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Teaching in the Post COVID-19 Era

World Education Dilemmas, Teaching
Innovations and Solutions in the Age
of Crisis

Springer

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Photographer Michael Nash uses his own backdrop to mask Poland's World War II ruins while shooting a portrait of a woman in Warsaw in November of 1946. (AP Photo/Michael Nash)

Foreword

In early March 2020, UNESCO, the UN agency for education, released the first global figures on school closures induced by the COVID-19 pandemic, warning that nearly 300 million students were impacted, with the most disadvantaged at greatest risk of missing out on their education entirely. Within weeks, this figure had climbed to 1.5 billion, representing 90% of the student population, across 190 countries.

Never has education experienced disruption at this scale. No country was ready to withstand such a shock and pivot to remote learning. This opened wide the space for peer learning, innovation and collaboration as a necessity to ensure learning continuity. Educators were challenged on all fronts, from lack of digital competences and connectivity, to inadequate learning resources and obstacles in maintaining contact with their students, especially the most vulnerable and marginalized. More than ever, this crisis has demonstrated that schools are not only places of academic learning but ones that provide vital social protection and emotional support and nurture relationships. It has underscored that social and emotional skills are essential for learning and living. It has shone light on the resourcefulness and dedication of teachers, on the engagement of families and communities in supporting education, and on the agility of governments to partner and innovate.

This pandemic, however, has amplified inequalities, accentuating a pre-existing education crisis. The only way forward is to accelerate the transformation of education. Our compass remains the most ambitious goal ever adopted by the international community as part of the 2030 Agenda for Sustainable Development: to achieve inclusive, equitable and quality education and promote lifelong opportunities for all by 2030.

The most urgent injunction is to act for inclusion, by creating the conditions where all children and youth learn, regardless of their circumstances. This remains a tough call, requiring measures to support those at risk of exclusion, diversify teaching practices, and combat all forms of discrimination in learning environments. Technology, on which learning has become increasingly dependent, must be locked into systems to improve learning, pedagogies, teacher training and resilience to crisis, with equity at the core. Teachers must be consulted, valued and provided with opportunities to collaborate and continuously improve their skills, informed by scientific research.

Beyond these fundamentals, the time is ripe to gear education to an interdependent, uncertain world, facing the common existential threat of climate change, the deepening impact of technology on every aspect of our lives, and the spread of misinformation polarizing our societies. Education embeds a vision of the future we want: more inclusive, equitable and sustainable. Educational institutions provide the space to acquire the knowledge, sensitivity and skills to act for the common good, to think critically, to defend democratic values and protect our planet.

The transformation of education therefore requires new knowledge, fresh evidence and the courage to question established beliefs and practices, to experiment. Higher education has a frontline role to play in connecting research to policy and practice, and sharing knowledge to irrigate the entire education system.

This volume provides insight into the wealth of innovations that have taken root over the past year around the world and offers rich reflection on pathways for transforming the purpose and practice of education. It brings together a wide diversity of viewpoints and expertise, spans all levels of learning, and resonates with UNESCO's humanistic and transformative vision of education, and the conviction that intellectual exchange and partnership nourishes human progress and advances the human right to education.

About Stefania Giannini – UNESCO Assistant Director-General for Education

Ms Stefania Giannini was appointed UNESCO Assistant Director-General for Education in May 2018, becoming the top UN official in the field. In this position, she provides strategic vision and leadership for UNESCO in coordinating and monitoring the implementation of the Education 2030 Agenda, encapsulated in Sustainable Development Goal 4 "to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all." With an academic background in the Humanities, Ms Giannini has served as Rector of the University for Foreigners of Perugia (2004–2012), being one of the first and youngest women to hold this position in Italy. As Senator of the Republic of Italy (2013–2018) and Minister of Education, Universities, and Research (2014–2016), she developed and implemented a structural reform of the Italian education system, centered on social inclusion and cultural awareness. She has also been closely involved in an advisory capacity with the European Commissioner for Research and Innovation.

Stefania Giannini
Assistant Director-General for Education
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Foreword

Although the contributions to this comprehensive Handbook have all probably been written while we are still very much immersed in the COVID era, we can already see the contours of post-COVID educational spaces emerging from the shadows. During the past year, educators and students around the world have experienced a profound transformation of teaching and learning brought about by the current global crisis. Academic conferences and business meetings of all sorts have gone virtual; university and tertiary college courses have predominantly moved online; teachers and students in K-12 schools are adjusting to online and/or hybrid interactions with mixed outcomes. Significant learning loss is predicted for K-12 students, particularly those coming from socially disadvantaged backgrounds. For example, in the United States context, Kuhfeld et al. (2020) estimated that under what they called COVID Slide projections (where 2020 summer holidays were assumed to start in March 2020), 'students were projected to end the abbreviated 2019–2020 school year with roughly 63% to 68% of the learning gains in reading but only 37% to 50% of the average gains in mathematics compared with those of a normal school year' (2020, p. 556).

Thus, the insights, innovations, and experiences documented in *Teaching in the Post COVID-19 Era* could not be more timely. Over the course of multiple lockdowns, travel restrictions, and the economic insecurity that is all around us, there have been multiple occasions when many of us have spoken the phrase 'When things get back to normal…' with a mixture of hope, anticipation, and apprehension. We know some form of 'normality' will return over the coming year, but we also know that it will be a very different normality from what we have grown accustomed to.

The post-COVID era will bring some benefits. Many of us have been surprised at how smoothly large conferences and meetings involving thousands of people have been orchestrated. We have missed the personal interactions associated with these large conferences but relatively little has been lost from the perspective of learning and communication of information. With hybrid conferences involving both online and in-person options on the horizon, many of us will undoubtedly choose to reduce

our carbon footprint and the physical toll of travelling long distances by opting for online participation.

