges and universities are navigating privatization, commercialization, and corporatization. Although the bulk of academic capitalism literature is focused on responses to privatization, studies are rarely framed as such, which results in a separation between this literature and research focused on privatization.

Related to this is the question of whether or not privatization is only impacting public universities, which is an implicit tension within the literature, particularly as it relates to institutional-level manifestations. Much of the literature on privatization focuses on public institutions (e.g., Barringer 2016; Cheslock and Gianneschi 2008; Jaquette and Curs 2015). However, privatization at all four levels, particularly the national and sub-institutional level manifestations, cuts across all sectors. Furthermore, a number of the institutional-level manifestations, especially those related to knowledge creation and dissemination, diversification of finances, and changing nature of governance, cut across public and private institutions (e.g., Barringer et al. 2019; Cantwell 2016; Slaughter et al. 2004). We argue that if privatization incorporates change processes like marketization, commercialization, corporatization, and financialization, then privatization cuts across all sectors. However, public and private nonprofit institutions are starting from very different places and, as such, privatization takes different forms among institutions in these two sectors. As Priest et al. (2006a) put it “private universities are by definition already privatized in many ways” and have been for decades or centuries (p. 190). Therefore, they are – and should be – part of the privatization story. They have simply been doing this longer, whereas this is a “new” feature of public higher education.

A second, related tension within this literature is the fact that all institutions, in particular research universities, experience privatization differently. This was addressed most explicitly in our discussion of institutional manifestations above. In light of this, the critical question becomes how we acknowledge such variance but still identify patterns and connect manifestations in ways that reflect a larger trend and broader conceptualization of privatization. As the institutional and sub-institutional manifestations sections above make clear, not all institutions engage in these various behaviors to the same degree, nor are they starting from the same point. For example, outsourcing, a frequently touted manifestation of privatization, “can take a different shape in each institutional situation for each different service area” (Priest et al. 2006a, p. 193). Furthermore, as organizational practices travel and diffuse across a field, their success at each institution is dependent upon the specific context of the institution (Powell et al. 2007). Therefore, while there are commonalities in the manifestations of privatization across institutions, there are also stark differences. The fact that privatization does not take shape in uniform ways creates difficulties in delimiting and describing the phenomenon. This tension necessitates, as we elaborate below, the utilization of both large-N quantitative analyses to understand variation and also case studies and other qualitative research to reveal institutional context and particularities across cases. In addition, to fully understand the nuance and larger trends, this work must be iterative, moving back and forth between the two methods, to generate a body of work that explores the complexity and nuance.

As our discussion of these tensions and limitations suggests, we are explicitly calling for a renewed research agenda focused on privatization, its manifestations, and their consequences within the higher education literature. This return is necessary in order to: (1) fully understand the consequences of privatization for organizational behavior, structures, and decision-making; (2) understand the consequences of inequality within the field between institutions and within institutions between units that results from privatization; and (3) to understand the implications of privatization for people within the institutions as the nature of work and hiring practices have changed for faculty and the barriers to access and equity for students potentially grow. As part of a renewed research agenda, we also call for research that explicitly engages in organizational-level analyses, whether it be work focused on understanding the institutional-level manifestations or multilevel work at both higher (i.e., national and state) or lower (sub-institutional) levels. Privatization is enacted across all four levels, but it is most fundamentally changing the nature of colleges and universities. Therefore, research on the consequences for students or faculty, for example, that does not acknowledge the institutional context of these individuals, or the state policy research that ignores institutional diversity within the states, will fail to fully conceptualize and empirically map the nuance and complexity of privatization. To help develop a renewed research agenda on privatization, we outline future research directions at each level of privatization (national, state, institutional, and sub-institutional), beginning with the need to obtain a better understanding of national policy shifts.

Future Directions: Consequences of National Policy Shifts

As we discussed above, privatization has manifested at the national level in three ways: through the incentivization of commercialization, the privatization of financial aid, and both fostering and not adequately regulating the growth of the for-profit sector of higher education. Within this context there are two avenues for future research that, if undertaken, would further flesh out the role of the federal government in enacting privatization and the consequences of their policies. First, there has been only limited examination of the history and evolution of Sallie Mae and the ways in which it has marketized student loans. Furthermore, there has been scant research on the consequences of the privatization of Sallie Mae and its transition to Navient Corporation. More specifically, it is not clear what role the creation of Sallie Mae played in the growth of student loans compared to grants as a way for the federal government to assist students. A related question centers on how recent programs and policies to help families pay for college, such as tax-exempt college savings accounts, has contributed to market segmentation in higher education (Slaughter and Rhoades 2016). In addition to these specific questions, research on the ways in which federal financial aid relates to inequality between institutions is a ripe area for future research.

The second direction for future research is centered on for-profit higher education institutions. Efforts to regulate for-profit institutions have vacillated. Federal policies

in the 1990s created conditions under which for-profit institutions were able to rapidly expand. However, more recent years have seen a wave of for-profit closures as a consequence of federal policies that were put in place to protect students. This begs the question of what the consequences of these closures are, particularly for the historically disadvantaged groups traditionally targeted by for-profit institutions (Cottom 2017). One question that researchers should pursue centers on the experiences of students, faculty, and staff employed at for-profit institutions that close. Moreover, research should also examine the ways in which uncertainty related to the future of for-profit institutions affects the experiences of students currently enrolled in those institutions. Another avenue of research that merits attention is the role of lobbying and partisanship in efforts to regulate for-profit industry. Similar to research on partisanship as it relates to state appropriations, future research should examine how the composition of congress and other political factors relate to policies that either support or seek to regulate the for-profit sector. Although the federal government has been an active player in privatization, too frequently national policies are positioned as context or background. Future research should better uncover national-level manifestations of privatization both as an end in itself and to help us better understand how federal policies influence privatization at the other levels.

Future Directions: Assessment of State Policy Shifts

At the state level, privatization has been manifested in three ways: state disinvestment, the rise of performance-based funding, and governance reforms and private-sector partnerships. Several questions emerged from synthesizing literature on state-level manifestations of privatization. First, although several studies discuss the decentralization of tuition authority (e.g., Kaplan 2009; McLendon and Mokher 2009), little research has evaluated how deregulation has influenced tuition prices for in-state, out-of-state, and graduate students. In another area, there have been many calls for institutions to become more efficient in the wake of state disinvestment, yet the research on cost efficiency in public higher education is scarce, making it difficult to determine if achieving greater efficiencies are possible and in what areas (Titus et al. 2016; Titus et al. 2019). In the same vein, governance reform efforts aimed at decentralization to give institutions greater control over select management functions have not been evaluated to determine if they have been successful in improving cost efficiency and performance. Another direction for future research related to state-level manifestations of privatization revolves around states' efforts to reform certain institutional functions like procurement and encourage private-sector partnerships. Some of these topics require specialized knowledge of state- and system-level governance, which are not topics extensively discussed in the field. Furthermore, there are relatively few researchers who focus on state-level higher education governance, creating a gap in our knowledge that should be addressed in order to more fully understand privatization.

A significant share of recent research on state-level manifestations of privatization examines the diffusion and outcomes of performance-based funding. The

volume of recent research on this topic may yield a false sense of saturation. However, questions remain about the ways in which performance-funding encourages competition between institutions along a narrow set of metrics. Moreover, current research has only partially addressed the ways in which performance-based funding differentially impacts institution-types, especially Minority Serving Institutions and regional comprehensive universities (Orphan 2018). As an alternative to performance-based funding, Hillman et al. (2015) advocated that states incentivize equity, and researchers should explore such alternatives to privatization-based policies to determine if they produce more positive effects.

Beyond performance-based funding, some states' interest in performance and reducing waste has led them to consider closing and/or merging institutions (i.e., Georgia and Pennsylvania). Closing and/or merging institutions has not been explicitly connected to privatization, though the practice of merging, acquiring, and closing is common in the private sector. There is reason to examine the relationship between mergers and closures to privatization, as well as a need for more research on the approaches and consequences of institutional mergers and closures. To date, most conversations about institutional mergers have focused on community colleges and regional comprehensive universities, two sectors that educate a disproportionate share of adult, first-generation, low-income, veteran, and minoritized students (Orphan 2018). In sum, the literature on state-level manifestations of privatization has tended to cluster around resources for understandable reasons. However, there are many other facets of privatization that should be examined as part of a renewed research agenda.

Future Directions: Growing Inequality Within the Field of Higher Education

Many of the behaviors institutions are engaging in as they adapt to privatization as the new normal have resulted in increased stratification within and between higher education institutions on a number of dimensions (e.g., resource inequality due to uneven donations or endowment returns or success in research commercialization) (Barringer et al. 2019; Cantwell 2016; Leslie et al. 2012; Rosinger et al. 2016a, b; Taylor et al. 2018; Taylor and Cantwell 2019; Taylor et al. 2016; Volk et al. 2001). This suggests that not only do these manifestations have consequences for the institutions themselves but also for the field as a whole. However, beyond the increased stratification, and growing potential for increased stratification as these practices continue to spread throughout the field, we know little about the organizational field level implications of privatization. Therefore, we suggest two directions for future research that can help address this limitation within the literature.

First, does privatization result in greater homogeneity or greater differentiation within the field of higher education? Eckel and Morphew (2009b) argued that mimicry should increase across public institutions as privatization takes hold. However, there is also acknowledgment that those institutions with specialized niches or missions may choose to further differentiate. Empirical investigations of this have, to date, been limited. Recent work by Harris and Ellis (2019) showed that institutional diversity is

decreasing as the field homogenizes due to the number of niche schools declining and institutions pursuing similar paths over time (e.g., expansion of doctoral programs and increasing enrollment). However, Barringer (2016) found that there is growing differentiation in public college and university revenue profiles between 1986 and 2010; therefore, evidence across behaviors is mixed. Research that expands on this work to explore differentiation or homogenization of higher education institutions within the field as a whole will help to address this gap. Particularly of interest is research that incorporates differences in the manifestations and starting points of privatization across institutions (Hearn 2006; Hirsch 1999). Addressing this limitation in the current literature would allow us to ascertain the impact of privatization on institutional diversity which has frequently been touted as one of the key strengths of the US higher education system (Harris 2013).

Second, it is clear from the literature on institutional manifestations that not all institutions are poised to respond to, or take advantage of, privatization, which has significant consequences for the relative success of and stratification between institutions. For example, Hearn (2006) argued that research universities are in the best position to take advantage of alternative revenue streams and, therefore, benefit from resource diversification. Eckel and Morphew argue that “those institutions best positioned to benefit will likely be the diversified, entrepreneurial universities that already have a reputation and track record of financial success” (Eckel and Morphew 2009b, p. 188). This can even be seen in the research on university athletics wherein the increase in commercialization and marketization of athletics is shown to have differential effects across universities in different divisions and with different sports (Cheslock and Knight 2015; Weisbrod et al. 2008). However, empirical studies in this area are lacking.

As a result of these differences, privatization has and likely will continue to benefit all organizations in unequal ways. This is clear in the scholarship on research commercialization, where the benefits are heavily concentrated within a handful of institutions. For example, the majority of licensing revenues came from a handful of institutions, and at those institutions, it was only a small number of licenses that generated the bulk of these revenues (Powers 2006). In fact, the technology transfer offices at most universities “barely break even” (Powell et al. 2007, p. 128). This inequality is also evident in donations and endowment revenues, where accumulated advantage is the rule (Cantwell 2016; Cheslock and Gianneschi 2008). However, more research is needed on the extent to which stratification is increasing between and within groups of institutions, such as those defined by sector (e.g., public institutions) or institutional type (e.g., research universities) (Taylor and Cantwell 2019). We know there is significant potential for increased stratification across universities as inequality has grown in certain areas of these institutions.

Future Directions: Changing Internal and External Dynamics

In addition to reaching a greater understanding of the changing stratification within the field of higher education institutions the research on institutional manifestations

section also suggests four additional directions for future research at the institutional level. First, a number of researchers have warned that privatization can unbalance institutions, or to put it another way, cause them to start pursuing socially undesirable behaviors (Hearn 2006; Hirsch 1999; Weisbrod et al. 2008). The implicit recognition that these statements make is that revenues drive behaviors and missions as has been demonstrated in the nonprofit finance literature (e.g., Fischer et al. 2011; Froelich 1999). There has been concern about this within the higher education literature in the work on institutional diversity and academic or mission drift (Barringer and Jaquette 2018; Harris 2013; Harris and Ellis 2019; Jaquette 2013; Morgan 1998). However, we know little about if and how privatization is leading to drift within these institutions, and perhaps more interestingly how this differs across institutional sectors and types. Addressing this limitation in the literature would provide empirical evidence on two central questions about the impacts of privatization, specifically (1) does it lead to homogenization or differentiation across universities and (2) has the new normal of privatization fundamentally altered the nature and conditions (e.g., changed the level of competition, increased institutional stratification) of the organizational field of higher education as a whole. Ascertaining answers to both of these questions, while also important in their own right, has the added benefit of laying the foundation for better understanding the consequences of privatization for students, faculty, and the other key stakeholders of higher education which we elaborate on in more detail below.

Understanding how these changes have affected the internal structure and stratification of colleges and universities is an additional direction for future research. It has been widely acknowledged within the literature that a number of these behaviors, in particular research commercialization and changes in both academic structure and internal resource allocations, have privileged certain departments over others with those departments that are already successful usually receiving preference (Pfeffer and Salancik 1974; Powell et al. 2007; Rosinger et al. 2016a; Slaughter 1993; Taylor et al. 2013; Volk et al. 2001). There is also inequality in the extent to which different academic units are utilizing contingent faculty (Hurlburt and McGarrah 2017a; Weisbrod et al. 2008). These differences are due to variations in the proximity of units to the market, potentials for research patents, and administrator preferences (Hearn 2007; Slaughter and Leslie 1997; Slaughter and Rhoades 2004). However, the individual faculty and departments also have agency in this, these units and those within them can make different decisions on privatization activities that they wish to engage in (St. John and Priest 2006). However, we know very little about why academic units choose to engage in certain behaviors but not others. Addressing this limitation by studying academic units and their decision-making structures would help us to obtain a better understanding of the role of faculty, department chairs, and deans in the process of privatization and in so doing help us to understand the mechanisms by which this impacts academic structures and behaviors as well as the internal stratification of universities.

We also do not have a clear understanding of the impact this increased within-institution stratification has for these institutions, which suggests a third future direction for research. Specifically, we know a number of the factors that have led

to increased internal stratification (e.g., Gumpert 2000; Pfeffer and Salancik 1974), but have less understanding of the consequences or effects of stratification. For example, what is the impact of the increased stratification between units (i.e., departments or colleges and schools) within universities having on the culture and structure of these institutions? Is the structure becoming even more loosely coupled and are some units become more tightly coupled as they are facing increasing hierarchies around them? Does this create tensions within the existing cultures of these institutions? Is the culture within the institution overall changing to accommodate these shifts or is there a proliferation of subcultures? Does this increase the complexity of governance within these institutions? If so how? Research that addresses these questions, and others, about the consequences of these increasing inequalities will address the impact of this shift for the conditions of work faced by those within these institutions and that have the potential to impact faculty retention, student culture, and the nature of academic work.

It is also clear from the research above that privatization has fundamentally, at least for a number of institutions, altered the boundaries of these organizations both shifting and expanding them (Barringer and Slaughter 2016; Gumpert and Snyderman 2006; Slaughter and Rhoades 2004). However, as with the increased internal stratification, we do not have a clear sense of what these boundary shifts mean for the structure and governance of these institutions. For example, how have the trustee connections outlined above changed the nature of the governance and policies of these institutions, if at all? How much do these boundary shifts vary across institutions and what does that mean for differences in the governance of different institutional types? Is there a point at which these organizations will become too big, diverse, and unwieldy for effective governance? Does this vary depending on the institutional mission or type of the organizations? Addressing some of these questions will allow us to better ascertain the consequences of privatization, and again more clearly articulate the mechanisms by which it is influencing various aspects of university behaviors. This, while useful in its own right, again also lays the foundation for obtaining a better understanding of the impacts of these changes wrought by privatization on the individuals and stakeholders of these institutions which we turn to next.

Future Directions: Implications for Constituents Within Higher Education Institutions

There are also implications for the individuals within these institutions that remain underexplored. We first address the implications for access, equity, and student-level inequality before turning to the implications for faculty. It is important to, within both of these strands, recognize and incorporate the institutional level because, as we argue and show above, privatization looks different both across and within institutions therefore it is necessary to account for these organizational-level differences as we study the impact of privatization on students, faculty and other groups.

A number of scholars have argued that privatization is, or has the potential, to increase barriers to access and decrease equity for students (Eckel and Morphet

2009b; Hossler 2006; St. John and Priest 2006). For example, as McDonough and Fann put it “with the spread of privatization, resources information, and cultural capital are accumulated further by those who already have them, admissions criteria become more demanding as wealth students receive assistance and coaching, and equality of college opportunities becomes further out of reach” (McDonough and Fann 2007, p. 84). Jaquette and Curs (2015) have shown that declining state appropriations leads to increased recruitment of out-of-state students which could decrease access for in-state students. Posselt et al. (2012) showed that admissions selectivity increased between 1972 and 2004, such that despite increasing levels of preparedness, racial inequality has been maintained in selective college enrollments during this period. Despite these arguments and evidence, we still lack a complete picture of how privatization is impacting student access, equity, and on a distinct but related note, the quality of the education they are receiving that these institutions. Further research in this area that more clearly explicates the mechanisms by which privatization is impacting institutional financial aid, selectivity criteria, student recruitment, the availability of educational offerings, as well as their delivery and quality would allow us to ascertain the effects of privatization on one of the key stakeholders of higher education institutions, students.

Faculty have also been affected by privatization, specifically as we discussed above in terms of the nature of their work and in hiring practices in both the institutional and sub-institutional manifestation sections above (Eckel and Morphew 2009a; Slaughter and Leslie 1997; Slaughter et al. 2004). However, despite this work, there are still a number of questions that remain about how privatization is manifested in the working conditions and lives of faculty. For example, we lack a full understanding of the nature of the lives of part-time and contingent faculty and how this relates to the lives of full-time faculty, as well as the relationships between these groups (Rhoades 2007). We also know little about “how faculty collectively wield and resist the exercise of power at the level of departments, colleges, universities and municipal or state systems of higher education institutions” (Rhoades 2007, p. 123). This means we have only a minimal understanding of how faculty are internalizing, adapting (or not) to the new normal of privatization, and what this means for how they conceptualize their work (Rhoades 2007). Furthermore, picking up on another theme from above, we do not have a good sense of how privatization has impacted the nature of faculty work outside of research universities. Much of the work on faculty has focused on these institutions; however, as we note above, privatization looks very different across different institutional types so focusing on faculty at other types of institutions could fill a fundamental gap in the literature on how privatization impacts the nature of faculty work.

Methodological Innovations

As we make an explicit call to return to research in this area, and outline the future directions above, we also want to highlight the various methodological approaches used to date in this work and suggest three methodological approaches that will be particularly helpful in reinvigorating research on privatization.

