

Chapter 12

Higher Education Shaping the Unscripted Future: The Imperative to Affirm Human Values in Transformative Times

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Whereas the peoples of the United Nations have in the Charter reaffirmed their faith in fundamental human rights, in the dignity and worth of the human person and in the equal rights of men and women and have determined to promote social progress and better standards of life in larger freedom. (<http://www.un.org/en/documents/udhr/index.shtml>) (Preamble, U.N. Universal Declaration of Human Rights, 1948)

The promise of higher education is to disseminate knowledge and inspire commitment to human values and human rights on the global scale, providing the foundation of opportunity creation for the benefit of all. Higher education is the only institution positioned to assume this crucial role. Education and learning, from the earliest beginnings in the history of the world, have served to improve the human condition, enhancing the well-being of individuals and society. In this respect, educators have always shaped the future.

From the earliest times of Plato's Academy in Ancient Greece, to Muslim philosophers and mathematicians, to the University of Al-Karaouine in Morocco, to the Nizamiyya School in Iran, the University of Paris and the University of Cambridge, educational institutions have advanced human culture and civilizations. Educators have always endeavored to improve the lives of individuals and to strengthen society.

Educators of centuries past have dramatically influenced the world as we know it; the impact of educators today will impact the future for all. As the 21st century unfolds, and as the shape, character, and composition of higher education rapidly change, educators will continue to shape the century. The issue and opportunity facing higher education is *how* and *by what means* it will be a major positive force for humanity, given the turmoil that it faces as it struggles to shape itself for the future.

Non nobis solum (not for ourselves alone) (Shapiro 2005, p. 1)

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The emerging new century is bursting with challenges and changes of epic proportion and global consequence. Today's challenges know no boundaries. As described by Johansen of the Institute for the Future, we are living in a VUCA world—one characterized by Volatility, Uncertainty, Complexity, and Ambiguity (Johansen 2009, pp. XIV–XV). Scharmer and Kaufer describe our times as the “Age of Disruption”, an age in which issues faced are daunting on a scale previously unparalleled, while the promise of “renewal has never been more real” (Scharmer and Kaufer 2013, p. 1). This world promises both dangers and opportunities.

The work of educators in the 21st century is to minimize the dangers of our VUCA world, optimize opportunities, and intentionally create a world-wide population of global citizens who embrace human dignity for all, working through and across all boundaries of existence. Such citizens acknowledge the impact of their actions on the rest of the world, eagerly make such impacts central to their calculations, and recognize others—regardless of gender, race, religion, nationality, or ethnicity—as equal and of great worth. Global citizens embrace the role of championing universal human values and protecting human dignity.

The mission of higher education is to perpetuate and protect the values that underlie human dignity and human rights. These values are articulated in the United Nations' Universal Declaration of Human Rights and other key documents.¹ The central danger we face as we are propelled into a global technologically driven future is that we fail to protect human dignity, that widely disseminated knowledge and networks neglect to affirm the centrality of humanity in the future, and in the worst case scenario, knowledge and networks are put to use to destroy the prospects of the survival of others and ultimately ourselves. Terrorism is the least of these dangers; failure to address food shortages, environmental damage, and conditions for pandemics are sufficient for concern.

This work concludes by considering the heightened necessity for higher education and the affirmation of universal human values that it uniquely can perpetuate. We assert that higher education is fundamental to human progress in the world.

Central to this chapter is the use of an historic case study to provide a broad overview of the defining role of higher education in shaping the future of nations, societies, and individuals; reinforcing values; and strengthening the social fabric.

The chapter is divided into four sections, illustrating the role of education in society. The first section uses micro level analysis to consider the idea of individual life scripts based on circumstances of birth. The second section uses a five variable macro level analysis, drawing on historical data to examine the shaping of a future using the seventeenth century British colonies in America as a case study. The role of education in transforming the future of 13 disparate colonies into a nation

¹The conceptualization of human dignity and human rights used in this chapter finds expression in the UN's Universal Declaration of Human Rights, founding documents of the United States, and works of philosophers during the Enlightenment Period (some directly referenced throughout this chapter), among many writings of a religious, historical, and political nature around the world. The United Nations Universal Declaration of Human Rights, crafted in 1948 in the wake of the events of World War II, forms the basis of the concepts of universal human rights and values discussed in this work. <http://www.un.org/en/documents/udhr/index.shtml>.

renowned for its influence in global affairs is traced, and the importance of the affirmation of human dignity is outlined.

The third section of the chapter considers the same variables with regard to higher education of the twenty-first century and how higher education can reshape itself so that it can fashion the global century. The fourth section focuses on the role of the educator, and affirms the twin requirements of higher education in this century: to marshal relentless changes to craft the educational process, and to preserve basic human rights in order to dispel dangers and shape a future for everyone.