Hybrid options are also likely to expand at the secondary school and tertiary level, requiring policymakers and educators to rethink curricula, timelines, instructional strategies, and all forms of assessment. There will be significant challenges for educators to find the appropriate balance between transmission of information and skills, much of which can, in principle, be done online, and the less quantifiable goals of education such as social and emotional learning, developing imaginative thinking skills, and participating in learning communities focused on collaborative problem-solving. In light of the rapid changes undoubtedly coming to both secondary and post-secondary education in the post-COVID era, it is somewhat reassuring to think that, at least in the immediate future, the educational experiences of children in early childhood programmes and elementary schools may remain much as they have been. Digital influences will obviously increase but the predominant model will likely remain in-person classroom learning.

Clearly, education in the post-COVID era will usher in opportunities and challenges. But perhaps the greatest challenge comes from the very same technology that has generated so many learning opportunities. In the past year, the scale of mass indoctrination from conspiracy theories 'going viral' on the Internet has become apparent. Expertise is routinely spurned by a significant proportion of the population in countries around the world. Science is rejected in favour of evidence-free conviction. Credible media outlets are dismissed angrily as 'fake news'.

Technological innovation in the field of vaccine development has brought hope that the physical devastation wreaked by the pandemic may soon be contained. But are there any technological or educational solutions on the horizon to limit the destructive psychological impact of disinformation, wilful ignorance, and cynical exploitation? As we think about the challenges and opportunities of post-COVID education, we tend to focus on more effective ways of teaching academic subject matter such as math, science, and literacy. But at this juncture of human history, it is equally important for educators to enable their students to think rationally, constructively and creatively so that they become immune to indoctrination and the destructive group-think characteristic of cults.

Reference

Kuhfeld, M., Soland, J., Tarasawa, B., Johnson, A., Ruzek, E., & Liu, J. (2020). Projecting the potential impact of COVID-19 school closures on academic achievement. *Educational Researcher*, *49*(8), 459–565.

About Dr. James Cummins

Dr. James Cummins is a Professor with the department of Curriculum, Teaching, and Learning at OISE. Dr. Cummins holds a Canada Research Chair (Tier 1) and has been a recipient of the International Reading Association's Albert J. Harris Award (1979). He also received an honorary doctorate in Humane Letters from the Bank Street College of Education in New York City (1997). In recent years, he has been a co-investigator on a large-scale SSHRC-funded project entitled "From Literacy to Multiliteracies: Designing Learning Environments for Knowledge Generation within the New Economy." He is currently involved in a project to validate the Ontario Ministry of Education's Steps to English Proficiency assessment tool. He is also conducting a research review on English Language Learners' academic trajectories. Dr. Cummins has co-authored several books on literacies in education, and has seen his work translated into Japanese and Spanish. https://www.oise.utoronto.ca/ctl/Faculty_Profiles/1464/James_Cummins.html

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Foreword

Probably no event has had more impact on education globally than the Covid-19 pandemic. Here in Canada in March 2020, nearly every university and college moved all their teaching into an online, remote emergency mode within the space of two weeks. (Previously less than 10 per cent of all credit course enrolments were in online courses.) This saved the Spring semester for most students and institutions, and most Canadian institutions are still operating mainly online in the fall. The school sectors, however, were hit particularly badly, and even as late as October 2020, many school systems here in Canada are struggling with online and back-to-school strategies while the virus is still prevalent.

What is becoming clear though is that even after the pandemic, there will be a 'new' normal. Some instructors will have found that online learning can work well, at least for a significant number of students. Institutions are realising they need to build resilient systems that can withstand such shocks and this will influence their future plans.

Other lessons though are less positive. Covid-19 has shown, especially for school systems, that there are significant problems of equity of access for online learning, and the less economically developed a country, the greater the equity issues. The isolation and stress caused by Covid-19, working and studying from home, and balancing child care and work responsibilities as well as lock-down provisions, have all impacted the mental health of many people, including parents, students, teachers and professors. Not all subjects are equal when it comes to online learning. In particular, science, technology and vocationally oriented subjects that require practical work are more difficult to move online.

Then there are areas of innovation and development, such as blended and immersive learning, integrating both face-to-face and online learning, that have received a big impetus as a result of Covid-19. These teaching models though are still experimental and need to be evaluated. And lastly, new models of course design are emerging. The Covid-19 experience has raised the issue of the need to identify the benefits and limitations of synchronous versus asynchronous learning, and the unique educational affordances of face-to-face teaching when much learning can be done as effectively online.

It is for all these reasons that this book is very important. We need to know exactly what worked, what did not, and the lessons to be learned as a result of the switch to emergency remote learning. This book brings together experiences and research from over 30 countries on these topics, and will be essential reading for all policy-makers, educational administrators, and teachers and instructors.

Dr. Tony Bates is a Senior Advisor at the Chang School of Continuing Education, Ryerson University, Toronto, and is also a Research Associate at Contact North, Ontario. He is currently Chair of the Board of the Canadian Digital Learning Research Association. He was a founding staff member of the British Open University, becoming a full professor in educational media research. In 1989, he became Executive Director, Strategic Planning and Information Technology at the Open Learning Agency, Vancouver. From 1995 to 2003 he was Director of Distance Education and Technology at UBC. He has worked as a consultant in the design and management of online and distance learning in over 40 countries.

Dr. Bates is the author of twelve books, including his latest online, open textbook for faculty and instructors, *Teaching in a Digital Age*, which has been downloaded over 500,000 times and translated into ten languages.

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Foreword

The global impact of COVID-19 on daily functioning cannot be measured. The virus changed human contact and shocked the global mindset as individuals realized how quickly life can crumble into basic survival. While resilience inspired creative new ways of responding to the changing landscape of life, the ongoing fatigue of change, isolation, economic depression, and unattainable normalcy eroded mental health.

The impact of COVID-19 on mental health is palpable. The concern over health and safety rose to the forefront of conscious thought. For many, the ability to implement their routine coping strategies, such as social outings or group exercise, was erased without preparation or thoughtful substitution. Change is challenging on a small scale for most, but the virus caused a domino reaction that left many without resemblance of pre-COVID-19 life.