Overall, there have been a variety of methods utilized to study both privatization and its various manifestations. These fall into three broad camps. First, and perhaps unsurprisingly, the work that focuses on the financial manifestations, as well as much of the state-level manifestations, utilizes quantitative research techniques and frequently, though not always, relies on available secondary data, such as the Integrated Postsecondary Education Data System (IPEDS), the Beginning Postsecondary Students (BPS) Study, and the National Postsecondary Student Aid Study (NPSAS) (e.g., Barringer 2016; Jaquette and Curs 2015; Posselt et al. 2012). A second methodological strand within this work is quantitative research that either relies exclusively or in part on original data collection. This includes, for example, a number of the articles cited above that explore trustees' connections and their impacts on the behavior of research universities (e.g., Mathies and Slaughter 2013; Slaughter et al. 2014), the work on the role of foundations (McClure et al. 2017b), and the research on internal resource allocations within institutions (e.g., Pfeffer and Salancik 1974; Volk et al. 2001). The third and final methodological strand in this literature is the qualitative work, usually using case studies or comparative case studies (qualitative and quantitative), which relies on a variety of types of data including, but not limited to, interviews, document analysis, and historical analysis (e.g., Gumport 1993; Rosinger et al. 2016b; Slaughter et al. 2004).

While these three methodological strands have added a richness and diversity of perspectives to the research on privatization, we argue that to address the future directions for research in this area different approaches will also need to be incorporated. Specifically, based on the future directions for research outlined above, and the current state of the literature, we advocate for the utilization of four methodological approaches in the future research on this area: (1) mixed methods research techniques, (2) relational approaches, (3) methods that focus on capturing variation within populations, and (4) research using causal inference. We discuss each in turn below. This is of course not to say that other approaches are also not warranted (e.g., exclusively qualitative work) but rather that based on the directions for future research we outline above these four approaches would be particularly useful.

First, more research on privatization that combines qualitative and quantitative methods, either as part of a single paper or within a single project that results in a body of work across multiple papers, allows for the iterative nature of these methods to complement and enhance each other. Mixed methods research such as this would allow for the investigation of both the breadth of behaviors (e.g., via a quantitative analysis of a large group of institutions) and the depth (e.g., exploring a small subset of cases from the larger analysis in some depth), which is necessary for exploring and understanding complex phenomena such as privatization. This complexity is difficult to capture using either exclusively quantitative or exclusively qualitative approaches.

Second, we also call for more research that capitalizes on the fundamentally interrelated process of privatization and the interconnectedness both of organizations (both higher education institutions and those they are related to outside of higher education (e.g., state governments, corporations, ANPOs)) and levels (e.g., state

policy impacts institutions and institutions impact state policy). In order to account for and empirically evaluate these connections, a methodological approach that is specifically designed to see these patterns, such as social network analysis, is needed. Both qualitative (e.g., Barringer and Riffe 2018) and quantitative (e.g., McClure et al. 2017b; Metcalfe 2006) social network analyses conceptualize and map these relationships and their impact. This is useful to utilize for a topic such as privatization where the connections between institutions are increasingly central to understanding the dynamics at play within the field and also within institutions. However, even beyond the specific techniques of analysis, this approach and its associated literature and theories, which focus on the position of organizations and individuals within a field or web of connections (e.g., Biancani and McFarland 2013; Burt 1992; Granovetter 1985), is useful as we seek to better conceptualize the changing boundaries, interrelationships, and cross-level interactions of the forces and manifestations of privatization.

Third, we suggest using methods that are specifically designed to capture variation within a population and parse that out in meaningful ways, such as cluster analysis, latent class analysis, or multilevel latent class analysis. Given the variation in the ways in which universities are engaging in privatization, traditional quantitative techniques that focus on averages are problematic as they are not ideal for understanding populations that contain distinct subpopulations. These traditional methods, of course, can be adapted to study this in various ways through interactions and comparisons across a series of regression models for different groups of institutions (e.g., Leslie et al. 2012; Taylor et al. 2018). However, utilizing techniques such as latent class analysis and cluster analysis (e.g., Barringer et al. 2019; Barringer 2016; Rosinger et al. 2016b; Taylor and Cantwell 2019) allow researchers to empirically determine the specific groups within a larger population based on factors of interest and then analyze those groups as distinct subpopulations thus capitalizing on the variation within the population while not losing the ability to engage in quantitative work and the benefits that this can entail.

Fourth, we propose that privatization research use more techniques that infer causation (e.g., instrumental variable and difference-in-differences regression, and synthetic control methods). The literature indicates that, although quantitative studies of institutional or state finances are common, there has been limited application of techniques that show how one variable causes a particular effect. In fact, some have questioned whether state disinvestment is responsible for tuition increases precisely due to the lack of causal research designs (Cooper 2017). Webber's (2017) study of tuition pass-through rates provides an example of how causal research designs can respond to such critiques and provide empirical evidence of how privatization affects institutions and various constituents. There is room for causal research to help establish the influence between levels of privatization and the effects of privatization on various constituents.

In short, our synthesis of this disparate and complex literature points to a number of limitations but also opens up a number of directions for future research. These future directions of research that we have outlined on privatization, as well as our

call to engage in work that is focused on, or accounts for, the organizational-level, clearly establish the need for additional research in this area.

Conclusion

The collective discourse that has addressed privatization in higher education is comprised of a rich array of participants who have penned thoughtfully diverse pieces for nearly three decades. This group includes scholars of sociology, education, and other social scientists that have empirically examined its various manifestations, humanities scholars concerned about the type of citizen higher education produces, economists who have evaluated its diffusion of policies and return on investment, university executives confronted with securing sufficient financial resources, policymakers tasked with the responsibility of ensuring efficient monetary oversight, and alumni who mortgaged their future in order to shoulder the consistently rising price of postsecondary tuition. In this chapter, we have attempted to capture the rich complexity of the privatization literature while simultaneously bringing its disjointed diversity into a more coherent whole with our multilevel framework.

Through our multilevel framework, we acknowledged broader economic, political, and sociocultural forces that catalyzed the privatization of higher education. The changes, that commenced in the final decades of the twentieth century, were preceded by five historical eras whereby each progressively strengthened differences between the public and private sectors of higher education. Moreover, these changes were brought about by four distinct processes – commercialization, corporatization, financialization, and marketization – that interact with one another in a dynamic manner within and across multiple levels of manifestations and analysis. While prior studies on privatization advanced our understanding of a specific national, state, institutional, or sub-institutional level, our multilevel framework highlights that the embedded nature of these multiple levels collectively comprise a broader interrelated organizational ecosystem that more accurately reflects the complexity and diversity of this phenomenon occurring in US higher education.

Greater understanding often presents greater opportunities for action, and we responded, in kind, with opportunistic calls for scholars and practitioners act at multiple levels through research, policy creation, and local practice. We underscored that collective and coordinated actions across multiple levels of society will begin to help confront the increasing inequality that exists among institutional types, particularly in areas of donations, endowment returns, research commercialization, and alternative revenue streams. The pervasive financial disparity – whether among institutions or individuals – is not a sustainable position to maintain one of the most notable strengths of the US system of higher education, its diversity. Such resource inequalities can only persist for a given period of time before their deleterious effects become more widespread. We hope that a further understanding of the complexity of privatization prompts further action in the form of research, policy creation, and practice to address this pressing matter.

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A Primer for Interpreting and Designing Difference-in-Differences Studies in Higher Education Research

12

Fernando Furquim, Daniel Corral, and Nicholas Hillman

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Abstract

Though randomized control trials continue to serve as the “gold standard” of causal inference, they are neither feasible nor desirable in numerous instances.

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Even in the absence of randomized trials, higher education researchers have at their disposal several statistical tools for estimating causal relationships. One such method is difference-in-differences, a powerful and intuitive approach to causal evaluation that exploits variation in the timing and coverage of policies. The method lends itself well to studying higher education policies and initiatives, as these frequently diffuse over time and across space in ways that may permit for causal inference. Difference-in-differences has become one of the most widely used methods for causal inference in higher education research. We use this chapter to introduce new researchers to this method with an overview of difference-in-differences models, common threats to their validity, and robustness checks. We then present extensions of the method, including event study models and variation in treatment timing. We illustrate these methods throughout the chapter by analyzing the effect of hurricanes on enrollment at affected colleges using data from the Integrated Postsecondary Education Data System and provide Stata code for replication of the analysis.

Keywords

Policy evaluation · Causal inference · Quasi-experimental design · Natural experiments · Counterfactuals · Difference-in-differences · Event study models · Parallel trends assumptions · Fixed effects models · Variation in treatment timing · Heterogeneous effects · Robustness checks · Multiple comparison groups · Clustered and bootstrapped standard errors · Hurricane Katrina · Geography of college choice · Enrollment trends

Introduction

Hurricane Katrina was one of the most catastrophic natural disasters in the United States' history. Nearly 2,000 lives were tragically lost, over 200,000 homes were destroyed, and countless lives were affected because of the hurricane's damage (Deryugina et al. 2018). The damage did not just come in the form of severe winds and flooding but through the subsequent environmental, housing, and public health infrastructure that needed to be repaired and rebuilt across the Gulf Coast region (Kates et al. 2006; Vigdor 2008). Katrina made immediate and lasting impacts on the Gulf Coast but especially in New Orleans, Louisiana, which was at the epicenter of the hurricane. Approximately, 70% of the city's 455,000 residents evacuated before the hurricane made landfall (Fussell 2015) and now – over a decade later – the population remains below pre-Katrina levels at 393,000.

The hurricane has also had lasting effects on the city's education system, perhaps most notably with the state's decision to convert its most troubled public schools into charter schools (Strauss 2018). But the hurricane's effects on education were also felt by its local colleges and universities, as many institutions were severely damaged by the storm and some even shuttered after the storm. According to a special report commissioned by the American Association of University Professors, the hurricane

was “the most serious disruption of American higher education in the nation’s history” (Savoie et al. 2007, p. 61), because it destroyed hundreds of campus buildings, caused over \$500 billion in property damages, displaced thousands of students and employees, and shuttered the operations of campuses. Colleges directly in the path of the hurricane – Southern University at New Orleans, the University of New Orleans, Xavier University, and Dillard University – were harmed the most. Dillard University, for example, shut down for the fall semester but reopened in January 2006, holding classes in the Hilton New Orleans Riverside Hotel (Johnson and Rainey 2007). Even campuses located “uptown” and subject to little property damage – including Tulane University, Loyola University, and Our Lady of Holy Cross College – faced “enormous operating losses when the students, faculty members, and services they relied on disappeared” (Mangan and O’Leary 2010). In the 15 years since Katrina, the colleges and universities of the New Orleans area have made much progress toward recovery, though setbacks and opportunities for further renewal still remain (Bumphus and Royal 2007).

The immediate and lasting effects of Hurricane Katrina on affected peoples and communities can hardly be fully measured, though social scientists across disciplines have sought to understand numerous dimensions of the consequences of the storm. Researchers have estimated the impact of the hurricane on a wide range of outcomes including labor market participation (Groen and Polivka 2008), personal earnings (Deryugina et al. 2018), mental health (Galea et al. 2007), migration patterns (DeWaard et al. 2016), and standardized test scores (Sacerdote 2012). Higher education researchers have studied the implications of Katrina for affected community colleges (Bumphus and Royal 2007) and historically black colleges and universities (Johnson and Rainey 2007), as well as its effects on student success (Ladd et al. 2007).

The efforts and commitments of students, policymakers, community partners, faculty members, administrators, and a host of other individuals and groups that enabled affected institutions to reopen are incredibly instructive for higher education leadership studies, policymaking, planning, and evaluation. It is this last point that the current chapter is designed to advance, where we use Hurricane Katrina as a case study to illustrate and implement the “difference-in-differences” (DID) research design. This research design can help researchers, policymakers, and administrators evaluate the effects of events and policy changes or, as in the case of New Orleans, to monitor the extent of recovery that has taken place over time.

Identifying Effects of the Hurricane

If one wanted to evaluate the impact Hurricane Katrina had on New Orleans college enrollments, they could simply compare enrollment levels before and after the hurricane. Doing so would show that the average New Orleans colleges enrolled 1,823 fewer students when comparing 2004–2005 (before) to 2005–2006 (after), as shown in Fig. 1.

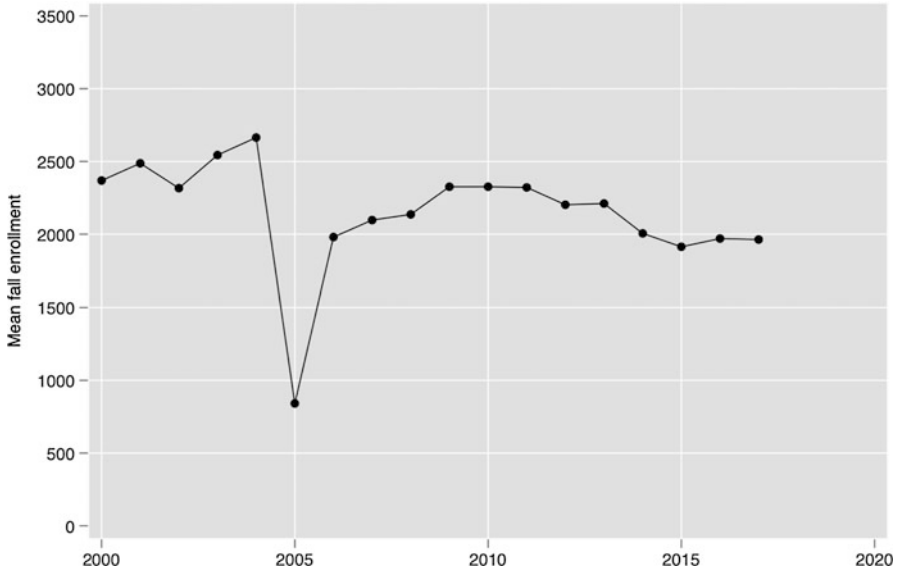


Fig. 1 Fall enrollment levels for colleges in New Orleans. (Source: U.S. Department of Education)

In many policy and planning situations, this is exactly the kind of analysis that takes place in estimating the impact of a particular event or change. While instructive, a simple year-to-year change does not tell the full picture of an event's immediate or long-term impact unless the analyst is willing to make some important and restrictive assumptions. This is where the DID technique becomes useful – it is designed to improve upon this simple before and after approach by comparing this pre-post change for one affected group (e.g., New Orleans colleges) to the change over the same period for an unaffected group (e.g., other southern colleges in large cities) over time. The DID method makes use of the pre-hurricane period and of the unaffected institutions to construct a counterfactual enrollment outcome for colleges in New Orleans in the post-Katrina period. This counterfactual or potential outcome (Rubin 2005) is the appropriate contrast to the observed outcome that tells us the effect of the hurricane on enrollments.

We illustrate this simple example below. Figure 2 adds a plot of the trend for other southern colleges. Before Katrina, one could imagine colleges and universities in New Orleans and in surrounding areas following a similar enrollment trend. It is possible that enrollment levels differ between the two groups, but for our purposes, the more important aspect of the graph is the trend in enrollment, which appears quite similar for both groups. In the absence of Hurricane Katrina, we may reasonably expect that enrollment trends in colleges located in New Orleans would have continued uninterrupted – and the deviation from this trend is an avenue for estimating the effect of Katrina on enrollment at affected colleges.

Adding a comparison group (plausibly unaffected by the storm) and measuring their outcomes (e.g., enrollment) over the same time period (before *and* after the

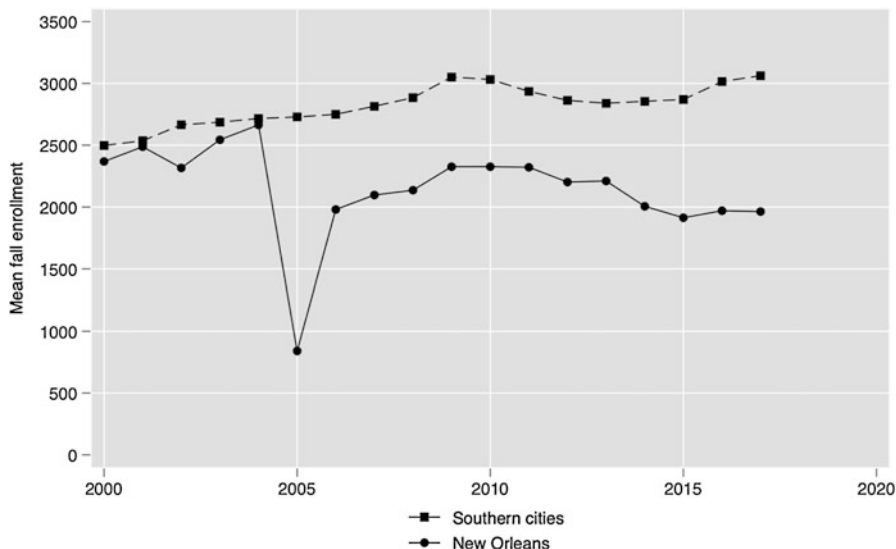


Fig. 2 Fall enrollment for colleges in New Orleans and other southern cities. (Source: U.S. Department of Education)

hurricane) offers a more compelling estimate of the impact Hurricane Katrina had on New Orleans colleges. DID allows researchers to examine just how different New Orleans' colleges were in terms of enrollments (over time) compared to other southern colleges, allowing institutional leaders, researchers, planners, and policymakers to monitor and measure recovery efforts. This relatively easy comparative approach exploits two differences, offering more nuance over the simple pre-post comparison (i.e., a single difference). In our example, the pre- and post-hurricane comparison only for affected institutions (Fig. 1) represents a single difference approach, where we can only capture causal effects under strict assumptions we will discuss later (e.g., in a randomized control trial). But by adding a second difference (Fig. 2's addition of unaffected cities), DID can yield causal parameters based on the appropriate construction of a counterfactual outcome drawn from the (plausibly random) variation in the timing and exposure to a treatment (or hurricane).

In higher education policy research, the DID technique has come to be increasingly popular and well suited for answering causal questions. We document the use of DID in published articles from 2005 through 2018 in Fig. 3. We do so by counting the number of articles explicitly implementing "difference-in-differences" analyses in three leading higher education journals (*Journal of Higher Education*, *Research in Higher Education*, and *Review of Higher Education*) and three leading education journals (*Educational Evaluation and Policy Analysis*, *American Educational Research Journal*, and *Educational Researcher*). Between 2005 and 2018, we found 83 articles in these 6 journals using DID, with the majority of studies ($n = 64$) published just in the past 3 years.