12.1 Scripts, Their Purpose, and Their Undoing: Education and Human Advancement

When one considers in its length and in its breadth the importance of this question of the education of a nation's young, the broken lives, the defeated hopes, the national failures, which result from the frivolous inertia with which it is treated, it is difficult to restrain within oneself a savage rage. In the conditions of modern life the rule is absolute, the race which does not value trained intelligence is doomed. Not all your heroism, not all your social charm, not all your wit, not all your victories on land or at sea, can move back the finger of fate. Today we maintain ourselves. Tomorrow science will have moved forward yet one more step, and there will be no appeal from the judgment which will then be pronounced on the uneducated. (Alfred North Whitehead (1861–1947), British mathematician and philosopher)

Throughout human history it has been largely the case that the context into which individuals are born, their circumstances and culture, as well as gender, race, and social class, have provided a mechanism or a pathway of expectations for the rest of their lives. This shaping mechanism provides a socially developed and accepted script for their future, and provides a well-worn path for them to follow.

While scripts provide a measure of stability and predictability, the dilemma is that by definition scripts are controlling, constraining, and limiting. Enlarging the scripts of the human experience can be regarded as the essence of freedom.

Educational opportunity has been closely tied to changing the scripts of one's life in the United States (<http://www.brookings.edu/research/reports/2013/06/13-facts-higher-education>) and around the world (<http://www.ets.org/Media/Research/pdf/PICPN192.pdf>). Resistance in certain parts of the world to the education of girls often reflects efforts to maintain the current social order and protect their traditional scripts; education is the key to opportunity precisely because it enlarges the individual script. This can be seen as threatening to the established order, and can be dangerous. Young Malala Yousafzai's experience of being shot and severely injured by the Taliban at the age of 14 for her activism drew world-wide attention to and admiration of her courage (<http://www.bbc.co.uk/news/world-asia-23282662>; Yousafzai 2013). The education of girls changes lives, families and nations (http://press.clintonglobalinitiative.org/press_releases/president-clinton-opened-2012-clinton-global-initiative-annual-meeting-emphasizing-action-through-social-investment-empowering-girls-and-women-and-designing-for-impact/).

Education changes long-held scripts for current and future generations. Examples of students changing their lives are commonplace. Generations of parents have struggled to send their children to school so that the children could advance in society beyond what the parents were able to accomplish. Educators serving first-generation college students are often keenly aware of the enduring impact on the lives of students and their families for generations.

Consider the common experience of young people who often seek educational opportunities in an effort to enlarge their scripts, change their life trajectory and expand personal opportunity. One such woman is an acquaintance from Vietnam. She had been working in the rice paddies, along with her parents, in the same manner as generations before them. In one short decade, she seized an opportunity for schooling, eventually earning a Ph.D. Education helped change the life script assigned at her birth—from the rice paddies of Vietnam to a Ph.D. in nuclear physics. Without educational opportunities, her life would have followed her family's age-old generational script of working in the rice paddies. Now her work as a physicist stands to benefit all of humanity. Education is the power not only to improved lives for generations to come, but to change the world.

Nonetheless, today in remote regions of the globe, there remains a high probability that what a young girl will do throughout her life is precisely what her mother did and her grandmothers did and her female ancestors for generations and centuries in her past. Even though the girl's country of birth might be advanced in many ways, she may be born in a region or circumstance where her life and future are marked as rigidly scripted.

That said, life scripts may be comfortable, even while limiting individual potential and choice. Scripts provide the security of known expectations, social acceptance and predictability; decisions about one's future are pre-determined. Rigid scripts in stable societies provide comforting pathways for anticipating one's future. Risks and anxieties about one's future may be minimized as choices are limited and the pathway is clear and unchallenged. Even those individuals who wish to remove the confines of their scripts may recognize that the scripts themselves made life simpler as everyone's expectations, both for themselves and for others, were clear. Thus, scripts—even those that may be considered less desirable—at least serve to outline a predictable future with the security of time-honored roles, norms, expectations, and approval.

At the same time, the prospect of an unscripted future, one that falls short of expectations or is perceived as threatening, may generate considerable distress, or alternatively may be seen as a pathway to opportunity for a more desirable script.

Changes in scripts—even desirable changes—may be accompanied by a range of responses from discomfort or anxiety (on the personal level) to social unrest (on the societal level). One example of such social unrest is the national upheaval of the Civil War in the United States, a violent struggle to advance basic human dignity and human rights. This mid-19th century effort was focused on changing the scripted role of black Americans from slaves and property to free people and citizens. Like other civil wars and unrests in nations around the world, these events were prompted by organized objections to scripts and protests by groups of individuals. While the

resulting changes were obviously desirable, the historical record shows that in the United States, for many black Americans the transition was difficult and even dangerous for decades following the war. Fortunately for all Americans, the script has been rewritten to include freedom and the opening of boundless opportunities. Similar upheavals also occurred when women in the United States sought to change their life scripts, marching, petitioning, and serving jail time to claim opportunities ranging from voting rights² through the full spectrum of opportunity.

This historical perspective informs the need for continual focused attention to the protection of human rights. Securing these rights in the United States was a lengthy and deadly struggle. The United States suffered more casualties in the Civil War than all other wars combined.³ Yet today some observe that these hard-won economic and political rights are being eroded, as exemplified by the United States Supreme Court decision in 2013, invalidating section 4 of the U.S. Voting Rights Act of 1965⁴ (updated in 1975).⁵

Most societies have changed through the centuries, creating structures and institutions of governance, some of which reinforce traditional scripts while others open pathways of possibilities for changing or enhancing one's birth script. Tools to change birth scripts include political governance, social institutions, and educational opportunity. Here we turn to our case study to consider the role of education in the creation of a self-governing society and we begin with the Colonial Era of the United States.