In mental health counseling, the principle of relationship is often a primary focus for obtaining well-being. This translates to the relationship with others, the environment, and within oneself. The quality of relationship dictates quality of life. COVID-19 diminished relationships on every level. The quality of relationships with others transformed into isolation and social distancing. Social support is one of the most correlated aspects of well-being and positive mental health. The pandemic created barriers to being with others and feeling connected. New roles were forced onto relationships, causing new relational styles. For example, some parents assumed online home schooling for their children while some couples rebalanced who was the primary breadwinner in the home. Many families were also impacted by required distance from elderly family members.

The quality of relationship with environment was impacted by the virus, increasing its importance. It was polluted with overwhelming concerns for safety and cleanliness. The pandemic created worry about ways to keep homes, offices, and social areas safe. Messages of hand washing, social distancing, and timely sanitizing filled public spaces.

Last, the quality of relationship within oneself was disrupted. This relationship centers on how one connects with the core aspects of self, such as identity and

self-awareness. The pandemic resulted in growing anxiety for many as internal conflict grew over changing roles, financial struggles, career implications, and physical care.

This landscape of change and adaptation is where education faced new challenges. Educators and students are not immune to the effects of COVID-19-related stress and anxiety. In fact, pandemic-related stress for faculty and students is not only ongoing but chronic. What was often already stressful work, whether teaching or studying, was exacerbated. Adapting to new modes of teaching is only the tip of the iceberg. Educators are now tasked with balancing how to satisfy their own emotional and mental health needs while also meeting similar needs in their students. Amid worries about academic studies and performance, new anxieties originated for students about being separated from their friends and, often, family. Unfortunately, this establishes risk factors for signs of burnout for both educators and students.

Educators have become creative in the ways in which they are meeting their own emotional needs, as well as those of their students. This is a theme throughout this book. Section IV – Supporting Mental Health in Times of Anxiety – includes some of the novel solutions faculty have developed to handle the disruptions created by COVID-19 stress and anxiety in teaching and learning.

Dr. Peter Hall, PhD, is a Registered Psychotherapist in Ontario, a Licensed Counselling Therapist in New Brunswick, a Canadian Certified Counsellor, and an Approved Clinical Supervisor. He currently serves as Provost and Vice President Academic for Yorkville University's New Brunswick campus. Dr. Hall is a psychotherapist working primarily within the pragmatic therapeutic domain, where he is an experienced counsellor educator and supervisor, and has an extensive clinical background working with underserved populations, including those who are LGBT, underhoused, and suffering problematic substance use. Although he spends most of his work time these days in academic administration, he remains current in the mental health field by teaching in the graduate programs at Yorkville University, advocating for improved access to mental health services for underserved populations, and maintaining a small private practice.

Dr. Sarah Stewart-Spencer is a Licensed Professional Counselor in Virginia, a Licensed Mental Health Counselor in Florida, and a Nationally Certified Counselor. She is also certified as a hypnotherapist and a clinical trauma professional. She is currently serving as Dean of Behavioural Sciences for Yorkville University's Master of Arts in Counselling Psychology. Dr. Stewart-Spencer is a co-creator of the trauma treatment protocol called Trauma-Focused Hypnotherapy (combining

bilateral stimulation with hypnotherapy practices) and is a trainer at the International Trauma Training Institute. She currently serves as a contributing faculty member at Arkansas State University and Capella University. She is the Editor of The Humanistic Counselor, the official publication of the Association for Humanistic Counseling. She is also an editor of the book series Metaphors and Therapy: Enhancing Clinical Supervision and Education. This teaching guide breaks though ambiguity in counselor education and training by introducing a variety of metaphors to help instructors and supervisors. She is also the editor and founding member of the *Therapeutic Speakeasy Quarterly*, a peer-reviewed electronic journal for the helping profession. She has contributed to the profession through numerous publications and presentations at the local, regional, state, national, and international level. She has also practiced in a variety of roles and settings, such as crisis/emergency, community mental health, outpatient counseling, psychiatric inpatient, court-appointed assessments, and consultation, and as a clinical director of a private agency. She has served in leadership roles throughout the professional field, such as on the board of the Virginia Clinical Counselors Alliance and as a committee member for the Association for Creative Counseling.

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Preface

The COVID-19 pandemic has deprived 91% of students of education in almost 194 countries worldwide because of school closures and lockdowns (the United Nations Educational, Scientific and Cultural Organization (UNESCO, 2020)). Among the effects of this reduction in education are the possible inability to return to formal learning, destruction of schools, withdrawal of educational spending while costs and needs are heightened, reduced quality of teaching, and trauma and self-victimization (Cervantes-Duarte & Fernández-Cano, 2016). Crises have increased threats to learning and global development. Our critical situation in 2020–21 has been the impetus for our publication. While the COVID-19 crisis has shown how vulnerable both our educational systems and teaching standards are, it has also pushed us to race toward increasing acceptance of changes and potential opportunities. Challenges, opportunities, threats, and needs in education as expressed in the chapters that follow have emerged from the COVID-19 chaos. This Handbook provides a global view of the education solutions and innovations in technologies that educators have implemented to confront challenges during COVID-19. They remain available to us here as models and lessons for teaching and learning post COVID-19.

The Challenges

This is an era of challenges. COVID-19 has invaded our worlds, gripping individuals, families, and communities, leaving us on guard against threats to life and challenges to health and education. Stress and emotional anxiety have spread like the virus itself. Humans have been locked down in their own home "cells" without being able to socialize and safely interact for the first time in many decades (Pragholapati, 2020). In the wake of all this uncertainty, vulnerable educational systems with their traditional classroom walls, physical setup, and routine daily work have been challenged. The weaknesses of our traditional educational systems have been revealed. Many children and post-secondary students have not been able to safely continue their learning outside of their homes for months. More stress has

sometimes been generated by inadequate educational technologies and connections available in some learning situations.