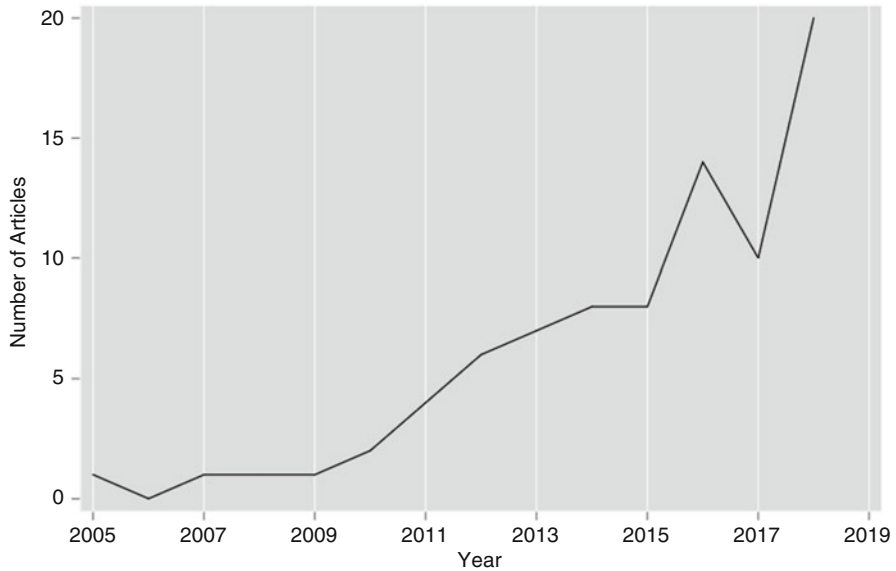


Fig. 3 Number of articles published using difference-in-differences methods across six journals. *Notes:* Count includes unique articles reporting use of “difference-in-differences” in *American Educational Research Journal*, *Educational Evaluation and Policy Analysis*, *Educational Researcher*, *Journal of Higher Education*, *Research in Higher Education*, and *Review of Higher Education*. (Source: Authors’ calculations from database searches)

This growth in the use of DID methods occurs in the context of a broader “credibility revolution” in the social sciences that emphasizes causal inference in empirical research. In the field of education in particular, the U. S. Department of Education’s Institute for Education Statistics has codified quality of evidence standards for making causal inferences (Angrist 2004). These IES guidelines, as applied to the *What Works Clearinghouse*, emphasize that randomized control trials (RCTs) are the most unambiguous design for establishing causal relationships even as RCTs still face significant barriers in many settings. Researchers have brought to bear several quasi-experimental research designs to observational data (as opposed to data from experiments) to draw out causal parameters. The term “quasi-experimental” covers a wide range of methods, many of which have been discussed in prior editions of this handbook such as propensity score matching (Reynolds and DesJardins 2009), fixed effects regression (Zhang 2010), regression discontinuity (McCall and Bielby 2012), and instrumental variables (Bielby et al. 2013).

Even with so many methods at our disposal, difference-in-differences is an appealing approach because of its simplicity and the relative parsimony of conditions that must be met for a DID study to yield valid causal estimates – making difference-in-differences “perhaps the most widely applicable quasi-experimental research design” in the social sciences (Goodman-Bacon 2018, p. 39). For several years, scholars across the social sciences (primarily in economics and public policy) have applied and extended the DID design in a number of research areas

(for examples, see Bertrand et al. (2004) and St. Clair and Cook (2015)). At the same time, however, recent developments on the econometric properties of DID have raised important concerns about its application that higher education researchers will need to consider (Athey and Imbens 2018; Bertrand et al. 2004; Goodman-Bacon 2018; Strezhnev 2018). Our goal in this chapter is not only to introduce readers to the DID method but to contextualize this introduction with these recent developments on the method and to discuss strategies for continually improving the implementation of DID in higher education research.

That higher education scholars have readily embraced this technique is a positive development for the field; after all, disentangling correlation from causation is a high priority for education research and can advance the field's methodological and theoretical boundaries. Doing so should develop new knowledge that will ultimately help inform policy and practice. There are promises – but also pitfalls – when using DID, so this chapter is intended to introduce readers to the DID technique using an empirical example, discuss key identifying assumptions, and highlight the limitations and cautions that researchers should bear in mind when applying the method.

The sections of this chapter alternate between presenting the DID framework and applying it to the effect of hurricanes on institutional enrollments. We begin with the canonical DID model in its two-group by two-period form – its simplest and likely most familiar application. We then estimate the average treatment effect of Hurricane Katrina on enrollments at New Orleans colleges and universities, which we hope illustrates the method well. We then go over several robustness checks that probe how well our initial estimates hold. Following this section, we introduce two important extensions of DID: DID with variation in the timing of treatment or event of interest, and event study models. We close the chapter by highlighting some of the key steps researchers should take when conducting a DID study and providing some sample code (in Stata) used for the analysis implemented as reference.

Canonical Difference-in-Differences

When researchers cannot randomly assign participants to a treatment and control group, as is done in experimental designs and randomized control trials, they often turn to quasi-experimental research designs to attempt to replicate the desirable properties of random assignment. When external shocks affect some individuals or groups, but not others, under specific conditions this may provide a design that is as good as randomization, meaning researchers have the ingredients for estimating causal effects. In the parlance of quasi-experimental design, these external shocks are often called “natural experiments” and can serve as a plausible source of exogenous variation by exposing some participants to a given treatment. A hurricane is a clear example of a natural experiment because it is an external shock that participants did not manipulate or have control over – the very self-selection problems randomized control trials are designed to solve. Some people and places will be exposed to the

treatment, whereas others will not; under conditions we discuss later, natural experiments can effectively cut time in two to compare differences in the exposed (treated) and not-exposed (comparison) groups before and after an event takes place. If the difference can plausibly be attributed to the treatment, then researchers might find the DID technique to be a useful tool for evaluating the effects of natural experiments such as policy changes or, as in this chapter, natural disasters.

For the canonical difference-in-differences, the researcher must first understand the nature of the treatment and explain what it was and when it occurred. After doing so, they should clearly explain who was exposed (i.e., the treatment condition) and who was not exposed (i.e., the counterfactual condition) to the treatment. This latter step sets up the counterfactual condition, where we are able to observe what could have plausibly occurred in the absence of a treatment. Since someone cannot simultaneously be exposed *and not exposed* to the treatment, it is impossible to truly know what would have happened in the absence of a treatment. Because of this, researchers must identify plausible counterfactual conditions where those not exposed could have been but, for as-good-as random reasons, were not. Doing this will help the researcher identify the counterfactual condition or the potential outcome to the treatment by defining a sensible comparison group and identifying the control variables relevant to isolating the treatment effect.

Had the treated group not been exposed to the treatment, we would expect that group to follow the same trend in outcome experienced by the comparison group in the posttreatment period. If their trends do diverge after the treatment, then it is possible the treatment itself caused that divergence. In the next several pages, we go over some of the ways in which DID is used to estimate a causal effect and how researchers can probe the credibility of the causality alleged.

Consider Fig. 4, which is a graphical example of the canonical DID. Here we have two groups – the treated (dashed line) and comparison (solid line) – and two time periods (pre- and posttreatment), with 0 indicating the time in which the event, intervention, or policy of interest took effect. In this stylized example, the outcomes for both groups follow similar, parallel trends leading up to when the treatment occurred at time 0. The dotted line displays the potential outcome or counterfactual for the treated group; that is, the outcome that group would experience had they not been subjected to the treatment. This potential outcome is derived from the parallel trends that we assume exists between the treated and comparison groups. We see a very small upward shift for the comparison group in the posttreatment period, which we have labeled the second difference, and a large downward shift in the outcome for the treated group. It is the difference between these two differences that allows us to identify the treatment effect using difference-in-differences, so long as we can satisfy ourselves that the dotted line is the correct counterfactual.

After determining the treatment and comparison group and defining the pre- and posttreatment periods, a researcher should collect data and produce a simple DID means table to measure the average difference between treated and comparison groups to begin assessing the magnitude and direction of a treatment effect. Here, the DID estimator (δ) takes the difference in mean outcomes for the treated group (T)

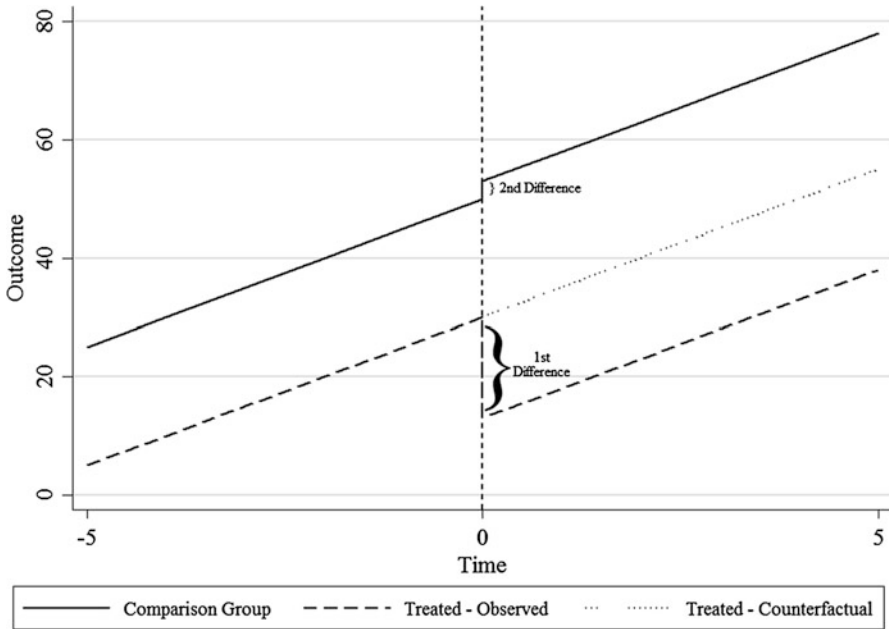


Fig. 4 Graphical representation of difference-in-differences

before (0) and after (1) the treatment, $(\bar{Y}_1^T - \bar{Y}_0^T)$. It does the same for the comparison group (C), where $(\bar{Y}_1^C - \bar{Y}_0^C)$ represents the difference in that group’s mean outcome before (0) and after (1) the treatment, as shown in Eq. 1:

$$\delta_{DID} = (\bar{Y}_1^T - \bar{Y}_0^T) - (\bar{Y}_1^C - \bar{Y}_0^C) \tag{1}$$

Table 1 is an alternative way to display the very same information from Eq. 1. In this table, the researcher would populate the first column with the average outcome for the treatment (T) and comparison (C) groups during the pretreatment period, denoted with the subscript 0. Then in the second column, they would populate the cells with the average outcome for treatment and comparison groups during the posttreatment period, denoted with the subscript 1. Note that each element of Eq. 1 maps to a cell in Table 1, and each also maps to the graphical representation in Fig. 4. The third column calculates the *Pre* and *Post* difference for each group where the bottom-right cell provides the average treatment effect, which can be estimated using regression-based methods.

DID in regression form. Table 1 is parsimonious in capturing the intuition of DID, but researchers are most likely to implement such an analysis in a regression framework. A regression-based difference-in-differences model allows researchers

Table 1 The difference-in-differences estimator in tabular format

	Pre	Post	Difference
Treatment	\bar{Y}_0^T	\bar{Y}_1^T	$(\bar{Y}_1^T - \bar{Y}_0^T)$
Comparison	\bar{Y}_0^C	\bar{Y}_1^C	$(\bar{Y}_1^C - \bar{Y}_0^C)$
Difference	$\bar{Y}_0^T - \bar{Y}_0^C$	$\bar{Y}_1^T - \bar{Y}_1^C$	$\delta_{DID} = (\bar{Y}_1^T - \bar{Y}_0^T) - (\bar{Y}_1^C - \bar{Y}_0^C)$

Notes: Subscripts indicate pre- and post-intervention and superscripts indicate comparison and treatment groups

more flexibility, for example, to include additional control variables in the regression and to specify the form of the standard errors. The following regression equation captures all of the elements from Table 1:

$$Y_{it} = \alpha + \beta Treat_i + \gamma Post_t + \delta_{DID} Treat_i * Post_t + \varepsilon_{it} \tag{2}$$

In Eq. 2, Y_{it} represents the outcome (e.g., enrollments) for institution i in period t . The variable $Treat_i$ is a dichotomous indicator of the treatment status; treated units have a value of one and comparison units have a value of zero, the latter serving as the reference category. $Post_t$ is another indicator variable taking a value of one for all time periods t such that $t \geq t^*$, with t^* representing the time period when the treatment takes effect. The third term is an interaction of these two variables and takes a value of one for all observations of units in the treatment group in post-treatment periods. The main coefficient of interest capturing the DID-based treatment effect is δ_{DID} , or the average treatment effect. The last term is the error, which we spend some time discussing later in the chapter. Using the earlier notation and substituting in the regression equation, we can see that the coefficient of interest is exactly what Table 1 provides:

$$\begin{aligned} \delta_{DID} &= (\bar{Y}_1^T - \bar{Y}_0^T) - (\bar{Y}_1^C - \bar{Y}_0^C) \\ \delta_{DID} &= ((\alpha + \beta + \gamma + \delta) - (\alpha + \beta)) - ((\alpha + \gamma) - (\alpha)) \\ \delta_{DID} &= (\gamma + \delta) - \gamma \\ \delta_{DID} &= \delta \end{aligned} \tag{3}$$

Now that we have a regression-based DID equation, we can easily add covariates to the model. In Eq. 4, we introduce Cov as a vector of control variables and θ as the associated vector of coefficients:

$$Y_{it} = \alpha + \beta Treat_i + \gamma Post_t + \delta_{DID} Treat_i * Post_t + \theta Cov + \varepsilon_{it} \tag{4}$$

The addition of covariates further conditions the outcome variable. This addition may be motivated by a desire to increase the precision of the treatment estimates; to

eliminate any confounding variables and correctly specify the model; to investigate possible heterogeneity of treatment effects; and to attempt to remedy issues related to divergent trends because the parallel trends assumption refers to the *conditional* (not unconditional) trends.

The second point (correct specification of the model) is particularly important if we believe that some covariate is correlated *both* with the outcome variable and with treatment eligibility, introducing confounding to our estimate. Thus, we want to include as controls “those exogenous variables that lead to differential trends and that are not influenced by the treatment” (Lechner 2010, p. 188). It is crucial that any covariate included in the model not be affected by the treatment; control variables that themselves change as a result of the treatment will bias the treatment effect estimate (Lechner 2010). As with any regression specification, it is important to consider what covariates to include, justify them conceptually and empirically, and test what impact if any they have on overall findings. While covariates can increase precision, their inclusion can also result in a DID coefficient of different sign, magnitude, or significance from the baseline DID model. Understanding why covariates may affect the parameter of interest is incumbent on the research in order to establish the credibility of any claimed causal effect (Angrist and Pischke 2009).

Standard errors. Specifying the regression model correctly goes a long way toward ensuring an internally valid estimate of treatment effects. Just as important for inference, of course, is the correct specification of standard errors so that they are consistent. Thus far, we have introduced DID as having (at minimum) two groups and two time periods, requiring either a panel or repeated cross section for estimation. Bertrand et al. (2004) noted that serial correlation – correlation of the model’s error over time – is commonly present in DID analyses; errors are also likely to be correlated within groups. Left unaddressed, these issues can result in severely underestimated standard errors, which could lead to type 1 errors – rejecting the null hypothesis when it is in fact true. In the next section, we illustrate this point in our running example of Hurricane Katrina and point readers to additional published articles that demonstrate various approaches to handling standard errors in DID.

Canonical DID Applied to Hurricane Katrina

Conceptual Background. The geography of college opportunity is a useful lens for understanding how Hurricane Katrina shaped educational opportunities in New Orleans. This framework focuses on the local geographic context of college choice emphasizing the importance of where colleges are located relative to population centers. This supply-side perspective complements traditional college choice theories that tend to focus on demand-side factors (e.g., consumer information, financial aid, academic preparation) that shape educational opportunities (Hillman 2017). If a local community has no colleges nearby, or if its colleges are shuttered by a natural disaster like a hurricane, then even the best academically prepared and well-informed student might not attend simply because no options are available. By

focusing on the local geographic context in which students make college choices, researchers can gain new insights into the role local contexts shape opportunity, and they can investigate how history, racial segregation, and urban planning shape college opportunities (Dache-Gerbino 2018; Rios-Aguilar and Titus 2018).

College choice is highly localized because many students work full-time, care for dependents, or have familial/community commitments making proximity and location key factors in whether and where to attend college (Turley 2009). Using data from the National Postsecondary Student Aid Study, Table 2 provides evidence that 71% of all first-year undergraduates enroll within 25 miles of their home. This result varies by sector, where 82% of community college students attend within 25 miles of home; this proportion drops to 39% for students attending nonprofit 4-year institutions. Even within the public 4-year sector, the majority of students (56%) enroll close to home, suggesting college choice is a highly localized decision for the majority of students. In the year leading up to Hurricane Katrina, nearly three-fourths of all first-year students attending colleges located in the New Orleans metropolitan area were Louisiana residents, illustrating how New Orleans colleges draw from local and statewide markets (U.S. Department of Education 2019).

In New Orleans, many campuses closed during the fall semester of 2005 and reopened in the following spring, creating a temporary shock in the supply of colleges. Current and prospective students who stayed nearby would have to wait for their institution to reopen if they wanted to continue pursuing their education (Johnson and Rainey 2007; Lowe and Rhodes 2012). And even after reopening, colleges were not at their full capacity so could not serve the same number of students they did prior to the storm. Colleges also faced the challenge of out-migration of displaced citizens, making it difficult to recruit faculty to teach, hire staff to administer programs, and ensure the administrative services were back online and functioning (Bumphus and Royal 2007). Shocks in the local supply of colleges can affect whether and where students enroll, as Lapid (2018) found in California where the introduction of new public colleges resulted in more students from nearby high schools enrolling in college. Similarly, shocks to the local economy can shape enrollment but only if colleges have the capacity to respond to those demand-side shifts (Foote and Grosz 2019; Hillman and Orians 2013; Betts and McFarland 1995). For example, automobile plants closed down across metropolitan Detroit, Michigan,

Table 2 Percent of first-year undergraduates, by miles from permanent home address and sector

	Miles from home			
	<25	25–49	50–99	100+
Public 4-year	56%	11%	12%	21%
Private nonprofit 4-year	39%	10%	11%	39%
Public 2-year	82%	9%	3%	6%
Private for profit	77%	8%	4%	11%
Total	71%	10%	6%	13%

Notes: To replicate this table, see https://nces.ed.gov/datalab/index.aspx?ps_x=bcdm22, using the following variables: LOCALRES, SECTOR4, DISTALL, and DISTANCE

Source: U.S. Department of Education

depressing the economy and leading to more students enrolling in community colleges (Hubbard 2018). Alternatively, when local economies are growing and employment opportunities expand, fewer people are likely to enroll in their local colleges (Charles et al. 2018).

By viewing Hurricane Katrina through the lens of geography of opportunity, we can see two main forces are shaping students' enrollment decisions. First, the local metropolitan area experienced a supply-side shock where fewer colleges were available for students, thus limiting their opportunities to enroll. For students who stayed in New Orleans and wanted to take classes after Hurricane Katrina, their options were constrained due to the limited capacity colleges had after the storm. As colleges rebuilt their capacity, they were able to serve more local students. This gets to the second point, which is that people were displaced from their homes and jobs so their demand for education may have fallen in the months (or perhaps years) following Hurricane Katrina. Thousands of current students were displaced during the fall 2005 semester, and they enrolled in other colleges in locales outside of New Orleans or they enrolled nowhere at all and waited for New Orleans colleges to reopen (Ladd et al. 2007). Similarly, the local population decline may have shifted enrollment demand in ways that colleges simply had fewer prospective students to recruit into their academic programs.