12.2 Case Study: Higher Education Transforming the Future of Thirteen Colonies into One Nation

To the extent that we have failed to challenge the full capacities of our students, from kindergarten through graduate school, we have betrayed the democratic ideal that is so precious to us. The meaning of democracy in education is not found in a dead-leveling process that attempts to conform all to a simple equality. We believe not that all persons are

²The effort of women to secure the right to vote in U.S. elections was an 80 year effort: 1840–1920, culminating in the 19th Amendment to the U.S. Constitution. <http://memory.loc.gov/ammem/naw/nawsttime.html>

³This observation has been bolstered by recent research by Dr. J. David Hacker of the history department at SUNY-Binghamton, published in *Civil War History*, 57 (4), 307–348. 2011.

⁴Shelby County, Alabama V. Holder, Attorney General, et al. http://www.supremecourt.gov/opinions/12pdf/12-96_6k47.pdf

⁵Section 4 of the 1965 Civil Rights Act required states and jurisdictions with a history of racial discrimination to secure clearance from the U.S. Justice Department or a federal court in Washington, D.C. before changing voting procedures. The 5–4 ruling by the Supreme Court specifies that Congress legislate the terms of such clearance using current data. Texas, one of the affected states, moved immediately to enact more restrictive voting procedures, which many point out adversely impact minority and elderly populations. http://www.nytimes.com/2013/06/26/us/supreme-court-ruling.html?pagewanted=all&_r=0; http://www.washingtonpost.com/politics/supreme-court-stops-use-of-key-part-of-voting-rights-act/2013/06/25/26888528-dda5-11e2-b197-f248b21f94c4_story.html. As of this writing, the application of this ruling in affected states is being litigated in federal courts.

of equal capacity, but that all are entitled to the opportunity to develop fully such capacities as they have. We combine this with a belief in the inherent dignity of the individual person. These are powerful ideas with tremendous implications. They mean, certainly, that the creative artist, the professional person, and the artisan alike deserve the full esteem of their fellow men and that everyone is entitled to the measure of self-respect who is doing their best in a vocation that contributes to the total life of our society. (McMurrin 1961; Sterling M. McMurrin, former U. S. Commissioner of Education (1914–1996))

Higher education has played a defining role in building society and shaping the future, not only for individuals and nations, but also the world. Using the emergence of the United States as our case study, we find in the early colonies a demonstration of the impact of higher education in building the future of a people. This section begins our comparison of two timeframes: one in which we have data and substantial hindsight, and the other, the future. In the next section, we use current developments to extrapolate to what might happen in the future, obviously with limited hindsight.

The analytical framework of the historical case study considers six variables: Characteristics, Data, Common Conditions, Proven Outcomes, Context, and Citizenship. The discussion of this case is organized by variable.

12.2.1 Characteristics

Higher education in the sixteenth to seventeenth centuries is familiar to those who read this chapter, as its key aspects likely mirror our own experience. While there have been significant innovations in higher education in the past century, such as the institution of graduate degree programs in the early twentieth century and service-learning in the late twentieth century, fundamentally rigid role structures have been persistent and remained intact: faculty roles and rewards; classroom based instruction; class schedules; degrees and credentialing.⁶ These characteristics, or a variation, are consistent with the structure of higher education in many countries. While higher education is currently transitioning from its longtime limited access, classroom instruction basis to more use of technology, changes have been difficult for many.

12.2.2 Data

Informed hindsight and historical records provide copious evidence for the case study of America's 13 original colonies on the shores of seventeenth century America. All were colonies of Great Britain, which at the time was regarded as the greatest superpower in the world.

⁶Dr. David Helfand details the rigidities inherent in the structure of higher education: <http://www.youtube.com/watch?v=DZQe73IXZiU&feature=share&list=PL98356CD352B01730>

Colonists had traveled across the ocean to settle in an unfamiliar environment. They were not from the upper classes of society. Some were expatriated from debtors' prisons and had no voice in their destiny. Many crossed the ocean seeking a better life than the scripted one from their birth. The travel itself carried great personal risk as many did not survive the ocean voyage. Once a colony was established, its survival was not guaranteed.

Higher education provided the defining foundation for the development of the colonies into a nation. While its transition from colonies to nation has been rocky and fraught with the challenges of forging a path from humane ideas of equality and human dignity to struggle and uneven implementation, the early insistence on the value of education has been shown to equip the polity with the necessary tools for addressing such challenges.

12.2.3 Common Conditions

As in our 21st century, the future of the colonists was unscripted. Those who survived the voyage set forth in a new environment with many unknowns and numerous threats to survival. Many colonists died from starvation, malaria, cholera, and other threats, including conflicts with the Native Americans, occasioned by taking the tribal lands. Some entire colonies did not survive.⁷

The journey of the colonies into a nation began in 1607 with the Jamestown Settlement in Virginia, and culminated in 1787 with the signing of the United States Constitution. The interim 180 years was characterized by generations of changes, struggles, and a complex history culminating in the uneven embrace of the values of equality and human dignity in a land of the slave trade and an economy based on the private ownership of humans as property.