Most learning technologies had previously been promoted only commercially. They had not been implemented or accepted in the mainstream as core platforms for learning. They were viewed as secondary or supplementary options. However, while physical classroom walls have survived change for hundreds of years, and have somehow won out as mainstays in education, schools now stand alone with empty desks quieted by COVID-19. The existing technologies used in these critical times, in many cases, have attempted to replicate physical classroom settings through online and virtual dynamics. In some cases, this seems to have caused more confusion than success. Unfortunately, administrative procedures have also at times suffered a lack of clear direction for tackling the impact of COVID-19 lockdowns on students and teachers.

The Opportunities

Ironically enough, these challenges have also unleashed new opportunities. One of the main opportunities now forces schools, universities, and policymakers to accept and adapt technology for use in teaching and assessment as never before. Another opportunity is the introduction of both remote synchronous delivery (RSD) and asynchronous learning as the only possible modes of teaching for millions of students. This has led to a dramatic increase and acceptance of RSD methods and platforms among learners and educators of all ages. While these delivery means still suffer some unresolved technical gaps, they have gained more users, more acceptance, and more trust worldwide.

In addition, homeschooling, tutoring, and community-based learning are now becoming more widely accepted. This has eventually led to an increase in project-based and independent learning opportunities. Alternative and authentic assessment methods have become more widely used instead of midterm and final exams. Along with these changes, critical thinking and creativity are getting more attention as routine competence drills and exercises are inadequate. We are now called to practice more flexibility and resilience in education rather than restrictions. Moreover, with the awareness that has come with these new learning environments and dynamics has come the need for more transparency and clarity as opposed to ambiguity.

There has been more emphasis on virtual than physical learning environments for the first time ever. And with such circumstances there is more student autonomy and self-direction encouraged. We study in virtual campuses and breakout rooms now rather than physical school buildings and classrooms. Likewise, we teach in remote classrooms instead of traditional "brick and mortar" schools, and call upon approaches like the "flipped classroom" to minimize any possible "digital divide" (Christiansen et al., 2017). There is also more interest and a huge increase in educational investments related to cognitive learning, artificial intelligence, augmented and mixed realities gamification, and educational bots research (Adkins, 2020).

Equally important, during these crises, is the fact that we take advantage of virtual webinars and e-conferences instead of physical professional conferences that require long-distance commutes for participation. In many contexts, mandated professional development (PD) and teacher education programs have been replaced with more flexible teacher-led initiatives and PD. Similarly, local home-based professional gatherings have been augmented with international and global professional networks. Consequently, once cautious administrators may be becoming more cooperative leaders, and teachers more collaborative and creative facilitators.

The Threats and Needs

Even with all of these opportunities for growth, there are still several gaps. One of these is the lack of a clear alternative for experimental and practical education in labs (e.g., science, engineering, mechanical, or physics labs). Similarly, physical education (PE) has suffered from lack of a safe and clear alternative to PE programs and gyms for students who are now isolated at home.

There may also be serious privacy issues and concerns related to the new teaching environments that have not been addressed so far by schools and governments. These concerns could affect students or the validity of their assessments. Issues related to accessibility and accommodations for some students need more thorough solutions that support universal design, transparent policies, and technologically enhanced learning.

Moreover, entirely new technology infrastructures are now required in comparison to what we have previously maintained. Most technologies we used before COVID-19 were introduced as a "supplement" to the traditional or hybrid modes of course delivery. Those included most of the Web 2.0 or "freemium" technology solutions that have been available for teachers for free. However, this no longer seems to be the case. As COVID-19 has increased the need for online solutions, technology providers have changed their business models and increased their pricing plans on a global scale from a relatively low US18.6 billion dollars to nearly 350 billion dollars anticipated by 2025 (Li & Lalani, 2020). Governments and institutions need to fill these gaps by providing alternative technology solutions that teachers can easily use for both synchronous and asynchronous teaching.

New codes of conduct for values and ethics in teaching and learning with appropriate education and awareness programs are also needed. Understandably, new criteria for accreditation, international recognition, or even university rankings also need to be re-visited or completely redesigned to meet new standards and expectations. With the whole world facing similar challenges, collaborative and intellectual task forces made possible through global professional networks would accelerate needed advancements in domains such as research, engineering, technology, teaching and learning.

About this Handbook

This Handbook is an intellectual response to these global challenges. It offers insights, solutions, and practices that have been tried and contributed by innovative educators from around the world during the COVID-19 pandemic. While this Handbook started as a spontaneous answer to an immediate threat in our local setting, it soon received numerous and novel contributions from educators from diverse educational contexts and backgrounds worldwide.

Despite the challenges we have been experiencing at this unprecedented time during COVID-19, this Handbook represents one of many candles that aim to light up the world to overcome challenges in teaching and learning and to renew education. Out of the many chapter proposals received, this Handbook showcases selected chapters that illuminate five main themes:

- Teaching in Crisis Situations
- Alternative Course Delivery Modes
- Innovative Teaching and Assessment Paradigms
- Teacher Education and Leadership in Crisis
- Supporting Mental Health in Times of Anxiety

The variety of contexts, proposed frameworks, solutions, and innovations in this work represent a resource for addressing global educational challenges during critical times to turn them into educational successes for the future. As an ongoing dynamic resource, the accompanying website http://www.2020era.ca will feature videos, presentations, approaches and strategies, learning activities, podcasts, and other digital resources to expand the practical use and implementation of the solutions explained in this Handbook.

Take Part

This Handbook and accompanying website aim to accelerate educational innovation in the post-COVID-19 era. Contributions and suggestions from readers and practitioners are encouraged. It is a time where we all need to be responsible "frontline educators" for the sake of a prosperous humanity and our learners. We look forward to you and all educators engaging with this Handbook and the related website to advance teaching and learning and technology use in education. We aim to continue to feature multiple and diverse global contributions. We hope to participate together with you in these ongoing educational initiatives. We call on you to take part.