Irrespective of these two drivers, the implication of the hurricane for our institution-level analysis is unambiguous: affected colleges should experience a sharp and protracted reduction in enrollment. The analysis in this chapter cannot answer whether enrollment changes were due to supply-side or demand-side effects, but in both cases, these changes can be viewed in light of the local geography of college opportunity where people's investment decisions are not simply a function of their own preferences and priorities but also shaped by what colleges are nearby.

DID Application. Our analyses make use of publicly available data from a few different sources. We use the U.S. Department of Education's Integrated Post-secondary Education Data System (IPEDS) as a source for institutional data including location (which we use to define affected institutions), total enrollment (the outcome variable), and tuition charges. We use data from the Federal Emergency Management Agency (FEMA) to track hurricane-related disaster declarations at the county level (U.S. Department of Homeland Security 2019). Based on this information, we code colleges located in the New Orleans metropolitan statistical area as our *treatment* group ($n = 33$). All other institutions located in metropolitan areas of southern cities not in the path of the hurricane are our initial *comparison* group ($n = 1,276$). To identify southern states, we select all states that are members of the Southern Regional Education Board (SREB) and we use information from the Bureau of Labor Statistics (BLS) and from the U.S. Census Bureau (2018a, b, 2019) to identify the relevant metropolitan statistical areas for analysis. BLS data are also the source for information on local unemployment rates.

To make the treated and comparison groups clearer, Fig. 5 shows the location of these institutions. The DID analytical exercise we are conducting compares the trend in total enrollment among New Orleans colleges to those in the 147 metropolitan statistical areas displayed on the map.

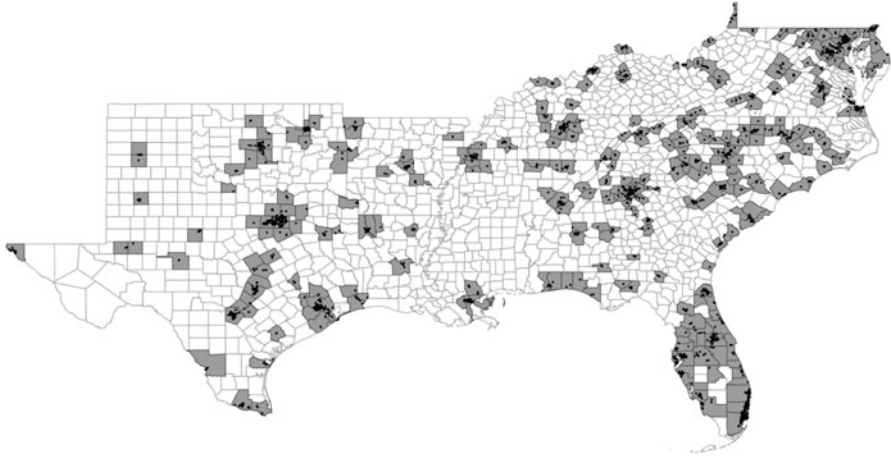


Fig. 5 Location of higher education institutions in Southern Regional Education Board region

Hurricane Katrina made landfall in August of 2005, just before the start of the academic year for most institutions. Thus, we define academic years before 2005–2006 as the pretreatment period, with the post-Katrina period starting from 2005–2006 forward (inclusive). We have constructed a panel that begins in 2000–2001, which gives us five pretreatment years (2000–2001 to 2004–2005) and 13 posttreatment years (2005–2006 to 2017–2018). Hurricane Katrina’s effects were likely greatest in the first years after 2005, but as the city recovered, any negative effects on college enrollments may have slowly diminished over time. One limitation of using a long posttreatment time horizon is that it runs the risk of introducing colleges eventually exposed to similar treatments (e.g., North Carolina colleges hit by Hurricane Irene in 2011) into the comparison group. We address this challenge later when discussing *time-varying treatments* and estimate models that attempt to quantify the effect of multiple hurricanes occurring across years (i.e., with variation in treatment timing).

Depending on the context of the study, researchers should also pay close attention to the length of pre- and posttreatment years. In the context of Hurricane Katrina and the canonical DID model outlined in this section, readers should interpret the results as the long-term average treatment effect of the hurricane over a 13-year recovery period. This long-term effect will underestimate the immediate and shorter-term impacts of the hurricane. To estimate shorter-term effects, we could have restricted the analysis to stop at 2010–2011 or any earlier post-hurricane year. However, doing so is invariably somewhat arbitrary; later we discuss how an *event study* can be used to detect the average annual treatment effect for each individual time period regardless of the length of the posttreatment length period.

Table 3 provides a simple DID means table summarizing average fall enrollments from IPEDS for the two groups before and after Hurricane Katrina. Here, we implement Eq. 1 from earlier, where we observe that colleges in New Orleans enrolled an average of 2,503.8 undergraduates in the pre-Katrina years, but only enrolled an average of 2,061.2 in the 13 years after the hurricane. A similar pre- and post-hurricane

Table 3 A simple difference-in-differences calculation of the impact of Hurricane Katrina on college enrollments in New Orleans

	Pre	Post	Difference
Treatment	2,503.8	2,061.2	-442.6
Comparison	3,531.3	3,439.6	-91.7
Difference			-350.9

Notes: Cells report average enrollment. Post is defined as academic years 2005–2006 onward. Treatment includes affected colleges in New Orleans metropolitan area
 Source: Authors’ calculations from IPEDS

Table 4 Regression-based difference-in-differences calculation of the impact of Hurricane Katrina on college enrollments in New Orleans

	No SE adjustment	Robust SE	Clustered SE
<i>Varying form of standard errors</i>			
Treat X post	-350.93 (719.49)	-350.93 (425.17)	-350.93 (293.51)
Observations	26,480	26,480	26,480
R-squared	0.001	0.001	0.001
<i>Adding controls (clustered SEs throughout)</i>			
Treat X post	-511.01 (575.81)	-1,178.89*** (467.82)	-1,753.18*** (476.22)
Observations	16,425	16,425	16,425
R-squared	0.067	0.959	0.958

Notes: Standard errors in parentheses
 Source: Author’s calculations from IPEDS
 *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, ~ $p < 0.1$

calculation for the comparison group indicates an average decline of only 91.7 students. The bottom-right cell shows a difference-in-differences of -350.9 students, which represents the (unconditional) hurricane’s average treatment effect on New Orleans colleges when compared to colleges located in other southern cities.

We discussed earlier that this tabulation is equivalent to a regression with indicators for treated units (colleges in New Orleans), for the posttreatment period (2005–2006 onward), and an interaction of the two. We report results for this regression in Table 4 below – a regression of the exact form described in Eq. 2.

Based on our explanation thus far, Table 4 should produce a coefficient for the $Treat_i * Post_t$ term that equals the same average treatment effect of -350.9 displayed in Table 3. This is indeed the case; the first column of Table 4 reports the unadjusted standard errors, which are likely inconsistent given the panel nature of the data. That is, these standard errors do not address the fact that observations are not independent – the observations of the same college or university are correlated over time and, as a result, so are the error terms for each institution. The second and third columns use robust and institution-clustered standard errors, respectively. The point estimate for the average treatment affect is of course unaffected across columns. Note, however,

that standard errors do change substantively. Robust standard errors can correct for heteroskedasticity but do not address the clustered nature of the data. The clustered standard errors do account for this correlation and are our preferred specification. However, in situations where the number of clusters is small (e.g., a state-level analysis of a single region of the country), clustering does not perform well (Bertrand et al. 2004) and bootstrapped standard errors may be in order. Because the data are longitudinal, the possibility of autocorrelation also exists. There are several approaches for adjusting standard errors when serial correlation is present, though it remains unclear how to best do so (Angrist and Pischke 2009). Once we introduce fixed effects to this model later in the chapter, an advantage of clustering standard errors this way is that it can also address serial correlation (Liang and Zeger 1986).

The bottom panel of Table 4 introduces additional control variables to the model in the fashion of Eq. 4. We condition the coefficient $Treat_i * Post_t$ on two covariates: institutions' annual tuition charges and the unemployment rate of the metropolitan statistical area where each institution is located. A long body of research has demonstrated that students respond to the price of college when making enrollment decisions (e.g., Dynarski 2003; Hemelt and Marcotte 2011) and that enrollments are countercyclical – rising when the labor market is poor and shrinking when unemployment is low (e.g., Heller 1999; Hillman and Orians 2013).

With these covariates included, we estimate a larger coefficient for the effect of Hurricane Katrina of -511 . Adding covariates can help improve the precision of parameter estimates, but in this case it comes at the expense of reducing the sample size due to missing data. Further, because the data are not necessarily missing at random (i.e., missingness is correlated with enrollment as smaller institutions are more likely to have missing data), it is possible that adding covariates complicates the external validity of the estimate (i.e., what institutions findings generalize to) as well as its internal validity (i.e., exclusion of these institutions may bias estimates). For the sake of simplicity and for illustration of the DID method, we do not address missing data beyond listwise deletion and do not make use of any of the various multiple imputation procedures; however, because missingness can substantially affect certain analyses, researchers may need to consider alternatives to listwise deletion (a helpful and recent overview of this issue can be found in Lall 2016).

In addition to covariates, one might include fixed effects at the institution and/or year level depending on their conceptual framework. The institution fixed effects may be reasonable additions if the researcher has reason to believe estimates may be affected by time-invariant characteristics of institutions that could affect assignment into treatment; all such characteristics (observed and unobserved) would be subsumed by the fixed effects. Year fixed effects might make sense when unobserved trends common to *all* institutions pose a potential threat to identification, such as broad demographic changes and other aggregate time trends. Odds are that such concerns lurk under many applications of DID, so it behooves researchers to seriously consider including these fixed effects. For example, one could estimate the DID model without fixed effects and then iteratively add time, unit, and both fixed effects. If the parameter of interest remains stable across models, one may be somewhat assured that these unobservables do not bias identification. If, however,

the parameter changes across these specifications, one should consider why. In the absence of the fixed effects, what possible omitted unobservables could affect the estimates and why? Are these unobservables related to time (that is, do coefficients change most noticeably once time fixed effects are added) or to units? Are there other covariates that could otherwise capture this time or unit level variation one could include in the model? See Stange (2015) for an example of this discussion of fixed effects in the context of a DID analysis.

Adding fixed effects changes the form of the equation somewhat, as the treatment indicator becomes omitted due to collinearity with the institution fixed effects. However, the main parameter of interest – the interaction term – remains identified. As reported in Table 4, we estimated models that included *only* the two groups of fixed effects as controls, and a model with all fixed effects *and* the other two covariates. These different model specifications indicate that the inclusion of the fixed effects (FEs) affects the coefficient for the treatment effect quite dramatically: accounting for the FEs yields a treatment effect of about $-1,789$. The addition of covariates to the fixed effects specification yields virtually the same coefficient. This pattern suggests that the fixed effects could be quite important: some unobserved factor(s) at the institution- or year-level may be biasing the results of the models that exclude fixed effects. An obvious example of such an unobservable could be the resources (both financial and personnel) that universities could draw on to mitigate the effect of the hurricane. It is also possible that institution-specific characteristics are associated with the intensity with which they experienced the hurricane – some may be located in harder hit areas than others, for example (unlikely when considering only the New Orleans area but certainly plausible when analyzing larger geographic areas). The model with fixed effects seems a more plausible correct specification of the true model, but the researcher can surely prod this more thoroughly than we have in this chapter.

Threats to Identification for the Canonical DID

Although difference-in-differences is a powerful approach to estimate the effect of various policies and initiatives in higher education (or, in the case of this chapter, hurricanes), it nonetheless behooves researchers to conduct numerous robustness checks that probe the interval validity of the estimates. In this section, we examine several robustness checks and apply them to the simple model we have estimated thus far (Eq. 4) and the results that model yielded (Table 4). Although, this model shows an impact, we should consider alternative explanations behind the decline in enrollment observed in Table 4 that are independent of the hurricane. We follow the approach outlined by Shadish et al. (2002), which guides researchers through plausible alternative explanations for the observed difference between treatment and comparison groups that researchers should attempt to rule out. Falsification exercises help identify threats to internal validity so researchers can infer “whether observed variation between A and B reflects a causal relationship from A to B” (Shadish et al. 2002, p. 53). Doing so rules out other plausible explanations that could causally link A to B.

The following paragraphs outline the nine key threats to internal validity laid out by Shadish et al. (2002) that researchers should attend to and discuss in depth when designing any experimental or quasi-experimental study. Doing so has the potential to improve the internal validity of the results, thus improving causal inference, but also help researchers explain the context under which the treatment occurred and to theorize the mechanisms through which A (Hurricane Katrina) causes B (changes in total enrollment at affected institutions) in the DID framework. We present the threats to identification outlined by Shadish et al. (2002) in this section and then, in the next section, conduct some of the robustness checks that can test for these threats in our analysis of the effects of Hurricane Katrina on enrollment at affected colleges.

Temporal precedence requires the cause to come unambiguously before the effect. In our analysis, we use a panel that precedes Hurricane Katrina for 5 years, which provides a measure of the trend in enrollment before the hurricane. The post-Katrina years include measures of the outcome that capture fall enrollment for periods that are after the hurricane per IPEDS reporting guidelines and definitions. That is, the hurricane unambiguously preceded the subsequent measures of enrollment for academic years 2005–2006 onward, so that the temporal order of events should allow for identification of a causal parameter. Note, however, that there could be some exceptions to temporal precedence if our study were slightly different. Fall enrollments are typically measured in October, so other hurricanes occurring later in hurricane season (which extends into November) could not plausibly affect fall enrollment for the academic year in which it occurs; any effect would only be observed the following year.

Selection problems occur when treated, and comparison groups are systematically different from one another at the beginning of the treatment. If this occurs, then it can be difficult to disentangle whether the treatment caused an outcome or whether the outcome is an artifact of initial group differences. For example, when participants self-select into a treatment, it is difficult to know whether the same forces that drew them into the treatment in the first place (e.g., motivation) are the same forces causing their outcome regardless of the treatment.

In our analysis, colleges did not self-select to be hit by Hurricane Katrina; however, selection could still be a problem if New Orleans colleges are systematically different from other colleges in the nation. To address this concern, our analysis will compare New Orleans colleges to similar colleges in other southern states that might have similar exposure to hurricanes. Other alternatives include controlling for baseline characteristics that differ between the two groups in a regression or using some form of matching procedure to construct a comparison group similar to the treated group on observable characteristics. For example, Andrews et al. (2010) used a propensity score matching approach when evaluating the effects of the Kalamazoo Promise program on college choice. This method allowed them to construct a comparable comparison group and address self-selection issues by matching and including in their estimates only public high schools that had similar baseline characteristics to the treated schools; however, it is important to note that this method only addresses selection issues based on observable features of high schools.

History refers to all other events that occurred at the start of the treatment or during the treatment period and could have affected the outcome. We focus on Hurricane Katrina in our analysis, but several other tropical storms and hurricanes have since affected the Gulf Coast region and New Orleans. Most notably, Hurricane Rita (another Category 5 hurricane) made landfall on September 24, 2005, just weeks after Hurricane Katrina. While we are inclined to attribute all enrollment effects to Hurricane Katrina, it is plausible that Hurricane Rita also played a role in shaping the outcomes we observe. Smaller but still significant natural disasters several years later – such as Hurricane Isaac, which made landfall on August 28, 2012 – could have also contributed to the outcomes we observed in the years after Hurricane Katrina. We deal with these confounders in our extensions of the DID model, discussed later in the chapter. Researchers must be attentive to confounders and either interpret their results as a “treatment package” if they are unable to isolate the single treatment event (e.g., Hurricanes Katrina and Rita). Alternatively, they can design the study in ways that adequately measure subsequent events occurring after the treatment period (e.g., Hurricane Isaac). In both cases, history is a key threat to the internal validity in our study and we will introduce a number of robustness checks and design strategies to help address these concerns in order to draw plausibly causal inference.

Maturation refers to changes that naturally occur over time regardless of the treatment condition. For example, if the treatment group was on an upward trend before the treatment while the comparison group was trending downward, then these secular trends (as opposed to the treatment itself) may explain the difference in later outcomes. An extension of this particular threat is Ashenfelter’s (1978) work on the effect of job training programs on earnings. Ashenfelter found that earnings of program participants dipped just before they entered the program – an artifact of individuals who lose their jobs choosing to then participate in such programs. This is particularly problematic because the very outcome of interest (earnings) changes in a way that drives individuals into the treatment group. One of the foundational assumptions of DID is that selection into the intervention is *not* determined by the outcome at hand. In the context of job training programs, ignoring the dynamic process by which individuals select into those programs, as is done with the “conventional difference-in-difference estimator, do[es] not adequately capture the underlying choices leading to differences in unobserved variables between participants and non-participants” (Heckman and Smith 1999, p. 313). Heckman and Smith (1999) found that DID estimates of the treatment effect of the Job Training Partnership Act are substantially biased compared to experimental estimates because of this maturation threat.

To address this threat to internal validity, researchers should visually inspect their outcome to ensure both the treatment and comparison groups follow parallel trends before the treatment, and should have a good understanding of the mechanisms selecting treated observations into the treatment. It is impossible to know whether the trends will continue posttreatment, but if they do, then the treatment likely had no measurable effect. In the case of New Orleans, we will demonstrate that the treatment and comparison groups followed similar trends prior to Hurricane Katrina, and we can observe how the enrollment dip occurred only after the “treatment,” followed by a slow recovery in subsequent years. We will also introduce an event

study that helps measure these dynamic variations in the treatment effect over time and to address these secular trends in even greater detail.

Attrition occurs when participants select out of the experiment or otherwise are not tracked for the duration of the analysis. Some participants might stay in the analysis for the entire period while others might leave for any number of reasons. When attrition occurs, researchers need to understand the underlying reason and identify whether there are systematic patterns in attrition. Similar to the concerns about participants self-selecting *into* a treatment, attrition is concerned about selecting *out*. In the case of New Orleans, colleges across the metro area temporarily closed down because of the hurricane, resulting in missing data for some (but not all) New Orleans colleges during the 2005–2006 reporting cycle. This can prove especially problematic if changes to the sample composition are an outcome of the treatment or policy itself – for example, if the permanent closure of some affected institutions was the result of Hurricane Katrina, the attrition of these units from the analytical sample would understate the effects of the hurricane on enrollments.

Attrition is a potentially relevant concern both for the treatment and comparison groups. If the composition of the comparison group is changing over time, where some units are observed or included in the comparison sample for some periods but not others, it is possible that these compositional changes confound treatment effect estimates. For example, suppose we construct comparison groups based on Carnegie classification. It is plausible for a comparison institution to switch Carnegie classification as a result of an event such as a hurricane affecting nearby institutions and diverting, say, a large pool of doctoral students to the comparison school and away from affected universities. Such a scenario may result in institutions in the comparison group not being observed consistently over the duration of a panel, and researchers need to determine the extent to which this presents problems in the context of their study. This threat also relates to the stable unit treatment value (SUTVA) assumption that we discuss later.