For the colonies, the future was yet to be shaped. The colonies were not founded with the intention of breaking away from England and forging a new country. However, after more than a century of disputes with King George III and his predecessors, the colonies began the awkward, difficult and dangerous process of becoming a nation. Many individual colonists made the painful decision to renounce their status as British subjects and risked being hanged for treason if the colonies lost the Revolutionary War, while others returned to England.

12.2.4 Proven Outcomes

Founding documents of the new nation, including the Declaration of Independence and the U.S. Constitution, were influenced by the thinkers of the Enlightenment period, particularly the philosophy of John Locke (1690). These “self-evident”

⁷The late sixteenth century Roanoke Colonies in (present-day NC) did not survive.) http://encyclopediavirginia.org/Roanoke_Colonies_The#start_entry

human dignity values of equality, "...right to life, liberty, and the pursuit of happiness..."⁸ undergird the effort of the 13 colonies toward one imperfect union. Like the values explicit in the U.N. Universal Declaration of Human Rights, these values provide a human dignity subtext that has helped inform underlying governing decisions of the nation from the eighteenth century to now.

Proven outcomes continue from the Colonial Period. As we trace the evolution of the United States from 13 struggling colonies, it is clear that institutions of higher learning continued to play a critical role over time, perpetuating human values as well strengthening the social fabric. From the private colleges of the colonies to the westward expansion and the Morrill Acts of the 19th establishing land-grant universities and colleges and encouraging admission of African Americans (Association of Public and Land-Grant Universities 2012), to research universities, the Servicemen's Readjustment Act of 1944 (http://www.gibill.va.gov/benefits/history_timeline/) greatly expanding the middle class (http://www.scholarsstrategynetwork.org/sites/default/files/ssn_key_findings_mettler_on_gi_bill.pdf), the National Defense Education Act and other acts expanding educational opportunity for all citizens regardless of race, gender, religion or nationality, and the Higher Education Act (<http://www2.ed.gov/about/overview/fed/role.html>), the impact of higher education on the United States has been profound.

12.2.5 Context

The establishment of colleges in colonial America demonstrates commitment to higher education. Early colonists founded Harvard College 15 years after the Mayflower landing. Within 18 years of the Jamestown Settlement, the precursor to the charter of the College of William and Mary was written. During the 17th and 18th centuries, several colonies established colleges. Harvard College and the College of William and Mary have their beginnings in the 1600s, while many others—including Princeton, Yale, Dartmouth, Rutgers, and others—were established in the 1700s. The earliest institutions prepared men for key roles in society. They studied the humanities, Greek, Latin, logic, philosophy, and associated disciplines. Later, fields such as law, surveying, navigation, mathematics, and physics were added to the curriculum (Rudolph 1991). The earliest faculties of these institutions, often established by the governor of the respective colony, were educated at European universities.

Education was important for the growth and vitality of society in general and for the colonies in particular. Later, the leaders of the United States, many of whom

⁸ Declaration of Independence. http://www.archives.gov/exhibits/charters/declaration_transcript.html

were themselves graduates of these institutions, explicitly posited advanced learning as necessary for the survival of a self-governing nation.⁹

The Founders, while representing conflicting interests and often vigorously disagreeing amongst themselves, understood the importance of education in developing a viable nation and shaping a future they hoped would endure. In their view, only an educated citizenry would be capable of the necessary work of a representative democracy. Only through education could values of equality and liberty be grounded in reason and discourse, and institutionalized in perpetuity for future generations.

Two of the intellectual giants of the founding era were John Adams of the colony of Massachusetts and Thomas Jefferson of the colony of Virginia. Both were elected president of the new nation. They had worked closely together on the Declaration of Independence. They often found themselves in disagreement on key issues. Adams did not hold slaves, considering it immoral; Jefferson did not free his slaves. Their long relationship turned rocky. Mutual animosity was so intense that decades passed without any communication between them. Their many commonalities, however, included the necessity for education and the importance of equality and human dignity.

Adams penned the Constitution of Massachusetts, in which he described the role of government, the social compact of all citizens, affirming the respect for the rights and liberties of every person, and the citizenry as interconnected individuals with duty to one another. Adams thus provided a governing document as well as the values-based foundation of society in which individuals could recognize their community connectedness to one another. Such an articulation promotes a sense of common bond and lessens the destructive individual mechanisms by which people have been known to prey on one another. The Constitution of Massachusetts, the “oldest continuously functioning constitution in the world” (<http://www.mass.gov/courts/sjc/john-adams-b.html>) is recognized as one of the significant predecessors to the United States Constitution.