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References

Adkins, S. (2020). *Metaari's 2020 advanced learning technology research taxonomy*. METAARI. http://users.neo.registeredsite.com/9/8/1/17460189/assets/Metaari_2020_Research_Taxonomy.pdf

Cervantes-Duarte, L., & Fernández-Cano, A. (2016). Impact of armed conflicts on education and educational agents: A multivocal review. *Revista Electrónica Educare*, *20*(3), 238–261.

Christiansen, M. A., Nadelson, L., Etchberger, L., Cuch, M., Kingsford, T. A., & Woodward, L. O. (2017). Flipped learning in synchronously-delivered, geographically-dispersed general chemistry classrooms. *Journal of Chemical Education*, *94*(5), 662–667.

Li, C., & Lalani, F. (2020). *The COVID-19 pandemic has changed education forever. This is how*. The World Economic Forum. https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid19-online-digital-learning/

Pragholapati, A. (2020). COVID-19 impact on students. *Edarxiv*. https://doi.org/10.17605/OSF.IO/NUYJ9

United Nations Educational, S., & Organization (UNESCO), C. (2020). *Global education monitoring report 2020: Inclusion and education: all means all*.

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"… our own light goes out and is rekindled by a spark from another person. Each of us has cause to think with deep gratitude of those who have lighted the flame within us." —Albert Schweitzer

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To the authors and the many contributors to this text – "Thank you!" You have written brilliantly, edited carefully, and worked diligently. By sharing your solutions, research, and approaches you have provided the knowledge and models of innovation and tenacity needed for education during COVID-19 and far beyond.

We would like to mention Toronto Film School Acting Instructor John Tench, and his generous assistance in locating images for this book.

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Our appreciation goes out to the educators and role models who have inspired us with their Forewords in this text, as well as their examples of leadership:

- Stefania Giannini, Assistant Director-General for Education, UNESCO
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- Peter Hall, Ph.D. and Sarah Spencer-Stewart, Ph.D. MACP and DCP Programs, Yorkville University

And to our publisher, Springer Publishing, and our Editor, Melissa James – without your guidance and support this Handbook would not have been possible.

We respectfully acknowledge that this handbook was developed and edited on the traditional territories of diverse Indigenous nations. We reaffirm our responsibility to increase awareness and understanding of First Nations, Métis and Inuit peoples and colonial legacy, and commit to strengthening our relationship with Indigenous peoples throughout Canada.

Ismail Fayed, Ph.D. and Jill Cummings, Ph.D. (Co-Editors)

Introduction

Teaching in the Post COVID-19 Era: *World Education Dilemmas, Teaching Innovations and Solutions in the Age of Crisis* offers a global vista on solutions developed to handle disruptions in education.

This Handbook showcases extraordinary educational responses in exceptional times. The scholarly text discusses valuable innovations for teaching and learning in the time of COVID-19 and beyond. It examines effective teaching models and methods, technology innovations and enhancements, strategies for engagement of learners, unique approaches to teacher education and leadership, and important mental health and counseling models and supports.

These unique solutions advance effective digital technologies to support learners and teachers in critical times – for example, to name but a few, Florida State University's Innovation Hub and interdisciplinary project-based approach; remote synchronous delivery (RSD) and blended learning approaches used in Yorkville University's Bachelor of Interior Design, General Studies, and Business programs; the University of California's strategies for making resources affordable to students; strategies for resilient online assessment measures recommended from Qatar University; simulation use in healthcare education; gamification strategies used in Oman innovations in online second language learning and software for new Canadian immigrants and refugees; effective RSD and online delivery of Directing and Acting courses by the Toronto Film School, Canada; academic literacy teaching in Colombia; inventive international programs between Japan and Taiwan; and imaginative teaching and assessment methods developed for online Kindergarten – post-secondary learners and teachers.

Authors share unique global perspectives from a network of scholars and educators from more than 30 locations, schools, and post-secondary institutions worldwide. Educators, administrators, policymakers, and instructional designers will draw insights from this text to sustain education during and beyond the COVID-19 era.

The related website at http://www.2020era.ca hosts teaching and learning activities, videos, podcasts, and other exemplary digital resources to expand the practical use of this Handbook. Student teachers, practitioners, teacher educators, course and program developers, instructional designers, and administrators will be inspired by these practical solutions and ready-to-use ideas.

Contents

About the Editors

Ismail Fayed is Project Director, Educational Technology, at Yorkville University, Canada. He has 17 years of Higher Education experience in Canada, Qatar, UAE, Saudi Arabia, and Egypt. He holds a Ph.D. in Education Technology from the University of Science Malaysia and an MA in Educational Technology and TESOL from the University of Manchester. Dr. Fayed is the author of *ESL Writing Enhancement Using Moodle LMS* (2013), and co-editor of "Computers in English Language Teaching" (2011, TESOL-Arabia). He has served as an Executive Board member for several non-profit TESOL organizations over the past ten years such as (Qatar TESOL, TESOL Arabia and EgypTESOL EdTech).

Dr. Jill Cummings is Associate Dean of Faculty Development at Yorkville University, Canada, where she develops and facilitates orientation and professional development programs and scholarly activities. Dr. Cummings received her Ph.D. in Curriculum, Teaching, and Learning from the University of Toronto. She has supervised, developed, and delivered teacher education programs at both graduate and undergraduate levels. She has also developed and taught MA TESOL, TESL, and Adult Learning programs (online, blended, and face-to-face). Her research focuses on blended and online teaching and learning, creativity, and assessment and feedback. Jill Cummings is interested in "all things" about pedagogy, teachers, and community. She regularly contributes to numerous associations and conferences. Among many publications, she developed and edited "*Creative Dimensions of Teaching and Learning in the 21st Century*" in 2017.