Regression occurs when observations that are farthest from the average tend to get closer to the average over time, regardless of treatment condition. For example, if a student scored low on an exam and was selected for a treatment intervention because of that low score, then an evaluator might not be able to tell whether it was the treatment or simply regression that led to their new (presumably higher) score after the treatment. This is conceptually similar to the maturation threat previously discussed, but with an emphasis on outliers – those farthest away from the mean will regress closer to the mean over time. In New Orleans, we need to make sure that, for whatever reason, the colleges selected for the analysis are not in the tails of the enrollment distribution in the pretreatment period; if they are, then the results could be driven at least in part by regression toward the mean.

Testing refers to the repeated exposure to a treatment where the outcome is driven not by the individual treatment but by the accumulation of multiple treatments. When people or organizations have repeated experience with a particular intervention, they become more familiar with it and can adapt accordingly. In the case of New Orleans, it is possible that repeated exposure to hurricanes (of any size or scale) could make colleges in the metro area more resilient or prepared for emergencies. But this analysis

focuses on a rare and particularly powerful type of hurricane (Category 5) that is not only infrequent but is also unique in terms of the “treatment” because every hurricane has its own unique landfall pattern and intensity. Accordingly, we do not see Hurricane Katrina as part of any repeated event, which minimizes our concern for testing threats to internal validity.

Instrumentation problems occur when a measure changes and, due to that change, makes it appear that there is a treatment effect. If a licensure exam changed the way it measures a specific proficiency before and after a treatment, then we cannot determine if the treatment caused the change or if these improvements are artifacts of the new way the outcomes are measured. In the case of New Orleans, both the treatment and the outcome are measured the same way throughout the analysis period. A Category 5 hurricane is still the most severe hurricane whether it occurred in 2000 or in 2017. Similarly, fall enrollments are collected and reported with a standard definition over time, leading us to have little concern that instrumentation will threaten the internal validity of our model. Note, however, that it is possible for the nature of hurricanes themselves to change. More recent hurricane seasons, for example, have been characterized by particularly destructive flooding from storm surges that can occur even for hurricanes below Category 5. Hurricane Florence made landfall as a Category 1 storm but led to a great deal of flooding in the Carolinas, for example (Jarvie and Landsberg 2018).

Finally, Shadish et al. (2002) explain how these individual threats often work in combination with one another, resulting in *additive and interactive effects*. In our analysis, we are primarily concerned with history, maturation, and attrition threats. When describing the nature of these threats, we should consider how they might reinforce one another. Hypothetically, a small New Orleans college may have been on the brink of closure (*history*) and unable to reopen after Hurricane Katrina (*attrition*). In this case, we would have a history-attrition effect, where both the pretreatment trend and the later attrition together could threaten the model’s internal validity, because it is plausible that this college would have closed down due to being on the brink of closure, regardless of the hurricane. Hurricane Katrina could have sped up their closure, but we may not be able to attribute its closure solely to that event. This brief example illustrates the possibility that threats can be combined in ways that complicate cause and effect.

After identifying a study’s most vulnerable threats, researchers should go through the exercise of combining these threats to assess the extent to which they are additive versus independent. Doing so should help researchers identify creative solutions for modeling and designing their study; attending to these nuances should also help researchers more carefully describe the pathway between cause and effect and, just as importantly, to identify an internally valid “true” treatment effect.

Robustness Checks for the Canonical DID

After carefully examining these threats to internal validity, researchers should begin to think about – and ultimately rule out – any plausible alternative explanations

causing the observed effect. This falsification process requires researchers to “identify a causal claim and then. . . generate and examine plausible alternative explanations that might falsify the claim” (Shadish et al. 2002, p.15). Robustness checks are done in the spirit of falsification, where the researcher generates and examines a number of different models and design strategies that, taken together, are intended to increase our confidence in our main findings or preferred specification. If, for example, a study found positive effects but offered very few robustness checks, then the conclusions would be on weaker ground than one that found consistently significant effects after a battery of robustness checks. In the next few paragraphs, we provide an overview of some common robustness checks and then conduct some of them on our analysis. These robustness checks are guided by some of the common threats to identification we discussed above and by the assumptions that must hold for DID to yield causal estimates.

We have already touched on two of these assumptions: that trends are parallel and that assignment to the treatment is not correlated with the outcome being measured. The latter may seem obvious in some cases, such as in our analysis of the effect of Hurricane Katrina on postsecondary enrollments. Affected colleges clearly were not affected by the hurricane because of the number of students attending. But in many cases, it may be important to consider whether there is some relationship between the outcome and how treated units elect into the treated group. For example, researchers interested in the effect of affirmative action bans on diversity of student bodies (e.g., Cortes 2010; Garces 2013; Garces and Mickey-Pabello 2015) have employed DID methods to capture the causal relationship between these bans and subsequent enrollment patterns for students of color. But recent research by Baker (2019) has argued that a decline in the proportion of white students at flagship public institutions is associated with an increased likelihood of an eventual affirmative action ban. Could this mean that the outcome of interest (proportion of students of color) is correlated or deterministic of selection into the treated group? Finally, as is typically the case in causal inference methods, there is an assumption of a stable unit treatment value (SUTVA; see Angrist et al. 1996 for a more complete discussion). This assumption has two constituent parts: that the outcome of each unit is not affected by the treatment status of other units, and that there is a single treatment without any unobserved variations. The SUTVA assumption is necessary for the construction of counterfactuals in the potential outcomes framework and thus is virtually inescapable. If the outcome of a unit is affected by others’ treatment status (spillover effects), it becomes harder to define a plausible potential outcome for treated units – and the same is true if the treatment varies in unobserved ways (Lechner 2010).

Visual inspection of parallel trends. The parallel trends assumption, also called the “common trends assumption,” is essential to causal identification with DID. We provided a graphical representation of this in Fig. 4, but the assumption can be specified more formally. The parallel trends assumption implies that absent the treatment, the trend of the comparison group applies to the treated group. In a potential outcomes framework (Rubin 1974), this assumption concerns the *unobserved* (and unobservable) scenario under which the treatment does not occur. In other words, the potential outcome is the enrollment at colleges and universities in

New Orleans in the years since 2005 had the hurricane not occurred. Holland's (1986) fundamental problem of causal inference is that we cannot observe both potential outcomes for any institution. The parallel trends assumption is invoked so that the trend for the comparison group can serve as the counterfactual for the treated group in the posttreatment period.

In Fig. 4, the parallel trend is represented by the dotted portion of the $T = 1$ line. It is an assumption about the posttreatment period for treated units *in the absence of* treatment – an unobservable counterfactual condition that precludes any direct test of the parallel trends assumption. We have already discussed the importance of visually inspecting trends before the treatment, but an important limitation of commonly used visual inspections is that parallel pretreatment trends are at best suggestive evidence for parallel counterfactual trends – in fact, since the parallel trends assumption concerns an unobservable counterfactual, parallel pre-trends are insufficient evidence that the parallel trends assumption holds (Kahn-Lang and Lang 2019). There are a few approaches available to the researcher when concerned about pre-trends, outlined below. Before undertaking any of these approaches, a crucial step is for the researcher to reflect on why the parallel trends assumption may not hold – the conceptual reason behind violations of this assumption may lead researchers to adopt different solutions to their particular setting.

Controlling for trends. A visual inspection of pre-trends, and even a more formal test for the presence of divergent pre-trends in an event study design (discussed later), may still be insufficient to convince the researcher that the parallel trends assumption holds. To address concerns about parallel trends, researchers can allow each unit to have its own intercept *and* its own linear time trends in the outcome measure. If a researcher is concerned that the groups might have different growth trajectories, then incorporating some measure of trends into their regression equation can help satisfy the parallel trend assumption. To include unit-specific trends in a model, one would interact the unit fixed effects with a continuous (linear) time trend:

$$Y_{it} = \alpha + \beta Treat_i + \gamma Post_t + \delta_{DID} Treat_i * Post_t + \theta_i + \sum_i (\theta_i * t) + \varepsilon_{it} \quad (5)$$

The model now includes in the summation term an interaction of the fixed effect with time (and the main effect for institutions, indicated by θ_i).

It now estimates the treatment effect conditional on these unit trends and unit fixed effects; either of these additions may capture important omitted variables like any unobservable characteristic of the units themselves or differences in the secular trend in the outcome across units, thus reducing estimation bias. Without these additions to the model, those unobservables and secular trends would be omitted variables and thus a potential source of bias in the estimated treatment effect. Equation 5 is a flexible model that could be robust to concerns about the absence of parallel pre-trends, but there are at least two potential downsides to this specification.

First, unit-specific trends carry a high cost in terms of degrees of freedom, reducing the statistical power of the analysis to detect the “true” effect. This loss of power could

be particularly problematic for shorter panels with many units. Second, Eq. 5 imposes a *linear* trends assumption that the researcher ought to investigate. It is certainly feasible to make the trends more flexible (for example, adding yet another set of interactions between institution fixed effects and polynomials of time) if warranted, though again there is a hefty cost in terms of lost degrees of freedom. Second, we run the risk of overcontrolling in the model as higher-order or otherwise highly flexible specifications of the unit trends enter the regression, leaving little unexplained variation left for estimating the effect of an intervention or policy or otherwise obscuring that effect (Kahn-Lang and Lang 2019; Wolfers 2006).

Even with these downsides, many DID studies make use of unit-level trends, at least as a check of the main results (Wolfers 2006). Researchers can also control for trends at levels higher than the treated unit, which are less costly in terms of degrees of freedom and may be less likely to result in overcontrolling in the regression. Instead of institution-specific trends, in our running example, it may make sense to control for trends at a unit of geography such as state- or region-specific trends. For example, if the dynamics of college enrollment at the state level pose a potential concern for our analysis, we could include a set of state-fixed effects and interact those with a linear time trend or with state-year fixed effects (that is, a fixed effect for each state-year combination). This would account for time-varying determinants or influences on the outcome variable that are common to all institutions within that geographic area (see Stange 2015, for an application of this in the context of variation in the demand for specific degrees across regions).

Multiple comparison groups. Because parallel trends are a central assumption of DID, the choice of comparison group should reflect this concern. In other words, the appropriateness of a comparison group in a DID analysis lies largely on whether the trend for the comparison group makes for a compelling counterfactual to the treated units. The composition of the comparison group can lead researchers to be unsure if their results are truly a result of the intervention or policy in question due to choosing a comparison group based on convenience afforded through the availability of data. There are two general approaches to try to remedy this problem – the researcher could identify geographically proximate comparison groups, which we have done thus far. Alternatively, researchers could construct statistically proximate comparison groups (Shadish et al. 2002) using a variety of methods such as propensity score matching or synthetic control methods.

Geography-based control groups appear highly prevalent in higher education research. Many of the studies of performance-based funding policies, for example, use national samples where all states or neighboring states not adopting these policies serve as comparisons (see Tandberg and Hillman 2014; Hillman et al. 2015, 2018). The same is generally true for analyses of affirmative action bans (Cortes 2010; Garces 2013; Garces and Mickey-Pabello 2015). At times, however, such broad comparison groups may not make sense – some institutions or states may provide unconvincing counterfactuals or are so fundamentally different from “treated” units that they do not make a sensible contrast. One way to mitigate this threat to internal validity is to use a local match to create comparison groups (Shadish et al. 2002, 2008). Local matches refer to choosing comparison groups

that are geographically located near the comparison group and share similar characteristics. It is important to consider whether local matches imply a threat of spillover effects. In our analysis, for example, it is certainly possible that comparison institutions near the New Orleans area experienced an increase in enrollment as a result of the hurricane driving students from affected New Orleans institutions toward unaffected nearby colleges and universities.

Focal matches, on the other hand, are derived from statistical matching techniques including propensity score matching, coarsened exact matching, or synthetic control methods, all of which have been applied in a DID framework (e.g., Abadie et al. 2010; Arkhangelsky et al. 2019; Hillman et al. 2014; Jaquette et al. 2018). In the DID framework, Hillman et al. (2014) used coarsened exact matching to evaluate performance funding in Pennsylvania, creating comparison groups with similar pretreatment patterns to address their concerns about internal validity. Jaquette et al. (2018) employed synthetic control methods to study how responsibility-centered management affects tuition revenue. Regardless of the strategy a researcher employs, the goal is to create balanced treatment and comparison groups based on observable characteristics, for example, characteristics that predict treatment, which will ostensibly reduce sensitivity to model misspecification (St. Clair and Cook 2015). Matching in this context is used to ensure treatment and comparison groups have similar observables in the pre-treatment period, ideally mimicking randomized assignment in an experiment (Iacus et al. 2012; St. Clair and Cook 2015). Yet another possibility is to match purely on the pretreatment outcome trends, although Daw and Hatfield (2018) have noted that doing so introduces the risk of regression to the mean if more extreme values of the outcome are more likely to experience the treatment. For example, if states adopting a particular policy do so because they face dire budgetary constraints that limit higher education allocations, matched comparison states will similarly be outliers and may regress to the mean over time, biasing treatment estimates.

Placebo tests. Placebo tests have become more common in DID analyses. These tests can take multiple forms, but they most commonly involve using a placebo treatment timing or placebo treatment group. Estimating the treatment effect after changing the treatment timing provides the researcher further evidence as to whether the effect can be attributed to the treatment or is due to some unknown confounder. To do this, one can take all data from the pretreatment period (and exclude all posttreatment observations), assign one of the pretreatment time periods as the placebo treatment period, and estimate a treatment effect for the placebo itself. If a researcher finds a similar effect in magnitude and significance when using a placebo treatment period, one would be hard-pressed to attribute the change in outcome to the intervention of interest. In other words, suppose we shift the timing of the treatment to a period before Katrina actually occurred, say the year 2001. Would we still find a significant effect on enrollments before 2005? If we do, this would suggest that some unobserved other cause may be confounding our estimate for the effect of Katrina on enrollments. A variation on this approach is to exclude all treated observations and then recode some comparison observations as treated (see Gertler et al. 2016, for additional details and guidance).

Nonequivalent outcome. Yet another variation of a placebo test is to evaluate whether the treatment has an effect on an unrelated outcome. Based on subject-matter theory, one can anticipate that certain interventions will affect some outcomes over others. Depending on the study’s context, there are outcomes that should not plausibly be affected by the treatment. These outcomes give researchers an additional falsification test, where they can replace the original outcome with any nonequivalent outcome (Shadish et al. 2002). If the DID model estimates yield an effect for the outcome of interest but shows no evidence of such an effect for the nonequivalent outcome, then the researcher can make a stronger argument that their results are causal. On the other hand, if a researcher finds an effect for the original outcome – and they find an effect for the nonequivalent outcome – then their results may be model dependent, conceptually underdeveloped, or driven by some omitted variable since only the original outcome should produce significant effects (Gertler et al. 2016).

Robustness Checks Applied to Hurricane Katrina

This section implements some of the robustness checks outlined above, beginning with multiple comparison groups, followed by visualizing the parallel trends assumption and the addition of trends. It concludes with two falsification tests – placebo test and nonequivalent outcomes – to illustrate a wide range of robustness checks researchers should consider when designing their DID models.

Table 5 displays the average treatment effects of Hurricane Katrina when comparing New Orleans colleges to three different geographic (“local matching”) comparison groups and one statistically derived comparison group (“focal matching”). The first column displays the same results displayed earlier, where New Orleans colleges enrolled between 351 and 511 fewer students than other southern colleges

Table 5 Regression-based difference-in-differences calculation of the impact of Hurricane Katrina on college enrollments in New Orleans with multiple comparison groups

	SREB	Nationwide	Neighboring states	Matching
Treat X post	−350.93	−721.76*	−845.63**	−1,239.98**
	(293.51)	(288.10)	(302.14)	(339.27)
Observations	26,480	124,686	9,584	5,037
R-squared	0.001	0.001	0.001	0.020
<i>With controls</i>				
Treat X post	−511.01	−1,008.51*	−1,295.54*	−1,286.33~
	(575.81)	(492.84)	(570.70)	(547.88)
Observations	16,425	76,174	5,222	3,884
R-squared	0.067	0.028	0.064	0.066

Notes: Institution-clustered standard errors in parenthesis. Controls include tuition and local unemployment. Neighboring states include Arkansas, Mississippi, and Texas. Matching is based on a model predicting treatment as a function of enrollment

Source: Author’s calculations from IPEDS

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, ~ $p < 0.1$

after Hurricane Katrina. The top panel indicates the unconditional results, with no covariates included, and the bottom panel conditions on tuition and unemployment rates. All models cluster standard errors at the institution level. The second and third columns display results when comparing New Orleans colleges to the rest of the United States and then only to bordering states (AR, TX, and MS), where the hurricane’s effect ranges between -722 and $-1,296$ across the four specifications. The final column matched New Orleans colleges to institutions that were not exposed to the hurricane but had statistically similar enrollment sizes before 2005. This model specification generated average treatment effects similar in magnitude to the other three columns, between $-1,240$ and $-1,286$.

By comparing New Orleans to multiple counterfactual conditions, researchers are able to offer a robust estimate of potential impacts. In this example, we observe negative effects for three of the four comparison groups, with southern states being the only comparison group where we find no significant differences. Figure 6 displays enrollment trends for the four comparison groups, illustrating how New Orleans colleges and their comparison groups followed similar pretreatment enrollment trends. However, each of these comparison groups appears to have experienced relatively flat average enrollments after 2005, whereas New Orleans area colleges experienced a steady decline in enrollments.

The next robustness check we conducted was to include time trends. For the sake of simplicity, we introduced these as state-specific trends. These variables account for any unobserved time-variant trends within states that could affect outcomes, such as secular demographic changes, state-level changes in the demand for higher education, or trends in high school graduation rates that might affect the pool of

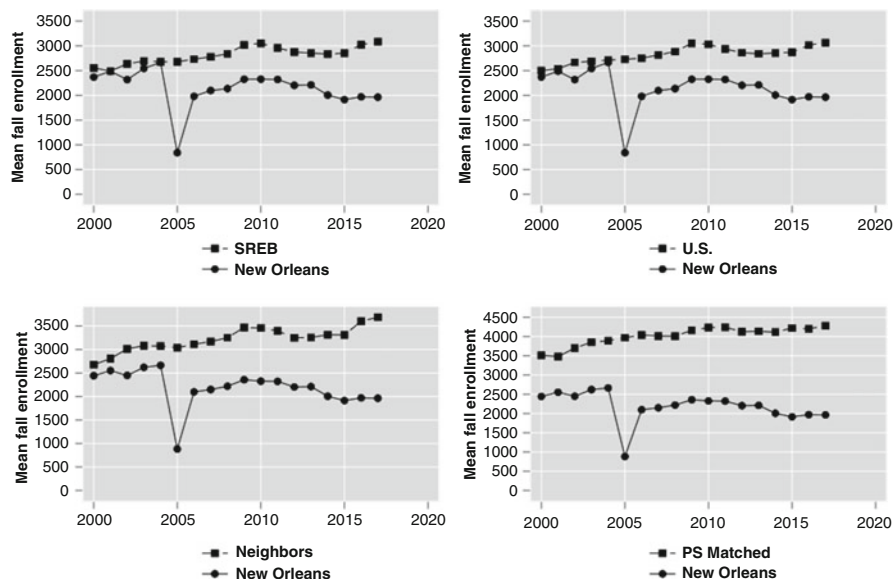


Fig. 6 Enrollment trends for multiple comparison groups

potential college-goers. Interestingly, the inclusion of state-specific trends results in a larger (in absolute terms) treatment effect estimate that is almost twice the initial coefficient: -655.38 . Interpreting why such a large change in magnitude occurs requires further research into the specific conditions of treatment and comparison states around the time of Hurricane Katrina. Note, however, that once we include institution and year fixed effects in addition to the model with state-specific trends, the coefficient of interest becomes -764.69 . The model with fixed effects only yields $-1,164.45$. Clearly, these are substantively important modeling choices. For purposes of this illustrative examples, it suffices to say that identifying the “true” treatment effect requires careful consideration of these analytical decisions. Even among the coauthors of this chapter, we occasionally disagreed on what specification was our “preferred” model (Table 6).