Central to Adams’ view of government was the necessity of an educated populace to make it work. He wrote: “Laws for the liberal education of youth, especially for the lower classes of people, are so extremely wise and useful that to a humane and generous mind, *no expense for this purpose could be thought extravagant* (italics added).”¹⁰

Meanwhile, Virginian Thomas Jefferson, wrote on the same topic, in a letter to his law professor, George Wythe, in Williamsburg:

I think by far the most important bill in our whole code is that for the diffusion of knowledge among the people. No other sure foundation can be devised, for the preservation of freedom and happiness...Preach, my dear Sir, a crusade against ignorance; establish & improve the law for the education of the common people. Let our countrymen know that the people alone can protect us against these evils [tyranny, oppression, etc.] and that *the tax*

⁹For example: John Adams attended Harvard College; Thomas Jefferson, George Wythe, and James Monroe attended the College of William and Mary; James Madison attended The College of New Jersey (now Princeton University).

¹⁰Quoted by McCullough (2001, p. 103).

which will be paid for this purpose is not more than the thousandth part of what will be paid to kings, priests, and nobles who will rise up among us if we leave the people in ignorance (italics added). (Jefferson 1786)

Like many founders, Adams and Jefferson asserted the value of education for survival of the nation, agreeing that costs cannot be a factor; the cost of ignoring education is far greater.

Jefferson, who founded the University of Virginia (<http://www.virginia.edu/uvatours/shorthistory/>) considered it one of his finest achievements and included it on his tombstone as one of his three most important accomplishments. Although he had served as Governor of Virginia, U.S. Secretary of State, and President of the United States, Jefferson omitted these distinctions and included only the following achievements (<http://www.loc.gov/exhibits/jefferson/207.html>): “Author of the Declaration for American Independence and of the Statute of Virginia for Religious Freedom, and Father of the University of Virginia.” He wrote: “Because by these, the testimonials that I have lived, I most want to be remembered” (<http://www.monticello.org/site/research-and-collections/jeffersons-gravestone>).

Why these three accomplishments and in this order? Clearly, the Declaration of Independence asserted that everyone is created equal to everyone else, and that every individual is entitled to “life, liberty and the pursuit of happiness”. The Statute of Virginia for Religious Freedom declared the freedom to think, to believe as one chooses, or not to believe, as fundamental to human rights and dignity (<http://www.vahistorical.org/collections-and-resources/virginia-history-explorer/thomas-jefferson>).

Last on Jefferson’s list is “Father of the University of Virginia.” In crafting this list for his tombstone, Jefferson affirmed to the world the necessary role of higher education in ensuring the principles established by the documents already listed. Without such institutions dedicated to freedom and learning, the survival of human values would be in jeopardy. Jefferson wisely understood the function of universities to perpetuate individual freedoms and enshrine for generations to come individual freedoms and basic human values.

Colleges and universities provided a choice of scripts to many. At the same time, these colonial institutions provided the necessary basis for a form of government grounded in the will of the people.

12.2.6 Citizenship

Higher education was launched to develop citizens so that a society would be fashioned and a self-governing people could function under the rule of law. This effort had a national focus—building the future of the country—rather than recognition of global impact and responsibility.

12.2.7 Summary

This section drew on historical data to examine the defining role of higher education in shaping the future of a group of colonies 400 years ago into a major country of the world. This is a case study from which key lessons can be derived and applied to national situations. Clearly, the dominance of educational institutions providing learning opportunities for everyone in a diverse multicultural society as pathways for opportunity, perpetuating human values, and thereby building society through human values, were indispensable to shaping the future of the colonies.

At the same time, it must be acknowledged that during this era—as now—there was among the citizenry a massive failure to see violations of human dignity in their collective midst. In spite of the centrality of human values in the founding documents, those values were not uniformly and readily embraced. Progress is incremental and hard fought. It is through difficulties, and even outright war, that progress is made. The challenges in bringing the values to fruition speak to the difficulties of overcoming cultural resistance to championing those values, and serve to warn us of immense challenges in developing a corps of effective global citizens.

12.3 The Role of Education in Shaping the Unscripted Future

Whereas recognition of the inherent dignity and of the equal and inalienable rights of all members of the human family is the foundation of freedom, justice and peace in the world...
(Preamble, U.N. Universal Declaration of Human Rights, 1948)

Turning our attention to the need to shape the emerging future by advancing human values, higher education is key to that effort. Given the defining impact of higher education on human civilizations in the past, it is appropriate that we consider the question of how it might shape the future on a global scale.

The future of the world in the 21st century is yet to be defined and is currently being crafted by us all. While the levels of individual uncertainty and anticipation may mirror past times in human history, including that of the colonists and revolutionaries renouncing their British citizenship, today's uncertainties are global in nature and connected around the world.

During the 20th century, higher education provided a means for individuals to grasp opportunity, change their birth script to a more desirable one, continue with that newly acquired script, while enhancing their role as citizens. In the past, degrees provided graduates with the pathway to a "script" whereby they learned exactly what they would be doing in their professions, enjoyed a long career, and were rewarded with a good retirement. Obviously, for all practical purposes, those days are over. Career expectations for many are no longer realistic for the next 50 years, or even the next 5 years.