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Part I
Teaching in Crisis Situations

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Digital Spaces of Engagement: Perspectives on Using Zoom and Virtual Spaces in Online Classrooms

David N. Ishii and Behnam Soltani

> *One looks back with appreciation to the brilliant teachers, but with gratitude to those who touched our human feelings. The curriculum is so much necessary raw material, but warmth is the vital element for the growing plant and for the soul of the child.*
>
> *Carl Jung*

1   Background

As universities have transitioned toward blended learning environments (Graham, 2018; Sharma & Barrett, 2007; Thorne, 2003), students, academic staff, and administrators are facing increasing challenges with ensuring student engagement and academic success. The onset of COVID-19 has amplified the need for addressing how courses are delivered online and how students respond to their new learning environs. The COVID-19 pandemic has had an extensive socio-psychological and financial impact on the global higher education sector. Instructors and students were thrust into a rapid-fire transition to an online mode of teaching and learning to use Zoom, a peer-to-peer software platform for virtual meetings. Although Zoom and similar video conferencing platforms have increasingly been adopted during the COVID-19 pandemic in various educational settings worldwide for distance education, tele-conferencing, and delivering online education in general, we have observed a number of challenges unfolding in relation to the rapid digitalization of curricula.

The transition from face-to-face classrooms to virtual meeting rooms has drawn our attention to understanding the following basic questions: "How does digital engagement manifest itself in these virtual classrooms?"; "How do students express

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their agency?"; and, "How do public and private spaces merge into an online space?" In essence, we aim to better understand what, how, and why engagement occurs in these digital spaces. We begin our discussion with a brief overview of how student engagement has been defined and how it relates to social practices. Then we introduce Lefebvre's (1991) concept of social space and its application to our Zoom teaching and learning classrooms. This is followed by an explanation of two teaching contexts and our perceptions of the types of engagement that occurred. The paper ends with some parting thoughts on student engagement and implications for teaching and learning.

2   Online Student Engagement

Various researchers have conceptualized what student engagement is (Finn & Zimmer, 2012; Kuh, 2005), whereas others have investigated how it is best achieved (Budhai & Skipwith, 2017; Conrad & Donaldson, 2011; Dixson, 2010; Poll et al., 2014). While some researchers (Handelsman et al., 2005) have classified different forms of engagement (e.g., skills engagement, emotional engagement, interaction engagement, and performance engagement), other researchers have conceptualized engagement in terms of teaching practices. Chickering and Gamson (1987) identified seven principles of best practice that include encouraging teacher-student contact, fostering peer-peer learning, using active learning activities, providing prompt feedback, emphasizing time on task, communicating high expectations, and respecting a diversity of ideas and approaches to learning. Finally, other researchers have linked engagement with the psychology of learners (i.e., experiencing a challenge, having curiosity, feeling a sense of control, evoking imagination, competing with others and oneself, cooperating with others, being recognized by others) that may lead to an increase in motivation and learner engagement (Malone & Lepper, 1987).

What is missing from these well-defined taxonomies or features of engagement is the acknowledgment that student engagement is a dynamic process that aims to recognize students' identities, understand their previous learning experiences, and meet their evolving expectations. As Garrison (2018) points out, "to establish appropriate teaching presence, it is necessary to go beyond a list of best practices or techniques for e-learning" (p.70). What may seem to engage students may not work later or with another group of learners. Attempts to engage learners may seemingly appear to be effortless but, at other times, have unpredictable outcomes. This point leads us to Scollon's assertion (2001) that all actions occur at sites of engagement, which can be defined as a space where a specific group of people uses particular language and tools in socially situated activities that manifest in particular actions or outcomes. We contend that Zoom (and similar video conferencing classrooms) is a digital site of engagement in which technology is not merely a tool or a virtual location but a continually evolving social space where relationships develop and meanings are negotiated. At this point, drawing on Lefebvre's (1991) notion of production of space and following Soltani's (2018) concept of academic social space, we discuss why student engagement is inherently a social process.

3 Lefebvre's Social Space

Our perceptions of using virtual classrooms like Zoom as a digital space draw on the work of Henri Lefebvre (1991), a French philosopher and sociologist, who argues that all forms of space are inherently social spaces. What this means, in relation to our focus on online learning environments, is that the digital spaces where instructors and students meet are an interconnected triad of spaces that represent the types of material tools available (perceived space), users' interactions with these tools and with themselves within that space (lived space), and how this online platform is envisioned to work, underscoring how the space should be used by its online participants (conceived space). Each of these aspects of Lefebvre's notion of space, or its application to our specific focus on digital spaces in this study, is explained in the following sections.

3.1 Perceived Space

Perceived space is a shared space where a group of people or a community meets or resides. Within this material space, the community's interactions, communications, relations, and processes become visible. In relation to digital spaces, perceived space is determined by its hardware capabilities and software features. Virtual classrooms like Zoom, as seen in Fig. 1, provide a screen layout that offers opportunities for interaction. It features screenshots of the participants; sharing of screen functions, audio, and video settings; a chat room; pointer options; breakout rooms; and other semiotic tools.
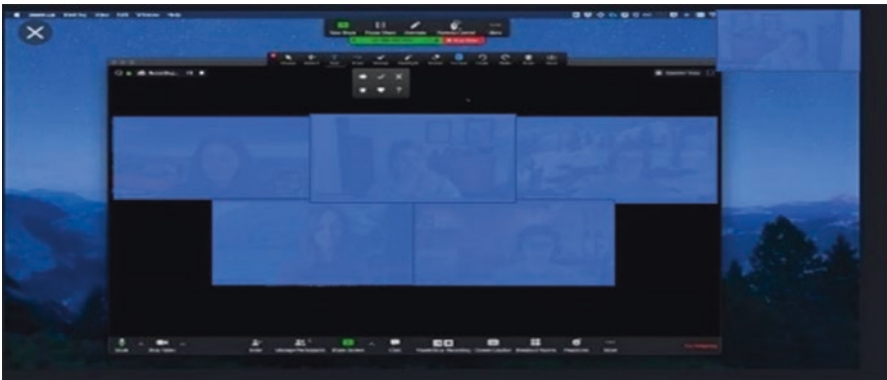
Fig. 1 Zoom's perceived space

3.2   Lived Space

Lived space is characterized by human interactions mediated by the semiotic tools available to users. It is in this space where individuals interact and express their agency (verbal language, written text, emoticons, facial or body language) using Zoom's tools and capabilities. Their online interactions follow social netiquettes that represent the perceived social norms (see conceived space below) of their online community – similar to an individual's interactions in the real world. The more experienced or authoritative members in an online space, as in real-life communities, may dictate when and how interactions take place. A lived space is not fixed but evolves as its users negotiate the types of interactions that are present or absent as well as appropriate affordances in this digital space.