We turn next to placebo tests. We have estimated placebo models where we simulate the treatment to occur not in 2005 but a few years before and after (2003, 2004, 2006, and 2007). Because we know Hurricane Katrina happened in 2005, we exclude data past 2005 for the placebo years 2003 and 2004 to avoid detecting the effect of the treatment. Similarly, the panel for placebo years 2006 and 2007 begins in 2006. We expect to find no treatment effect on college enrollments for any of the placebo years. Our findings are reported in Table 7. For the sake of simplicity, we

Table 6 Regression-based difference-in-differences calculation of the impact of Hurricane Katrina on college enrollments in New Orleans with state-specific trends

	Trends	FEs only	Trends and FEs
Treat X post	-655.38^* (267.54)	$-1,164.45^{***}$ (291.34)	-764.69^{**} (269.06)
Observations	26,480	26,480	26,480
R-squared	0.01	0.96	0.96

Notes: Institution-clustered standard errors in parenthesis. Trends are state-specific and include the main state and time effects. Fixed effects are at the institution and year levels

Source: Author’s calculations from IPEDS

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, $\sim p < 0.1$

Table 7 Placebo test results for change to treatment timing

	2003	2004	2005	2006	2007
<i>Without covariates</i>					
Treat X post	28.60 (114.50)	74.26 (125.30)	-721.76^* (288.10)	-785.45 (686.09)	-16.64 (223.22)
<i>With covariates</i>					
Treat X post	76.24 (234.87)	219.00 (320.73)	$-1,008.51^*$ (492.84)	$-1,085.17$ (1,181.96)	437.08 (456.55)

Notes: Institution-clustered standard errors in parenthesis. Controls include tuition and local unemployment. The years of analysis stop at 2005 for 2003 and 2004 placebo tests, while placebo tests after 2005 start at 2005

Source: Author’s calculations from IPEDS

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, $\sim p < 0.1$

Table 8 Placebo test results for nonequivalent outcomes

	SREB	US	Neighbor	PSM
<i>In-state tuition</i>				
Treat X post	233.19	142.04	1,217.54	-45.79
	(998.36)	(994.07)	(1,021.89)	(1,053.00)
<i>Out-of-state tuition</i>				
Treat X post	-207.63	-219.10	646.27	-655.38
	(969.08)	(964.40)	(992.47)	(1,024.46)

Notes: Institution-clustered standard errors in parenthesis

Source: Author's calculations from IPEDS

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, ~ $p < 0.1$

conducted the placebo test analysis only on the national sample, though researchers could easily do so across the multiple comparison groups. The treatment effect estimates are statistically indistinguishable from zero for all placebo years either before or after 2005. The only significant finding is associated with the treatment occurring in 2005, which is what we would expect if our baseline specification is in fact picking up a true causal relationship. We also conducted these placebo tests with covariates incorporated into the model, with consistent findings.

Table 8 reports results for a placebo test of nonequivalent outcomes. Because Hurricane Katrina was such a critical event, it may not be immediately clear what outcomes may plausibly have been unaffected. In this test, we used in- and out-of-state tuition as the nonequivalent outcome. Our reasoning is that tuition is typically set prior to the academic year when students enroll, thus preceding the hurricane in 2005. Given the complex budgetary and political processes involved in tuition setting at public institutions and the competitive enrollment environment of private college and universities, we reasoned that published tuition prices would not be materially affected by the hurricane – though of course these processes may vary across institutions or change in response to the hurricane. For example, tuition could be raised to increase revenue at institutions needing to replace damaged facilities. Nonetheless, tuition-setting is typically done in the context of a wide array of factors that we believe mitigate the likelihood the hurricane could affect tuition. Table 8 bears this out as we observed no significant effect of the hurricane on in- or out-of-state tuition across four different comparison groups. This result lends support to the contention that our enrollment model is detecting a causal effect of the hurricane on enrollment.

Modeling Difference-in-Differences with Time-Varying Treatments

Thus far, we have constrained our analysis to a single event that occurred at a single point in time. This is analytically convenient as it bifurcates time into two distinct periods, pre- and post-Katrina. Occasionally, higher education researchers may encounter such cases and be able to apply the standard two-group, two-period difference-in-differences method to evaluate a policy. One prominent example of

such an analysis is Dynarski's (2003) work on the effects of aid on college enrollment. She used a discrete change in the generosity of the Social Security Student Benefit program, which provided money to the children of deceased or disabled parents while those children attended college. The benefit program was eliminated in 1981, causing a sharp drop in the funds available to many individuals and diverting some of them away from college enrollment.

Higher education researchers are unlikely to encounter such scenarios since higher education policy is highly decentralized and changes over time. States hold a great deal of discretion on what policies to adopt and when to adopt them, while institutions similarly enjoy significant autonomy over their own practices. As a result, we frequently face situations where the timing of a policy or event of interest varies among treated units (in fact, this likely comprises the vast majority of applications of DID; see Goodman-Bacon 2018). When faced with variation in the timing of treatment, we can estimate a DID as a two-way fixed effects model:

$$Y_{it} = \alpha + \beta Treat_{it} + \gamma_i + \delta_t + \varepsilon_{it} \quad (6)$$

There are two notable additions and associated omissions in this parametrization relative to Eqs. 2 and 4. Note the addition of unit (γ_i) and time (δ_t) fixed effects. We no longer have an indicator for units in the treated group because it is collinear with the unit fixed effects. This is because the treatment indicator is invariant at the unit level – and more generally, any time-invariant characteristic of the treated units is subsumed by the unit fixed effects. The indicator for posttreatment time periods is also omitted because the model includes time fixed effects and because the post-treatment time period varies across units. This variation in the timing is finally reflected in a modification to what was formerly the interaction of the two omitted indicators, which is replaced by $Treat_{it}$. This new term is a time-varying treatment indicator. It takes a value of one for all observations of unit i when it is subject to the treatment ($t \geq t_i^*$, where t_i^* is the period in which unit i was first treated).

Though the parametrization is different, the intuition remains the same: treatment effects are identified off of “switchers”: those units that become treated during the observation period. Note that this means that some units will serve as comparison observations sometimes and treated units at later times, while other units will always serve as comparisons. Any unit that began the treatment before the start of the panel is not used in the model. The underlying assumption remains that of parallel/common trends: in the absence of the treatment, each unit would have continued on its trend. As with the model displayed in Eq. 4, this specification can also accommodate any covariates needed to account for possible confounders or to increasing precision.

Time-Varying Treatments Applied to Gulf Coast Hurricanes

Researchers in higher education are very likely to encounter situations where they have to estimate such models; time-varying treatments are probably more likely to be

encountered compared to the standard two-group, two-period DID. Hurricane Katrina was unique both in its destructive force and in the cascading failures of numerous agencies to respond to the disaster appropriately and in time. But at least some colleges and universities are affected by hurricanes virtually every hurricane season. Hurricane Katrina was preceded by Hurricane Ivan in 2004 and then quickly by Hurricane Rita in September of 2005. Since then, hurricanes in 2011 (Irene), 2012 (Isaac), 2013 (Sandy), 2016 (Matthew), and 2017 (Harvey) have also impacted metropolitan areas hosting colleges and universities; climate change may further expose institutions of higher education to such extreme weather events.

As Hurricane Katrina was rather unique, we may want to estimate the effect of hurricanes on enrollment more broadly, accounting for multiple hurricanes in order to improve the external validity of our findings. For illustrative purposes, we have conducted just such an analysis. We again used a panel of institutions spanning 2000–2017 and defined fall enrollment as the outcome variable. We expanded the definition of the treatment group to accommodate additional hurricanes. Specifically, we defined institutions as being exposed to a hurricane if they are in a metropolitan region that was declared a disaster area because of a hurricane at any point in the 18-year panel. We have also defined the treatment to eventually end, much like policies may. Institutions are arbitrarily defined as exposed to the hurricane when the hurricane makes landfall and for four subsequent years. In other words, the timing of the hurricane “treatment” is allowed to vary across institutions, and the “treatment” switches off 5 years after its start.

Results of this model are reported in Table 9. We find that, on average, hurricanes over this time period reduced enrollment by around 160 students, net of year- and unit-fixed effects. This effect is identified from changes in enrollment *within* institutions after they experience a hurricane event. This is a significantly smaller effect than that identified for Hurricane Katrina that may reflect the unique set of conditions associated with that storm.

Just as in our earlier example, researchers will need to conduct a series of robustness checks to investigate the trustworthiness of DID with variation in

Table 9 Regression results for impact of hurricanes on enrollments at higher education institutions (difference-in-differences)

DV: total enrollment	Coefficient (SEs)
Institution ever in declared hurricane-affected area (1 = yes)	–159.83** (51.86)
Observations	29,353
R-squared	0.960
Institution FE	Yes
Year FE	Yes

Notes: Institution-clustered standard errors in parenthesis. Model includes institution and year fixed effects, and an indicator variable for whether institution is subject to a hurricane at least once between 2000 and 2017

Source: Author’s calculations from IPEDS

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, ~ $p < 0.1$

treatment timing. However, because the timing of the treatment varies, some of the techniques we used to investigate parallel trends become somewhat more complicated. For example, it may not be immediately clear how to visualize pretreatment trends since the treatment timing varies. It is also important to consider variation in the treatment over time and any relevant changes that may occur among comparison group units (all of these issues point to potential violations of SUTVA). The next section discusses event studies, which can be quite useful in these instances where there is variation in the timing of the treatment.

Event Study

The simplicity of DID analyses of the form described in Eqs. 2 and 6 come at a cost. We are constrained to a single average treatment effect for the entire span of the posttreatment period. But over time, the effects of a given policy could vary in several different ways that are of interest to researchers. It is possible for effects to lag policy implementation, sometimes for quite some time. Certain outcomes simply take a long time before they can be observed. An obvious example is graduation. Stange (2015) analyzed how the implementation of tuition differentials affected the distribution of graduates by major. Tuition differentials make certain majors relatively more expensive than others, which could result in students making different choices of what to study and thus changing the share of degrees conferred by major. This article is a fine illustration because the author first uses a DID model to ascertain this effect, finding that differential tuition for engineering programs results in a 1.1 percentage point decrease in the share of degrees conferred in engineering. However, adoption of such a policy should affect student cohorts differently. It is less likely that a rising senior would change majors, for example, than an entering first-year student; the former faces only a single year of tuition differential whereas the latter incurs higher tuition prices for the duration of their studies.

Indeed, Stange's analysis found strong evidence suggesting that this is the case. He estimated models that differentiated between institutions that were early versus late adopters of these tuition differentials; those findings showed that the decline in the share of engineering was largest among institutions with earlier adoption of the tuition differentials. We could similarly expect other policies in higher education to take some time to fully mature and for effects to become clear. An obvious example is the effect of accountability efforts, such as performance-based funding on degree conferrals. Because conferring degrees takes time, the time periods just after policy adoption may not be as relevant as later periods when estimating treatment effects. Such lagged effects may not apply to studies of policies that affect more immediate outcomes, such as the consequences of changes to admissions practices (e.g., bans on affirmative action) or financial aid packaging (e.g., no-loan policies) to the demographic makeup of incoming classes. As Wolfers (2006) wrote, "Any reduced-form or structural analysis that assumes an immediate constant response to a policy shock may be misspecified if actual dynamics are more complex than a simple series break" (p. 1807).

A simple series break is exactly what we have assumed in our models thus far: Eqs. 4 and 6 estimate the effect of a policy as a shift in the intercept of the treated group for the posttreatment period. Researchers must carefully consider the data generating process underlying the outcomes under analysis to determine how best to specify a DID model. The assumption of constant effects may not hold under other scenarios. With multiple posttreatment periods, it is possible for the comparison condition (or “counterfactual”) to change over time.

A prominent example of this may be the expansion of generous financial aid policies among elite institutions. Early adopters of such policies may enroll a larger number of lower-income students in the short run, but competing institutions are likely to also change practices in response (Long 2011). No-loan financial aid policies, first pioneered by Princeton University, quickly diffused across many selective institutions. To the extent that such institutions recruit from and compete for an overlapping and fixed pool of high-achieving low-income students, the effectiveness of this policy is constrained as a zero-sum where (1) no-loan policies become so prevalent as to not serve as a differentiator among highly selective colleges and (2) colleges essentially trade students among themselves (Long 2011).

The same may be true for test-optional admission practices, which have grown exponentially in popularity (Furuta 2017). Belasco et al. (2015) evaluated the effect of test-optional admission on the enrollment of low-income students. Their careful DID analysis found no evidence that such policies achieve their stated goal of increasing access for low-income students who may earn lower scores on standardized tests. But their sample spans from 1992 to 2010, which raises a few potential questions. Over this time period, many institutions adopted test-optional practices; is it reasonable to assume the effect for late adopters is the same as that for early adopters? Students interested in applying to a college that does not consider standardized tests in admission have many more options to choose from in later periods, which may attenuate the effect of the policy on any one single test-optional college or university.

Another potential threat to identification, especially in longer panels with many pre- and posttreatment periods, is the issue of omitted variables. Though we can rely on unit fixed effects to account for time-invariant unobservables of each unit, as the time periods under observation grow, so does the concern that *time-variant* unobservables could bias the estimate. Consider, for example, that states or colleges may pursue multiple initiatives aimed at the same goal. Furquim and Glasener (2017) attempted to estimate the effect of QuestBridge, a program for recruiting high-achieving low-income students, on the incoming class of participating institutions. They noted that their period of observation coincided with the rise of no-loan financial aid policies also aimed at improving access for lower-income student populations, with three-quarters of institutions adopting both policies. Omitting a variable that captures the presence of no-loan policies would mean that its effect on low-income student enrollment is partially absorbed by the QuestBridge treatment indicator, which could significantly bias that point estimate. A parallel exists for test-optional admissions: how has the counterfactual (that is, the practices of comparison institutions) evolved over time, and how might this evolving counterfactual condition affect treatment effect estimates when using a long data panel?

Additionally, policies and initiatives can change over time. There is a wealth of studies analyzing the effectiveness of performance-based funding (PBF) policies on student outcomes, many of which make use of DID methods. A dichotomous indicator for the post-PBF period may not be appropriate, however, if the policy itself undergoes meaningful changes over time, such as changes to funding formulas or sunseting of hold-harmless clauses. Researchers of PBF have been careful to differentiate “1.0” policies from the 1970s and 1980s from more recent “2.0” policies that differ meaningfully from prior practice. But even among these “2.0” policies, policies may vary sufficiently over time to warrant careful consideration of how to specify the treatment variable in a DID analysis.

The DID model introduced in Eq. 2 is powerful and appealing in part because of its simplicity. The extension just presented in Eq. 6, where the timing of the treatment can vary across units, is a more flexible and likely more useful generalization of the two-group, two-period design. It allows us to account for the very frequent scenario in analyses of higher education policies and practices, which diffuse over time and across institutions and states. We have already hinted at several other scenarios that complicate a DID analysis; in addition to variation in treatment timing, researchers frequently run into issues like lagged treatment effects, changes to the treatment itself, heterogeneous treatment effects over time, and unobserved changes to the counterfactual condition. If we are concerned about these issues in our DID analysis (and we surely should be in most all cases), we can use event study specifications to gain additional insight into DID estimates across the duration of the panel.

The “event study” nomenclature has come to be typically associated with research into firms’ stock prices (e.g., Kothari and Warner 2007), but this parametrization can be applied widely to DID studies. The intuition behind an event study is to replace the single $treat_{it}$ term we used in Eq. 6 with a fully saturated set of indicators for leads and lags relative to the timing of treatment. Suppose treatment occurs at time k , which can vary across units:

$$y_{it} = \alpha + \mathbf{x}\beta + \sum_{j=-m}^q \delta_j treat_{it}(t = k + j) + \theta_i + \vartheta_t + \varepsilon_{it} \quad (7)$$

Many of the terms in Eq. 7 are familiar by now: unit and time fixed effects and any other covariates $\mathbf{x}\beta$ warranted by the conceptual framework and research design as needed to account for any confounding variables. The key feature of this event study model is the vector of indicators in the summation term. It includes m leads and q lags of the treatment, yielding one δ_j coefficient for each j th lead or lag of the treatment indicator. The indicators for each lead period relative to treatment yields a treatment effect for each posttreatment period. In contrast, the DID analyses conducted thus far make more restrictive assumptions about the functional form of the treatment effect: a single, constant ATE for all posttreatment periods.

The treatment lead indicators are also useful when assessing the parallel trends assumption. The indicators capture the difference in trends between the treated and comparison units before the treatment occurs. Though the parallel trends assumption

is untestable (as it deals with the unobservable counterfactual), these lead indicators can yield useful point estimates that help us assess whether the pre-trends are plausibly parallel. As we have done thus far, the standard errors are once again clustered at the unit level (assuming this yields enough clusters; we touch on other ways to treat standard errors in coming sections).

Equation 7 is an event study with few assumptions imposed on the treatment effect over time, as a coefficient is estimated for each time period. The event study could be specified more parametrically for ease of interpretability, for example, by allowing effects of the treatment to change linearly over time. Such a specification may make sense if researchers believe the treatment to operate in a specific way; for example, a researcher may theorize that a treatment has no effect during the phase-in period but does in later periods. Lafortune et al. (2018) estimated such a model to study how reforms to school funding affected student achievement. We reproduce Eq. (2) from their paper below for illustration:

$$\theta_{st} = \delta_s + \kappa_t + 1(t > t_s^*)\beta^{jump} + 1(t > t_s^*)(t - t_s^*)\beta^{phasein} + (t - t_s^*)\beta^{trend} + \varepsilon_{st} \quad (8)$$

The outcome is a measure of student achievement. The first two terms are state and year fixed effects. The change to school funding occurs at t_s^* for each state. They estimated β^{jump} as a level change in the outcome that occurs after reform (similar to the standard DID approaches we discussed thus far), along with a $\beta^{phasein}$ term that reflects the annual (linear) change in the outcome after reform and that reflects potential delays in the effect of funding reforms and student achievement, and finally a β^{trend} that reflects (linear) annual changes prior to reform. In other words, their model combines a shift in levels with changes in slopes. This is a more restrictive specification than Eq. 6 because it assumes linearity of the trend pre- and post-reform, while Eq. 6 imposes no such assumption by simply estimating a coefficient for each time period.