The reasons that career expectations are presently being dashed include the myriad of forces we are witnessing. Vast social, economic, employment, techno-

logical and global changes affecting us and the world are increasingly apparent. The broad outlines of these changes were developed in Park University's Hauptmann School of Public Affairs in 2007 (<http://www.park.edu/academics/hauptmann-school-of-public-affairs/deans-message.html>) and have been described as The Unscripted Future (DiPadova-Stocks and Kenworthy 2009). The changes identified here reflect the VUCA world¹¹ as well as the Age of Disruption¹² and are occurring in virtually every sphere: global, political, environmental, work and employment, technological, medical, mechanical, higher education and more. The changes are unique and wide-ranging in character, knowing no geographical or political boundaries; they circle the globe, enhancing world-wide communications and distribution of knowledge.

These changes are relentless, fast-paced, and accelerating. The same tool can be used to create opportunity and to create danger. For example, technology and the internet enable global collaboration with colleagues around the world, and also provide (e.g.) instructions on how to create a bomb.

The Unscripted Future surfaces difficulties of having no predictive models for consequences of events which have not previously occurred and thus have not been subjected to investigation. Consequences of decisions are untested; any of them may either be largely favorable for humankind, or very unfavorable. No predictive sciences anticipate the outcome of events, as some of what we are witnessing has never occurred. Prior research is not predictive of the future.

These considerations are critical in looking at higher education in our emerging future. They raise the foundational questions on its purpose and its most productive role in such an environment.

Increasingly, educators worldwide are recognizing that open creative thinking is required; keeping the models of the past will not work. In December 2007, Dr. Stephen Joel Trachtenberg, who had served as a university president for 30 years (University of Hartford and the George Washington University), addressed the annual conference of the Council of Graduate Schools. Expanding on his address in a published article, he asserted that if he were to convene a panel of experts to consider the future of higher education and how to advise students accordingly, he would include not only university deans, presidents, consultants, and the like, but also others experts in the following: "(1) the rise of graduate education in Europe and Asia and (2) distance learning...and (3) experts who earn their living by imagining the future" (Trachtenberg 2009, p. 73). As education is one of the more tradition-bound professions in the U.S. (along with the clergy and the judiciary), the third category of experts is especially striking. Trachtenberg described these experts as "...not bound or directed by tradition" (Trachtenberg 2009, p. 76).

Drawing on experts who are not bound by the past is critical for consideration of the future of higher education. The global and technological changes occurring now have no precedent. To think through these issues, one must be informed by tradition, but not bound or directed by it.

¹¹ See Johansen (2009).

¹² See Scharmer and Kaufer (2013).

Table 12.1 Role of Higher Education in Shaping the Unscripted Future. This chart presents variables presented in the case study and applies them to the 21st century

Colonies, sixteenth to seventeenth centuries	The 21 st century future
<i>Characteristics</i>	<i>Characteristics</i>
Traditional from 14 th century	Technology enabled
Basic structure unchanging	Continual change; innovation
Ivy tower; rigid roles	Community-based; global
Hierarchical; authority centered	Collaborative; co-creative
Top-down	Individualized
Classroom lectures based	Contributive; experiential
Gatekeeper of knowledge	Knowledge democratized
Unquestioned value	Judged on career outcomes
Exalted role in society	Elevated role in society
Recognized public good	Intentional global good
Elite; selective	Open access
<i>Data</i>	<i>Data</i>
Informed hindsight	Limited foresight
Historical records	Inferences applied forward
Evidence-based	Emerging evidence
<i>Common conditions</i>	<i>Common conditions</i>
Lack of certainty	Lack of certainty
Threats to survival	Threats to survival
Future to be shaped	Future to be shaped
<i>Proven outcomes</i>	<i>Necessary outcomes</i>
Strengthening social fabric	Strengthening social fabric
Human dignity values (HDV)	Human dignity values (HDV)
HDV perpetuated over generations	HDV perpetuated over generations
HDV reflected in governance and decision-making	HDV reflected in governance and decision-making
<i>Citizenship</i>	<i>Citizenship</i>
National identity	Global identity
	Responsibility of all professions

We are poised in an era of unprecedented opportunity to shape the future of human civilization (Martin 2006; Goldin 2008). The massive scale of this opportunity presents itself in the form of relentless change in many key spheres of life, from nanotechnology, to artificial intelligence, to global climate change (Stern 2007). According to Dr. Ian Goldin, Director of the Oxford Martin School for the Twenty-First Century at Oxford University, the possibilities of this century have been described as superb human advancement or, alternatively, failure to handle the twin threats of growing complexity and rising awareness of income inequality (Goldin 2008).

These changes create an immensely exciting yet unsettling era. New technological advances available to the public include 3-D printing, which will revolutionize manufacturing while making firearms and other weapons even more widely available. Google-glass, another consumer product, will transform interpersonal interactions while raising privacy concerns.

This era is complex, demanding and daunting. Each opportunity brings associated risks. The pace of change—described by Kurzweil as an accelerated exponential rate (Kurzweil 2005)—exacerbates the challenges.