3.3   Conceived Space

Conceived space is how the space is imagined. This aspect of space reflects understanding, beliefs, and ideologies about how the virtual meeting place should be reified. It signifies the software designer's ideologies and how these translate from the offline to the online world of a Zoom meeting. Conceived space is represented in the design of the Zoom meeting interface, as well as other functionalities including accessibility and security. The designers' norms and expectations are manifested in the functions and tools but are also intrinsically related to issues of trust, privacy and power as instructors and learners meet in a virtual environment that blurs the line between a public and private space.

Lefebvre's (1991) triad of space suggests, in the context of online e-meetings, that engagement is not just about how people interact with others, with content knowledge, or with the Zoom interface itself. Although it is worthy examining each of these aspects of engagement in themselves, our intention is to conceptualize engagement as much more than this. It extends our understanding of why things happen the way they do. As many tertiary institutions shift toward more synchronous and blended forms of online teaching and learning, Lefebvre's framework provides an alternative perspective on what engagement entails and how it impacts participants in their virtual meeting spaces.

4   Teaching Context and Students' Backgrounds

During the transition from face-to-face to synchronous online classes, the authors were teaching undergraduate English for Academic Purposes (EAP) and Linguistics courses at a university in New Zealand. Eighty students were enrolled in two Linguistics courses, an introductory 100-level course and a 300-level course on

language and communication in society. The two other EAP courses had similar sized enrollments but provided instruction only for students whose first language was not English. Although the 19–23 age range of the students was similar across these courses, the focus on acquiring content knowledge versus the development of language skills, as well as the different linguistic and cultural backgrounds of the students, provides contrast for our reflections.

The domestic and international students in the English for Academic Purposes courses were primarily from East Asian language backgrounds, although some students were from South Asia, the Middle East, South America, and Europe. For their first year (100-level) course, a 12-week course in academic writing, the content focused on how to find academic readings, critical reading and summarizing, developing a coherent structure, and completing their writing assignments using academic language. They met online twice a week for a total of three hours during which I (the first author) explained and demonstrated various writing skills during our Zoom sessions. The online synchronous classes were supplemented with weekly asynchronous writing activities from a downloadable study guide. Students could email answers, post questions in a discussion forum, and participate in one-on-one teacher-student online meetings to receive feedback on their writing. Students could also access pre-recorded lectures and download the PowerPoint slides used in the Zoom sessions for later review.

The 100-level Linguistics course provided a general introduction to various fields of study including sociolinguistics, psycholinguistics, and discourse analysis. This contrasts with the content in the 300-level Linguistics course, which focused on language representation in global issues and media platforms (e.g., film, music, YouTube). Both classes met twice a week, once for the lecture and once for the tutorial class, for a total of three hours. During the pandemic the lectures were pre-recorded; the tutorials were conducted synchronously via Zoom. The students in both cohorts extensively used the online discussion forum to resolve issues that required further information and clarification.

A focus on these two different online learning contexts will reveal how the same Zoom tools (perceived space) may result in contrasting forms of engagement depending on who the social agents (i.e., the students and the teacher) are; the way they negotiate the expectations, norms, and ideologies governing the virtual learning space (conceived space); and how they experience and feel about the material tools (lived space) in Zoom. All these aspects are dialogically intertwined, and inseparable, and should be understood together to determine the individuals' engagement in their constantly evolving digital spaces.

As the lecturers of these courses, we adopted a reflective approach (Attia & Edge, 2017; Edge, 2011) to gather our thoughts and interpret our experiences during the transition to online teaching. We understand that our reflections are unique, specific to our own circumstances, and hence not generalizable to teaching contexts in other tertiary institutions. Nonetheless, our perspectives on using Zoom may reveal similar opportunities, challenges and perhaps insights into the pedagogy of engagement in digital spaces.

5 Reflections on the Pedagogy of Engagement

5.1 English Language Courses

For the first author, the Zoom classes, scheduled for students enrolled in the English for Academic Purposes course, were originally set up to foster face-to-face learning in an online platform; however, most students preferred to keep their camera turned off and microphone muted. Although students cited various reasons (too early in the morning, no makeup, children or pets are here, connecting from the car), their social behaviors resembled their pre-lockdown predisposition to sit in the background and participate rather passively in their face-to-face classrooms. Meyer (2012) discussed the challenges in teaching Asian learners who may be more apt to avoid risk-taking, exhibit reticence, rely on teacher's knowledge, and prefer to listen rather than answer teacher's questions. In addition, their focus on grades and assessments seemed to discourage engagement in their online lessons. In summary, their academic socialization in the offline world appeared to mirror or migrate to their learning behaviors online.

Confronted with this challenge of teaching an online room full of wallflowers, I began to encourage them to use the chat messaging function. Instead of simply verbalizing questions through the camera, I would simultaneously type what I would say so that students could follow, respond, and engage with the course material. The prolific use of chat messaging became the forefront of our interactions with shared documents providing additional visual support. At times, it was challenging to keep up with all the students' responses and questions as they scrolled up the screen. The shared screen also meant that students were able to react to each other's posted messages, which showed that they were forming a community of online learners, reciprocating, and respecting each other's ideas. Students also used Zoom's handclapping or thumbs up symbols, as well as pen highlighters to show their approval or understanding of the course content.