A few scholars have applied similar techniques to higher education research. For example, Hillman et al. (2015) studied the effects of performance-based policies on retention and degrees awarded in the state of Washington. Using interaction terms, they modeled the effect on each outcome yearly rather than for the aggregated posttreatment period, though they still constrained the pretreatment period to have a single, pooled average. Li and Kennedy (2018) performed a similar analysis among community colleges nationwide, allowing the posttreatment coefficients to vary while keeping the pretreatment trend held constant. We cannot find any immediately apparent advantage to doing so when one could easily estimate a more flexible event study as outlined in Eq. 6. Stange (2015) used an event study model in addition to DID to investigate the effect of differential tuition pricing on degree production. The event study showed that the effect on degree production for engineering, for example, was most negative 3–4 years post-policy implementation, with quite small effects in the first 2 years. These (and other) examples notwithstanding event study models remain relatively uncommon in higher education scholarship, but they are easily implemented and can meaningfully add to many DID analyses.

Event Study Applied to Hurricane Katrina

We now revisit our analysis of the effect Hurricane Katrina on enrollment at affected institutions using an event study model. We use observations 5 years pre- and post-Katrina (2000 to 2010) to estimate the effect of the hurricane on enrollment by year. Though hurricanes are not one-time events, Katrina was uniquely destructive in 2005 and one would certainly expect it to have lingering effects long after, but those effects could diminish over time in response to recovery efforts throughout the region. The event study allows us to measure exactly that. Results are reported below alongside the DID findings for ease of comparison.

Event study results lend themselves well to visualizations; here we include a graph displaying the point estimate and 95% confidence interval for the treatment effect over time.

Let us walk through this new set of results. Our panel now spans from 2000 to 2010, with the hurricane occurring in 2005. We thus have 5 pre-periods from 2000 to 2004 ($q = 5$) and 6 post-periods from 2005 to 2010 ($m = 6$) for a total of 11 periods. Note that Table 10 and Fig. 7 report only ten coefficients because one period is omitted, serving as the reference category. For ease of interpretation, we designated 2004 as the reference year, since it immediately preceded the hurricane. A clear pattern emerges for the treatment effect coefficients for the six post-hurricane periods. Relative to 2004, we observe that institutions affected by Hurricane Katrina experienced the strongest decline in enrollment in 2005, unsurprising given that is the year of the event and that the hurricane occurred soon before the start of Fall term for many institutions. In that year, a reduction of nearly 1,000 enrollments is attributable to the hurricane. Note that we see a large confidence interval this year; this partly reflects a missing data issue (several institutions were unable to report enrollment to IPEDS for Fall 2005) and the higher variance of enrollment that the hurricane induced. This effect is somewhat smaller in the period spanning 2006–2009 (i.e., 1–4 years after the hurricane), when the event study coefficients remain relatively stable at around negative 750. Interestingly, the point estimate for 5 years after the hurricane (in 2010) is small in magnitude and statistically indistinguishable from zero. This pattern indicates that 5 years after the hurricane, enrollment levels at affected institutions had largely recovered to their pre-Katrina levels – a finding consistent with reporting on the recovery of affected colleges and universities in the press (Mangan and O’Leary 2010).

An advantage of the event study specification is the inclusion of leads of the treatment. The pretreatment coefficients for 2000–2003 measure differences in the enrollment trend before Hurricane Katrina between affected and comparison institutions (relative to 2004). Though the parallel trends assumption cannot be tested directly, these pretreatment lag coefficients can serve as an informal test of parallel trends in the pretreatment period. We can conclude from the coefficients for the pre-period that prior to 2004, enrollment trends for colleges and universities in the New Orleans area (the treated) and those in the rest of the country (the comparison) were not statistically different – each coefficient is quite close to zero in magnitude and

Table 10 Event study results for impact of Hurricane Katrina on enrollments at higher education institutions in New Orleans area, 2000–2010

DV: total enrollment	Coefficient (SEs)
2000	65.63 (153.06)
2001	81.07 (131.64)
2002	−6.34 (74.17)
2003	36.94 (44.85)
2004 (Ref.)	– –
2005	−941.85 (517.88)
2006	−748.48** (256.12)
2007	−785.47** (247.87)
2008	−758.83*** (229.62)
2009	−741.59*** (211.40)
2010	−18.38 (106.99)
Constant	2,336.62 (32.06)
Observations	74,168
R-squared	0.93
Institution FE	Yes
Year FE	Yes

Notes: Institution-clustered standard errors in parenthesis. Model includes institution and year fixed effects. Panel ranges from 2000 to 2010 and compares New Orleans to a national sample

Source: Author's calculations from IPEDS

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$; $\sim p < 0.1$

precisely estimated. The DID coefficient for the same 2000–2010 time period, inclusive of year and institution fixed effects, is -960 , which is an ATE for *all* post-treatment periods (not reported here). It is a reasonable enough approximation of the overall effect but does not capture the variation by year, including the larger effect in 2005 and the recovery toward the end of the panel. We hope we have convinced the reader of the value of event study models. Given sufficient data, they have many advantages over more restrictive DID specifications. They can also accommodate differential treatment timing, which we illustrate below.

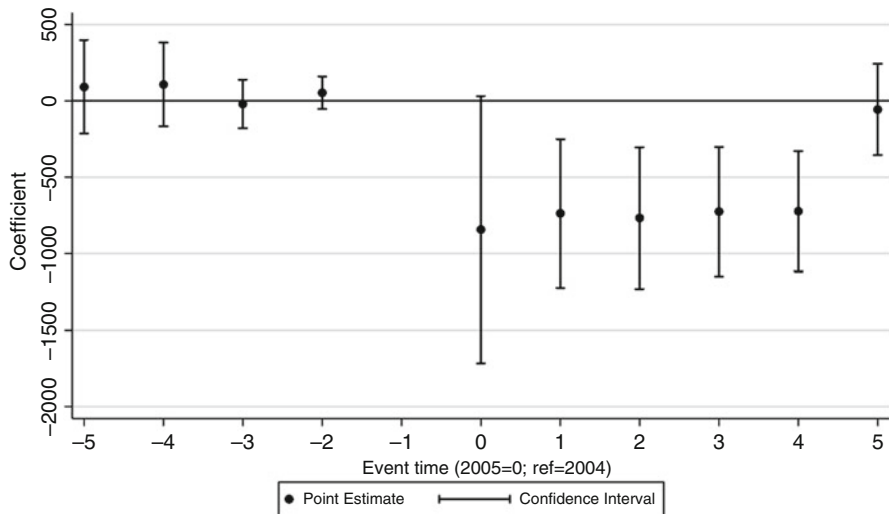


Fig. 7 Event study estimates for effect of Hurricane Katrina on College Enrollments in New Orleans

Event Study Applied to Gulf Coast Hurricanes (Time-Varying Treatments)

The event study approach just described is applicable to time-varying treatments as well, where multiple events occur at different points in time. Multiple hurricanes could affect several communities at different points in time across the Gulf Coast, so now turn again to an analysis of the effects of hurricanes more broadly, rather than focusing on Katrina exclusively. We have replicated the exact analysis from earlier in the chapter (Table 9) but now use an event study form rather than the two-way fixed effects of Eq. 5. Our results are reported in Table 11 and in Fig. 8.

As with our event study analysis of Katrina, we found that the effect of hurricanes on enrollments is most pronounced in the year the hurricane occurs, with enrollments eventually returning to their pre-hurricane levels. When we plot these coefficients, an interesting pattern emerges.

Note the pre-hurricane coefficients are significant and positive for the periods 4 or 5 years before the hurricane. Note also that in pre-periods three and two, though coefficients are not significant at typical significance levels, there appears to be a potentially suspicious downward pattern in the pretreatment coefficients. Such a pattern may indicate the presence of pre-trends that could threaten identification. The inclusion of state-specific trends (reported in the second column of results in Table 11) does not correct for this issue. In the context of multiple hurricanes over time, which vary greatly in spite of the shared meteorological term, a

Table 11 Event study results for impact of hurricanes on enrollments at higher education institutions

DV: total enrollment	Coefficient (SEs)	With state-specific trends
<i>Relative time to event (ref. 1 year pre-event)</i>		
5 years prior	284.26*** (72.68)	283.25*** (80.64)
4 years prior	123.29* (51.41)	118.23* (57.42)
3 years prior	42.01 (38.18)	41.60 (38.85)
2 years prior	18.77 (19.24)	31.60 (28.22)
Year 0	-5.10 (16.04)	-6.57 (18.24)
1 year post	-41.14 (27.35)	-43.97 (29.09)
2 years post	-100.37** (36.64)	-98.74~ (38.91)
3 years post	-168.53*** (48.34)	-178.804** (51.77)
4 years post	-238.64*** (67.12)	-238.50** (71.75)
5 years post	-69.13 (55.91)	-73.64~ (42.41)
Observations	21,461	21,461
R-squared	0.982	0.982

Notes: Institution-clustered standard errors in parenthesis. Model includes institution and year fixed effects, and an indicator variable for whether institution is subject to a hurricane at least once between 2000 and 2017, for up to 5 years after the hurricane. Second model adds state-specific trends

Source: Author's calculations from IPEDS

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$; ~ $p < 0.1$

difference-in-differences or event study approach may fail to capture a meaningful treatment effect without additional covariates, if the approach can recover a treatment effect at all. The definition of the treatment may simply be too murky when pooled across years.

In all, event study designs present numerous advantages that nicely complement DID analyses. The event study allows researchers to impose fewer assumptions on how treatment effects behave after a policy or event occurs and also gives us a test for parallel pretreatment trends. These models are relatively simple to implement when conducting a DID analysis and can be particularly insightful in applications with variation in treatment timing, which higher education scholars encounter frequently.

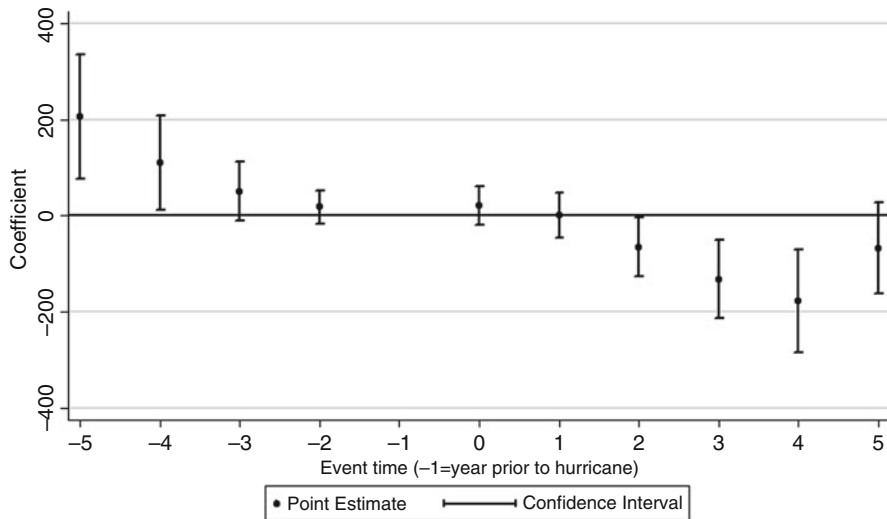


Fig. 8 Event study estimates for effect of Hurricanes on college enrollments

New Developments in Difference-in-Differences

There is clearly a great deal of enthusiasm for difference-in-differences methods in higher education research. It is a powerful research design that is simple to implement and that can make use of readily available data sources and is an important empirical tool for the evaluation of policies and initiatives in higher education. However, recent developments in the econometric properties of this method warrant some caution, particularly as methodological innovations diffuse somewhat slowly among higher education scholars. These developments have implications for how we estimate and interpret DID models that complicate the initially appealing simplicity of the research design.

We have noted that staggered or differential treatment timing is the norm, not the exception, in applications of DID. As a result, researchers frequently resort to the two-way fixed effects specification of Eq. 6 (including authors of this very chapter in other work!). Recent working papers by Athey and Imbens (2018), Goodman-Bacon (2018), and Strezhnev (2018) have all argued that the treatment effect estimates from such models are more complex to interpret than they may seem. For example, Goodman-Bacon demonstrated that the treatment effect is a weighted average of *all* possible two-group, two-period comparisons in the panel (e.g., late adopters vs. early, early vs. never). The weights associated with each comparison may not be intuitive to the researcher nor do they necessarily reflect what the analysis warrants (e.g., giving greater weight to units with greater treatment variance). More concerning, these weights could even be negative in instances when treated units serve as comparisons for later treated units and treatment effects vary over time, with these negative weights potentially biasing downward DID estimates (Goodman-Bacon 2018). Somewhat more reassuring, Athey and Imbens (2018) demonstrated

that standard DID treatment effect estimate with variation in treatment timing is unbiased if posttreatment effects are assumed constant by unit.

Another important consideration relates to estimated standard errors and the inferences we make about treatment effects. There are (at least) two concerns with estimated standard errors in DID that researchers must typically account for (Brewer et al. 2018). First, the correlation of errors within units increases the level of uncertainty about any treatment effect estimate; second, errors are also frequently serially correlated because treatment is highly serially correlated (i.e., a unit, once treated, is quite likely to remain treated). Clustering the errors at the appropriate unit level goes a long way to addressing these problems (Bertrand et al. 2004; Brewer et al. 2018) but still requires researchers to pay close attention to the number of treated units (the “switchers” that drive identification of effects) in absolute terms and relative to the comparison group. For example, Conley and Taber (2011) found that analyses of state merit aid policies frequently relied on a small number of adopters of such policies (ranging from one to ten). Accounting for the small number of adopters results in significantly larger standard errors that in some cases render findings marginally insignificant. In cases where clustering is ill-advised due to a small number of clusters, researchers can use wild bootstrapping to recover more correct standard errors (Brewer et al. 2018).

It is not surprising that the econometric properties of DID are of substantive interest to researchers given the wide adoption of the method. We highlight these developments because they have direct bearing on analyses of interest to higher education scholars and hope that we and the broader higher education research community can use these methods responsibly as they continue to evolve. Given the prevalence of DID studies in higher education, particularly with time-varying treatments, it is crucial for scholars in the field to remain abreast of the evolving understanding of what such models can and cannot do.

Conclusions

This chapter introduced readers to the DID research design, a quasi-experimental technique for estimating the causal impact of an intervention. Our running example of Hurricane Katrina illustrated key assumptions and extensions of this design, showing where it holds promise for advancing new knowledge and theory development in the field of higher education. Researchers can apply this technique to a wide range of research questions where a specific event splits time in two, resulting in pre- and post-periods where one group is exposed to the event (i.e., treatment group) and another is not (i.e., comparison group). An advantage of DID is that it does not require researchers to randomly assign treatment and comparison groups; rather, it takes advantage of “natural experiments” that can under certain conditions replicate random assignment (Murnane and Willett 2011).

With this basic setup, researchers can imagine a number of scenarios in higher education where an external event might expose one group to a “treatment” while leaving another unexposed. For example, we referred to the adoption of state

performance funding models throughout this chapter because public institutions in some states were exposed to the policy change and their outcomes were compared to colleges never exposed to the treatment. Other state policy changes, such as the adoption of affirmative action bans, transfer articulation agreements, financial aid programs, and other large statewide efforts exposing some – but not all – colleges to a specific policy change may yield opportunities for researchers to implement and extend the DID design. Yet, DID is not limited to state policy change. When local communities create place-based “promise programs” where residents of certain counties receive free college tuition, they could be compared to similar residents from ineligible counties to see if their outcomes differed before and after the program (e.g., Andrews et al. 2010). Similarly, when students suddenly become eligible for a certain benefit (e.g., additional financial aid, academic advising), they could be compared against similar students never exposed to the benefit to see how their outcomes changed over time.

By continuing to incorporate DID into the field of higher education research, current and future scholars will have more ways to develop and ultimately advance new knowledge in the field. This positive development should create new opportunities for researchers to apply and extend the design in promising ways. This chapter outlined several steps, assumptions, precautions, and extensions to consider when designing a DID study. Central to any DID study is a clear and compelling rationale or theory linking the event (i.e., the cause) to an observed outcome (i.e., the effect). Regardless of whether one is reading or conducting a DID study, they should focus on the likely mechanisms connecting cause and effect. By focusing on this, readers can be more critical consumers of the method while researchers can be more careful producers. In both cases, the goal should be to identify plausible threats to internal validity that, if unaddressed, could offer an alternative explanation to the findings. When researchers can rule out those plausible alternative explanations, then their results are more likely to be interpreted as causal or, at a minimum, to be less biased estimates. In the following section, we conclude by summarizing strategies to help researchers rule out these plausible alternative explanations by summarizing key techniques for implementing DID rigorously and thoughtfully. Doing so should help researchers produce higher quality scholarship that makes more lasting and meaningful contributions to the field.

A Summary and Some Next Steps

As this chapter illustrated, the difference-in-differences research design is gaining popularity given its simple, yet powerful framework for drawing causal inference in social science research. As the availability of longitudinal data continues to expand, and as researchers continue to pay close attention to policy implementation in higher education, odds are the application of this method will continue to grow among higher education scholars. This reflects the field’s commitment to causal research that yields meaningful measures of how different policies and initiatives affect higher education constituents. But the simplicity of the method can obscure

important threats to identification or other issues that can (and have) tripped us up in our research. As we conclude this chapter, we present a set of conditions and recommendations for higher education researchers to consider as they apply the method in their own work. We have found that following all (or at least some) of these to improve our own work.

Understand and describe the nature of the treatment. Although the adoption of a policy may provide the conditions needed to draw causal inference using DID, the researcher must fully understand the nature of treatment. Specifically, they should explain what the treatment was, when it occurred, and who was exposed and not exposed to the treatment. Answering these questions will help understand the compositions of the treatment and comparison group. In addition, the researcher should consider whether the treatment would produce a *constant* or *varying* effect on the treatment group. The type of effect may lead a researcher to use the canonical DID approach or an event study model.

Justify the choice of comparison group(s). The composition of the comparison group is closely related to understanding the nature of the treatment; that is, clearly identifying which cases are not affected by the treatment and why the treatment is implemented in the first place. This chapter provided two approaches to constructing a comparison group: local and focal matching (Shadish et al. 2002). On the one hand, local matching allows researchers to choose groups that are geographically close and share similar characteristics, for example. On the other hand, focal matching uses statistical matching approaches to create comparison groups based on similar observable baseline characteristics. Regardless of the approach used, the research should use subject-matter theory to decide whether the comparison group is the appropriate counterfactual (i.e., the comparison group could have plausibly experienced the treatment but for some specific reason did not).