12.3.1 Characteristics

The pace of change in higher education has been accelerating throughout the twentieth century and as of 2014, the future shape is barely beginning to surface. Technology is enabling many of the changes, with vast networks—and libraries—of knowledge increasingly available online to individuals on every continent. Learners in classrooms are increasingly more informed on their subject, and they know how to access current thinking on any topic instantly. Global collaborative groups are operating. A virtual tsunami of false information and fabrications quickly turns into an ocean of data, requiring critical thinking skills and attention to the legitimacy of information. As the saying goes, with the internet, everyone needs to learn to be their own reference librarian.

Innovative changes include: use of social media, mobile online courses (taking courses on phone and tablet apps), Massive Open Online Courseware, iTunes U, to career portfolios, personal learning networks, to name a few.¹³ Even gaming as skill development for saving the world is recognized as advancing global awareness and problem-solving in real world scenarios.¹⁴ Institutions of higher learning will accelerate life-long learning commitment in many directions, from encouraging people to take more courses to helping people learn from their environments.

12.3.2 Data

Data for informing our understanding of the 21st century has limitations because much of the data are, by definition, still to be collected on phenomena yet to occur. Many variables are yet to be identified.

While it is not yet possible to extrapolate from masses of historical data and primary documents, ongoing scientific studies and developments are underway, with new developments, innovations, and reports released at a rapid pace. For example, the September 2013 report of the Intergovernmental Panel on Climate Change reflects a heightened concern, as the evidence shows that global changes are accelerating (http://www.climatechange2013.org/images/uploads/WGIAR5-SPM_

¹³ See Fast Company's Anya Kamemetz, <http://www.youtube.com/watch?v=i6MLLkmXee0>

¹⁴ See The Institute for the Future's Dr. Jane McGonigal's conceptualization: <http://www.youtube.com/watch?v=dEIDuBesGYM>, as well as the SuperStruct games. <http://janemcgonigal.com/play-me/>

[Approved27Sep2013.pdf](#)). This change knows “no geographical or political boundaries”. Jurisdictional governing structures reflect geographical and political boundaries. Issues that cross these boundaries may not have the necessary governing structures to forge solutions. The climate change issue provides an illustration of challenges inherent in developing a solution to address it and fashion an appropriate governing structure, honor the sovereignty of nations, and act quickly.

12.3.3 Common Conditions

Like the English colonists of 400 years ago, we face threats and an unscripted future. Unlike the colonists, the 21st century brings global threats and no governing structure available to provide a set of common values and other benefits necessary to build a universal social fabric.

The colonists had a familiar present in the sense that their hunting and gathering skills for food, communication structures, and the like were familiar from generations past. In contrast, today’s generations in the same household communicate differently; social media, texting, and instant messaging, for instance, are skills that parents and grandparents find themselves learning from the youngsters. This dynamic will continue.

As the colonies had clear threats, we face some as well in our fast-paced global technological environment. Current issues that we as a human family are addressing include (but not limited to): climate changes with associated coastal flooding (Levermanna et al. 2013), challenges to the global food supply and the availability of safe drinking water, prospects of resulting massive population displacements, enhanced possibility of pandemics, wide availability of deadly chemical and bacterial weapons, enhanced cyber-attacks, global resource management challenges, and much more. While governments can shut down global internet access to curtail unrest, we have also seen social media launch revolutions and overturn dictatorships.

The convergence of these and other threat-like conditions can foster divisions among groups of people and threaten the societies. Left unchecked, they can unravel civility and launch social unrest. Threats, coupled with helplessness and no apparent governing mechanism for addressing the threats, shred any sense of common bond and surface destructive individual mechanisms by which some humans have been known to prey on others.

12.3.4 Necessary Outcomes

This category is the counterpart to Proven Outcomes in the case study. As demonstrated earlier, institutions of higher education are in the ideal position to perpetuate and affirm common human values, and in so doing, strengthen society. Without a

governing structure of sufficient strength to embrace human values, build the common social fabric and respond deftly and effectively to threats, higher education can imbed those values throughout the world so that they govern individual and collective decisions.

12.3.5 *Citizenship*

Higher education can meet the challenges facing humankind; the technology is now available to develop human intellectual capital on a global scale. Regardless of field of endeavor or profession, its important work is developing a corps of global citizens who embrace basic universal human values, are committed to protecting human dignity, and to building a better world for everyone. Doing so will help strengthen a global social fabric of resolve and understanding.

To that end, the following threads of learning provide generic starting points for developing global citizens:

- Universal human values and basic human rights
- Adaptability, empathy and service to others
- Cross-cultural and international perspectives
- Critical thinking, healthy skepticism, and research skills
- Historical perspective
- Accountability for actions and responsibilities
- Leadership and responsibility for others
- Ability to examine, articulate and argue different points of view.

These threads are not constrained by discipline, field, modalities, profession, or boundaries. They foster creative learning, draw on learning knowledge, and enhance the adaptability of learners, important features during these times of relentless change. In the online environment, learners gain experience leading virtual teams, conducting virtual presentations, and interacting with fellow learners located around the globe.

In the emerging future, individuals create their own scripts. Given the dynamic, global employment environment, people need to be able to adapt quickly. Many find themselves pursuing multiple careers in their work life and creating innovative businesses for themselves. To enhance their success, they seek educational programs that provide a necessary knowledge base and skill set for adaptation.

Individual distress prompted by challenging existing scripts, especially when those changes are not favorable or planned, is expected. While these dynamics are mentioned earlier in the chapter, if the disappointment is widespread across the population, it can lend itself to various forms of social protests and dysfunctional behaviors as people try to adapt. Many economic and political discussions on the global landscape reflect the importance of reliable and predictable scripts. In the United States, many Americans have long expected that they would not be confined to a generational script, but that they would be able to develop life circumstances

that surpassed those of their parents. Of open concern in today's economic and political environments is the recognition that growing income inequality leads to limited mobility of younger generations, in contrast to parents whose upward mobility is seen as having been more favorable.

12.4 The Unscripted Future and the Twenty-First Century Educator

In a world consumed with uncertainty, how can we ensure the success of ourselves as individuals, our communities, and the planet? (John W. Moravec, 2013, *Knowmad Society*, p. 18)

Harold Shapiro, the 18th President of Princeton University, points out that “Universities, like other social institutions and even individuals, ought to serve interests that include but move beyond narrow self-serving concerns” (Shapiro 2005, p. 1). The 21st century has become one of considerable uncertainty and turmoil as economies and employment frameworks are being restructured and income inequality in some parts of the world has increased. Educators, long committed to the betterment of society, find themselves in the predicament of not knowing how their own work will be shaped.

The following understandings are well established:

1. The foundation of stability in the Age of Disruption/the Unscripted Future is widespread recognition and emphasis of universal human values. They have been tested and proven for centuries and millennia of human history. They hold the promise of providing stability in a world of turmoil.
2. Education and learning improve the human condition.
3. Educators will be the force that shapes minds and hearts with universal human values.

Such understandings provide a basis for moving forward as we consider the shape of higher education. The physical boundaries of colleges and universities will become faded. Subject matter will respond to real time pressing issues and include problem solving. Learning will be more individualized, while global and virtual; guided continuous learning, with an increase in MOOCs and similar knowledge platforms freely available; faculty serve as continual sage mentors actively engaged in their own learning journey, concerning themselves with individual performance in the learning environment, careers, and in life, and with global implications. Higher education will provide linkages and pathways to the future via other organizations, associations, and local endeavors. Colleges and universities more fully embrace the establishment of businesses, firms, and laboratories to give graduates needed work experience beyond internships, and continue innovative associations with graduates.

Fortunately for the world, in many countries investment in higher education is a priority in shaping the future of their people and nation. While the United States has been decreasing its investment in higher education over the past few decades, China,

India and other nations continue to increase funding. China, for instance, is investing \$250 billion a year in higher education (http://www.nytimes.com/2013/01/17/business/chinas-ambitious-goal-for-boom-in-college-graduates.html?pagewanted=all&_r=0). These investments coupled with the sheer demographic differences between countries place pressure on other nations to harness and develop all possible human intellectual capital.

Key questions must remain at the forefront of our efforts as the future emerges: Will the development under consideration affirm human dignity? Will it improve the human condition? Will it develop needed intellectual capital? And will it be a force for good in the world?

12.5 Conclusion

Civilization is a race between catastrophe and education. (H. G. Wells (1866–1946), British writer)

From an exploration of individual life scripts to the societal and national level of analysis, we considered the role of higher education in the early 13 colonies as a nation was created, using it as a case study of diverse entities jointly shaping their future into a global presence. We turned to multiple dynamics of the 21st century in which scripts and expectations, both individually and globally, are being redefined, enlarged, and challenged, and we explored the defining role of higher education in bringing humane transformation in a way that protects human dignity worldwide. We conclude by affirming higher education as the most promising institution to shape the global future and the future of humanity.

Like the plight of the early colonies, the future looms unscripted and difficult, with its own set of dangers, yet exciting with promise and opportunity. Clearly, as this chapter is being written, the script of the future facing individuals and the world is yet to be framed and we cannot assume the outcome. The future, fraught with opportunities as well as with danger, is not scripted; this century may be the best humanity has seen, or the worst (Goldin 2008). It is up to the collective us.

The power of humane ideas, of values of equality and human dignity, are timeless, and no century, past or future, is exempt. The protection of human values, human dignity, and human rights is never secure, and the preservation of these values requires constant deliberate and intentional actions.

Like many leaders throughout history and around the world, the founders of the United States recognized that education is fundamental to a free, self-governing people and to civil society; they understood that education improves the human condition. They asserted the importance of higher education in founding colleges and universities as a priority. They recognized that the development of human intellectual capital was important to shaping a future viable for livable society. These realizations are distributed throughout the myriad of documents from that era—state constitutions, the Declaration of Independence, various declarations of rights,

and others, and resonate with the twentieth century's U.N. Universal Declaration of Human Rights.

Higher education in the 21st century must accomplish for the global future what universities accomplished in the Colonial Era. Then, like now, institutions of higher learning play the defining role in developing human intellectual capital equipped to meet the daunting issues facing our human family, and to shape a viable future for the world.

I look to the future, not to just be part of it but to shape it. (John F. Kennedy, Jr. 1917–1963)

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