Continually question the parallel trends assumption. One of the most crucial assumptions to draw causal inference from a DID approach is that the outcome follows parallel trends – both before and after the treatment – for both the treatment and comparison group. Because this assumption concerns the unobserved state of the world (i.e., what *would have* occurred in the absence of the treatment), it is untestable. Nonetheless, we as researchers can take steps that tell us whether we can establish a clear trend line (preferably at least three time periods) at least for the pretreatment period; we can also honestly assess if we believe that trend line in the posttreatment period. At minimum, analyses using DID should visually display the trends to let readers draw their own conclusions. As we build the case for our chosen identification strategy, we can make use of the approaches we discussed earlier, such as testing the pre-trend using event study designs and checking the robustness of findings to the inclusion of trends some level (unit, geography – whatever seems warranted). It all begins with the researcher to reflecting and contemplating why parallel trends may not hold up conceptually and empirically in the first place.

Incorporate necessary covariates but avoid controlling for things that could themselves be affected by the treatment. Adding unit and time fixed effects, along with time-varying covariates conditions the outcome variable and increases precision of the treatment estimate. Including covariates may also be necessary if there are

possible confounders that may bias the treatment effect estimate when omitted and to properly condition trends so that the parallel trends assumption may hold. Nevertheless, the researcher must empirically and conceptually justify the inclusion of specific covariates. Finally, researchers must consider whether and how including the covariates will affect the sign, magnitude, or significance of the baseline model estimate; if covariates do materially affect treatment estimates, it is incumbent on the researcher to understand why.

Run an extensive battery of robustness checks and falsification tests. This is the process of seeking assurance that findings are robust to plausible alternative explanation or modeling decisions. Using multiple comparison groups, implementing placebo tests, and checking for effects on nonequivalent outcomes are integral building blocks to establishing a causal claim from a difference-in-differences analysis.

Make use of event study models. Given the enormous complexity of most education policy and of higher education itself, it likely benefits us all to impose as few assumptions as possible on how the effects of different policies behave. Although the canonical DID allows for the estimating of the average treatment effect, implementing an event study design allows us to see the dynamic ways in which treatment effects may behave, be they immediate, lagging, or even diminishing effects. As an added bonus, this approach also provides an informal test of parallel pre-trends.

In addition to this short list of recommended steps for conducting a DID analysis, we have included much of the Stata code used in this chapter as an appendix. The included code should guide the reader through many of the steps of our estimation and the creation of tables and charts. We are not expert Stata coders, as a quick glance at the appendix should reveal. Nonetheless, we hope that the attached code can serve as a reference or starting point for researchers getting started on difference-in-differences methods, and we welcome any feedback from those making use of the code.

Finally, we close by acknowledging this chapter does not encompass the totality of what researchers should know about DID models. Readers may find the resources used throughout the chapter and listed in the references section of value if they want further detail or nuance. While we focused on the more fundamental aspects of conducting a DID analysis, there are several more advanced topics that may be of further interest, such as the application of DID to continuous treatments (i.e., to treatments that vary in intensity) and additional approaches to establishing causality in the presence of pretreatment trends like triple-differences (e.g., Ngo and Astudillo 2019) and two-stage least squares (Freyaldenhoven et al. 2018). The pace of innovation of the DID method remains intense, as attested by the number of working papers included in our references. Additional reading of work pushing the boundaries of our understanding of this method is essential. We wrote this chapter in part because we have come to learn this method largely by doing and by drawing on others' empirical work. We look forward to the continuing to learn from the efforts of higher education scholars advancing methodologies used in the field.

Appendix Code

The following Stata code produced many of the tables and charts included in this chapter. Because of space constraints, we have omitted various parts of the code such as data management steps and much of the analysis beyond Hurricane Katrina; we are happy to share complete .do files by request.

```
// open data for analysis
use C:\Desktop\did_handbook_data.dta

// install the following user-written programs:
ssc install lgraph, replace
ssc install blindschemes, replace
ssc install estout, replace
ssc install coefplot, replace

// figure 1: fall enrollment for colleges in new orleans
lgraph total_enroll year if treat==1, scheme(plottig) ylabel(0
(500)3500) ///
legend(off) loptions(1 lcolor(black) lpat(line) mcolor(black))
ytittle("Mean fall enrollment") xtittle("")

// figure 2: fall enrollment for colleges in new orleans and other
southern states
lgraph total_enroll year treat, scheme(plottig) ylabel(0(500)
3500) ///
legend(on order(1 "Southern cities" 2 "New Orleans") position(6))
///
loptions(0 lcolor(black) lpat(dash) m(square); 1 lcolor(black) ///
lpat(line) mcolor(black)) ytittle("Mean fall enrollment") xtittle
("")

// table 3: did means table
table treat post if (comparison==1 | treat==1), c(mean
total_enroll) f(%10.0fc)

// table 4: canonical did regression with different standard errors
and covariates
* top panel: canonical did regression with different standard
errors
reg total_enroll i.treat i.post i.treat#i.post if (comparison==1
| treat==1)
estimates store table4_a // no se adjustment
```

```

reg total_enroll i.treat i.post i.treat#i.post if (comparison==1
| treat==1), robust
estimates store table4_b // robust s.e.

reg total_enroll i.treat i.post i.treat#i.post if (comparison==1
| treat==1), /// cluster(unitid)
estimates store table4_c // cluster s.e.

* bottom panel: canonical did regression (cluster s.e.) with
covariates and fe
global controls "tuition1 metro_ue_rate"

reg total_enroll i.treat i.post i.treat#i.post $controls if
(comparison==1|treat==1), /// cluster(unitid)
estimates store table4_d // controls only

areg total_enroll i.treat i.post i.treat#i.post i.year if
_est_table4_d==1 & /// (comparison==1 | treat==1), absorb(unitid)
cluster(unitid)
estimates store table4_e // fixed effects only

areg total_enroll i.treat i.post i.treat#i.post $controls i.year
if _est_table4_d==1 &/// (comparison==1 | treat==1), absorb
(unitid) cluster(unitid)
estimates store table4_f // controls and fe

estout table4_a table4_b table4_c table4_d table4_e table4_f,
cells(b(star fmt(2) /// label(Coef.)) se(par fmt(2) label(std.
errors))) starlevels(* 0.10 ** 0.05 *** 0.010) /// stats(N r2,
labels ("No. of Obs." "R-Squared") fmt(2))

// table 5: canonical did with multiple comparison groups, without
and with controls
* create regional neighbor
gen neighbor = 1 if inlist(stabbr,"AR","MS","TX") & sreb==1

* create ps matched
logit treat total_enroll if sreb==1 & year<2005
predict double ps
ssc install psmatch2, replace
psmatch2 treat, outcome(total_enroll) pscore(ps)
egen ps_match = min(_weight), by(unitid)

* top panel (without controls)

```

```

reg total_enroll i.treat i.post i.treat#i.post if (comparison==1
| treat==1), /// cluster(unitid)
estimates store table5_a // new orleans vs sreb

reg total_enroll i.treat i.post i.treat#i.post, cluster(unitid)
estimates store table5_b // new orleans vs nationwide

reg total_enroll i.treat i.post i.treat#i.post if (neighbor==1 |
treat==1), /// cluster(unitid)
estimates store table5_c // new orleans vs neighbor

reg total_enroll i.treat i.post i.treat#i.post if (ps_match==1 |
treat==1), /// cluster(unitid)
estimates store table5_d // new orleans vs matched

* bottom panel (with controls)
reg total_enroll i.treat i.post i.treat#i.post $controls if
(comparison==1|treat==1),/// cluster(unitid)
estimates store table5_e // new orleans vs sreb

reg total_enroll i.treat i.post i.treat#i.post $controls, cluster
(unitid)
estimates store table5_f // new orleans vs nationwide

reg total_enroll i.treat i.post i.treat#i.post $controls if
(neighbor==1|treat==1),///
cluster(unitid)
estimates store table5_g // new orleans vs neighbor

reg total_enroll i.treat i.post i.treat#i.post $controls if
(ps_match==1|treat==1),/// cluster(unitid)
estimates store table5_h // new orleans vs matched

estout table5_a table5_b table5_c table5_d table5_e table5_f
table5_g table5_h, ///
cells(b(star fmt(2) label(Coef.)) se(par fmt(2) label(std.
errors)) starlevels///
( * 0.10 ** 0.05 *** 0.010) stats(N r2, labels ("No. of Obs." "R-
Squared") fmt(2))

// figure 6: enrollment trend for multiple comparison groups
lgraph total_enroll year treat if (sreb==1 | treat==1), scheme
(plottig) /// ylabel(0(500)3500) name(sreb, replace) legend(on
order(1 "SREB" 2 "New Orleans") ///

```

```

position(6)) loptions(0 lcolor(black) lpat(dash) m(square); 1
lcolor(black) lpat(line)///
mcolor(black)) ytitle("Mean fall enrollment") xtitle("")

    lgraph total_enroll year treat, scheme(plottig) ylabel(0(500)
3500) name(us, replace) ///
legend(on order(1 "U.S." 2 "New Orleans") position(6)) loptions(0
lcolor(black) ///
lpat(dash) m(square); 1 lcolor(black) lpat(line) mcolor(black))
ytitle("Mean fall ///
enrollment") xtitle("")

    lgraph total_enroll year treat if sreb==1 & (neighbor==1 |
treat==1), scheme(plottig) ///
ylabel(0(500)3500) name(neigh, replace) legend(on order(1
"Neighbors" 2 "New Orleans")///
position(6)) loptions(0 lcolor(black) lpat(dash) m(square); 1
lcolor(black) lpat(line)///
mcolor(black)) ytitle("Mean fall enrollment") xtitle("")

    lgraph total_enroll year treat if sreb==1 & (ps_match==1 |
treat==1), scheme(plottig)///
ylabel(0(500)4500) name(psm, replace) legend(on order(1 "PS
Matched" 2 "New Orleans")///
position(6)) loptions(0 lcolor(black) lpat(dash) m(square); 1
lcolor(black) lpat(line)///
mcolor(black)) ytitle("Mean fall enrollment") xtitle("")

    graph combine sreb us neigh psm, name(combined, replace)

// table 6: did regression with state-specific trends
    encode stabbr, gen(stn)
    areg total_enroll i.treat i.post i.treat#i.post i.stn#c.year if
(comparison==1 | treat==1), absorb(stn) cluster(unitid)
    estimates store table6_a // state x year trends

    areg total_enroll i.treat i.post i.treat#i.post i.year if
(comparison==1 | treat==1), absorb(unitid) cluster(unitid)
    estimates store table6_b // fe only

    areg total_enroll i.treat i.post i.treat#i.post i.stn#c.year i.
year if (comparison==1 | treat==1), absorb(unitid) cluster
(unitid)
    estimates store table6_c //state x years trends and fe

```

```

estout table6_a table6_b table6_c, cells(b(star fmt(2) label
(Coef.)) se(par fmt(2) label(std.errors))) starlevels( * 0.10 **
0.05 *** 0.010) stats(N r2, labels ("No. of Obs." "R-Squared") fmt(2))

//table 7: placebo test for change to treatment timing
*generate placebo years
gen placebo_2003 = 1 if year>=2003
gen placebo_2004 = 1 if year>=2004
gen placebo_2005 = 1 if year>=2005
gen placebo_2006 = 1 if year>=2006
gen placebo_2007 = 1 if year>=2007
recode placebo_2003-placebo_2007 (.=0)

* top panel (without controls)
reg total_enroll i.treat i.placebo_2003 i.treat#i.placebo_2003 if
year<2005, /// cluster(unitid) // analysis stops at 2005 to avoid
picking up Katrina effect
estimates store p_2003_noco

reg total_enroll i.treat i.placebo_2004 i.treat#i.placebo_2004 if
year<2005, /// cluster(unitid) // analysis stops at 2005 to avoid
picking up Katrina effect
est sto p_2004_noco

reg total_enroll i.treat i.placebo_2005 i.treat#i.placebo_2005,
cluster(unitid)
est sto p_2005_noco

reg total_enroll i.treat i.placebo_2006 i.treat#i.placebo_2006 if
year>2005, /// cluster(unitid) // analysis starts at 2006 to avoid
picking up Katrina effect
est sto p_2006_noco

reg total_enroll i.treat i.placebo_2007 i.treat#i.placebo_2007 if
year>2005, /// cluster(unitid) // analysis starts at 2006 to avoid
picking up Katrina effect
est sto p_2007_noco

* bottom panel (with control)
reg total_enroll i.treat i.placebo_2003 i.treat#i.placebo_2003
$controls if year<2005,///
cluster(unitid) // analysis stops at 2005 to avoid picking up
Katrina effect
est sto p_2003_co

```

```

reg total_enroll i.treat i.placebo_2004 i.treat#i.placebo_2004
$controls if year<2005,/// cluster(unitid) // analysis stops at
2005 to avoid picking up Katrina effect
est sto p_2004_co

reg total_enroll i.treat i.placebo_2005 i.treat#i.placebo_2005
$controls, cluster(unitid)
est sto p_2005_co

reg total_enroll i.treat i.placebo_2006 i.treat#i.placebo_2006
$controls if year>2005,/// cluster(unitid) // analysis starts at
2006 to avoid picking up Katrina effect
est sto p_2006_co

reg total_enroll i.treat i.placebo_2007 i.treat#i.placebo_2007
$controls if year>2005,/// cluster(unitid) // analysis starts at
2006 to avoid picking up Katrina effect
est sto p_2007_co

estout p_2003_noco p_2004_noco p_2005_noco p_2006_noco
p_2007_noco, cells(b(star fmt(2)///
label(Coef.)) se(par fmt(2) label(std.errors))) starlevels( * 0.10
** 0.05 *** 0.010)/// stats(N r2, labels ("No. of Obs." "R-Squared")
fmt(2))

estout p_2003_co p_2004_co p_2005_co p_2006_co p_2007_co, cells(b
(star fmt(2) ///
label(Coef.)) se(par fmt(2) label(std.errors))) starlevels( * 0.10
** 0.05 *** 0.010)///
stats(N r2, labels ("No. of Obs." "R-Squared") fmt(2))

// table 8: placebo test for non-equivalent outcome
* top panel (in-state tuition)
reg tuition1 i.treat i.post i.treat#i.post if (comparison==1 |
treat==1), cluster(unitid)
estimates store table8_a // new orleans vs sreb

reg tuition1 i.treat i.post i.treat#i.post, cluster(unitid)
estimates store table8_b // new orleans vs nationwide

reg tuition1 i.treat i.post i.treat#i.post if (neighbor==1 |
treat==1), cluster(unitid)
estimates store table8_c // new orleans vs neighbor

```

```

reg tuition1 i.treat i.post i.treat#i.post if (ps_match==1 |
treat==1), cluster(unitid)
estimates store table8_d // new orleans vs matched

* bottom panel (out-of-state tuition)
reg tuition3 i.treat i.post i.treat#i.post if (comparison==1 |
treat==1), cluster(unitid) estimates store table8_e // new orleans
vs sreb

reg tuition3 i.treat i.post i.treat#i.post, cluster(unitid)
estimates store table8_f // new orleans vs nationwide

reg tuition3 i.treat i.post i.treat#i.post if (neighbor==1 |
treat==1), cluster(unitid)
estimates store table8_g // new orleans vs neighbor

reg tuition3 i.treat i.post i.treat#i.post if (ps_match==1 |
treat==1), cluster(unitid)
estimates store table8_h // new orleans vs matched

estout table8_a table8_b table8_c table8_d table8_e table8_f
table8_g table8_h,/// cells(b(star fmt(2) label(Coef.)) se(par fmt
(2) label(std.errors))) starlevels///
(* 0.10 ** 0.05 *** 0.010) stats(N r2, labels ("No. of Obs." "R-
Squared") fmt(2))

// table 9: did regression for multiple hurricanes
areg total_enroll i.treat_mh i.year if inc==1, vce(cluster
unitid) absorb(unitid)

// table 10: event study results (hurricane katrina)
* create adoption year of treatment and limit to five-year pre/post
period
gen adopt_delta=2005-year if treat==1
gen within_5=(adopt_delta==. | inrange(adopt_delta, -5, 5))
*create event study lag (here's how to do it in a loop)
forvalues i=1(1)5 {
gen predelta_`i'=(adopt_delta==`i')
label var predelta_`i' "-`i'"
}
* create event study lead (here's how to do it one by one)
gen postdelta_0=(adopt_delta==0)
label var postdelta_0 "0"

```

```

gen postdelta_1=(adopt_delta== -1)
label var postdelta_1 "1"
gen postdelta_2=(adopt_delta== -2)
label var postdelta_2 "2"
gen postdelta_3=(adopt_delta== -3)
label var postdelta_3 "3"
gen postdelta_4=(adopt_delta<= -4)
label var postdelta_4 "4"
gen postdelta_5=(adopt_delta<= -5)
label var postdelta_5 "5"

areg total_enroll predelta_5 predelta_4 predelta_3 predelta_2
postdelt* i.year if ///
within_5==1 & year<=2010, vce(cluster unitid) absorb(unitid)
estimates store fig7

// figure 7: event study estimates (hurricane katrina)
coefplot fig7, keep ( predelta_5 predelta_4 predelta_3 predelta_2
postdelta_0 ///
postdelta_1 postdelta_2 postdelta_3 postdelta_4 postdelta_5)
vertical xlabel ///
(, angle(vertical)) xtitle("Years since hurricane (0)") ytitle
("Estimated effect")///
yline(0, lcolor(black)) scheme(plottig)

// table 11: event study results (all hurricanes)
* create new within_5 & pre/post indicators because they should be
relative to each hurricane
cap drop adopt_delta within_5 predelta* postdelta*
gen adopt_delta=year-first_hurr if hurr_ever==1

*create event study lag (here's how to do it in a loop)
forvalues i=1(1)5 {
gen predelta_`i'=(adopt_delta==`i')
label var predelta_`i' "-`i'"
}

* create event study lead (here's how to do it one by one)
gen postdelta_0=(adopt_delta==0)
label var postdelta_0 "0"
gen postdelta_1=(adopt_delta== -1)
label var postdelta_1 "1"
gen postdelta_2=(adopt_delta== -2)
label var postdelta_2 "2"
gen postdelta_3=(adopt_delta== -3)

```



```

label var postdelta_3 "3"
gen postdelta_4=(adopt_delta<=-4)
label var postdelta_4 "4"
gen postdelta_5=(adopt_delta<=-5)
label var postdelta_5 "5"

*limit to obs within 5 yrs of a hurricane.
gen within_5=(adopt_delta==. | inrange(adopt_delta, -5, 5))

* coefficient only
areg total_enroll predelta_2 predelta_3 predelta_4 predelta_5
postdelt* i.year if ///
within_5==1 & inc==1, vce(cluster unitid) absorb(unitid)

* adding state-specific trends
areg total_enroll predelta_2 predelta_3 predelta_4 predelta_5
postdelt* i.year ///
i.year##c.stn if within_5==1 & inc==1, vce(cluster unitid) absorb
(unitid)

// figure 8: event study estimates (all hurricanes)
coefplot fig8a, keep ( predelta_5 predelta_4 predelta_3 predelta_2
postdelta_0 /// postdelta_1 postdelta_2 postdelta_3 postdelta_4
postdelta_5) vertical xlabel ///
(, angle(vertical)) xtitle("Years since hurricane (0)") ytitle
("Estimated effect")///
yline(0, lcolor(black)) scheme(plotplain)

```

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