Teaching a two-hour class offline is not easily transferable to an online mode of learning. To maintain students' attention and engagement online, I initiated a conscious strategy of fostering learners' "social presence," which Garrison et al. (2000) define as the "ability of participants… to project their personal characteristics into the community, thereby presenting themselves to the other participants as 'real people' (p. 89)." I would intermittently venture off-topic (Ushioda, 2011) to inquire into their lives outside of Zoom, to draw interpersonal connections between their offline and online worlds, and to engage with them as people and not just as my students. Humor or other light-hearted attempts to engage with students were met with "haha" chat responses, or students' attempts to join in on the banter. Turning to Lefebvre's notion of space, the software designer originally envisioned a face-to-face learning experience (conceived space); however, in the absence of use of cameras and microphones, the instructor and students mutually agreed on a form of engagement and social netiquette in a modified "lived" space. Zoom's chat, symbols, and pointer functions (perceived space) were the tools that enabled the students to express their agency and engage with the instructor, each other, and the course content.

5.2   Linguistics Courses

For the second author, there were apparent differences between the online engagement in the 100-level and the 300-level Zoom classes. The students in the 100-level cohort had newly transitioned from high school to university and were new to the virtual premise of Zoom's interface and the university as a social space (Soltani, 2021). The students had not known their peers or had much engagement with one other in the physical space before the outbreak of the pandemic. I predominantly played the role of initiator in the online discussions but assigned activities to pairs to do in the Zoom breakout rooms. My observations of the students in the 300-level course showed, however, that they knew each other from previously shared courses, had already used Zoom, and thus were already familiar with the university's social space. The students in this cohort understood the course requirements, led the online chats, and discussed the relevance of course material to current affairs. These upper-level students debated with their peers both before the lockdown and during their Zoom sessions. My role was primarily as a listener and facilitator in the online classroom. In retrospect, I believe the 300-level students had already formed a community of practice (Lave & Wenger, 1991) where they had mutually interacted as a cohesive unit together. They could already use the academic social space (Soltani, 2018) the way they desired. Compared to the 100-level students, the 300-level students, having already been familiar with the virtual social space, could appropriate the social space and use it to their advantage to express their agency, which made the transition to a completely online offering less challenging for them.

The presence or absence of a community of inquiry (Garrison et al., 2000; Cleveland-Innes et al., 2018) was also a notable difference between the two levels of students. The 100-level students passively received the pre-recorded lectures, participated only on the forum when I asked them to do so, and directed their questions primarily to me as their online instructor. This suggests that the 100-level students were starting to socialize themselves into the university as a social space where they were developing an emerging knowledge of Zoom's functionalities and ways to connect in their online meeting rooms. The 300-level students, on the other hand, regularly posted their reflections and questions in their online forums as well as responded to their peers' posts. These students expressed their agency by requesting three mini lectures instead of only one long lecture. Although they had mentioned how much they had missed the sense of belonging that the physical space had offered them previously, they readily transferred their social realities prior to the lockdown into their virtual meeting places.

6   Conclusion

Digital engagement reflects a dynamic and evolving process of change for expressing users' agency in a situated time and place. Lefebvre's concept of social spaces enables us to draw connections between our ways of thinking and experiences in the

offline world with the digital spaces of our online learning environments. The students' online communities of practice organically developed in relation to the negotiated interactions that took place. Social spaces matter – even when it may seem that there is little student engagement. Understanding Lefebvre's three spatial dimensions (i.e., perceived, lived, and conceived spaces) provides an explanatory framework that helps educators foster student engagement in their online classrooms.

Our central concern is with understanding how the adoption of Zoom or other virtual classrooms has been implemented for educational purposes and how it impacts learners' engagement in blended learning environments. Our perspectives about teaching and learning suggest that instructors consider their students' prior learning experiences, their exposure to online learning environments, and ways of expressing their agency using Zoom's tools and capabilities. Teaching and engagement go hand in hand, but it is what instructors do in their online classrooms that matter most. Their knowledge, energy, and warmth impact students' attitudes and engagement, thereby shaping the culture of the classroom. Zoom or other online content delivery platforms may or may not be here to stay, but social spaces and their influence on student engagement will always be present.

References

Attia, M., & Edge, J. (2017). Be (com) ing a reflexive researcher: A developmental approach to research methodology. *Open Review of Educational Research, 4*(1), 33–45.

Budhai, S. S., & Skipwith, K. B. (2017). *Best practices in engaging online learners through active and experiential learning strategies*. Routledge.

Chickering, A. W. & Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education. *AAHE Bulletin*, 3–7.

Cleveland-Innes, M., Garrison, D. R., & Vaughan, N. (2018). The community of inquiry theoretical framework: Implications for distance education and beyond. In M. G. Moore & W. C. Diehl (Eds.), *Handbook of distance education* (4th ed., pp. 67–78). Routledge.

Conrad, R. M. & Donaldson, J. A. (2011). *Engaging the online learner: Activities and resources for creative instruction* (updated edition). Jossey-Bass.

Dixson, M. D. (2010). Creating effective student engagement in online courses: What do students find engaging? *Journal of the Scholarship of Teaching and Learning, 10*(2), 1–13.

Edge, J. (2011). *The reflexive teacher educator in TESOL: Roots and wings*. Routledge.

Finn, J. D., & Zimmer, K. S. (2012). Student engagement: What is it? Why does it matter? In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 97–131). Springer.

Garrison, D. R. (2018). *E-learning in the 21st century: A community of inquiry framework for research and practice* (3rd ed.). Routledge.

Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *Internet and Higher Education, 2*(2–3), 87–105.

Graham, C. R. (2018). Current research in blended learning. In M. G. Moore & W. C. Diehl (Eds.), *Handbook of distance education* (4th ed., pp. 173–188). Routledge.

Handelsman, M. M., Briggs, W. L., Sullivan, N., & Towler, A. (2005). A measure of college student course engagement. *The Journal of Educational Research, 98*(3), 184–192. https://doi.org/10.3200/JOER.98.3.184-192

Kuh, G. (2005). Student engagement in the first year of college. In M. L. Upcraft, J. N. Gardner, & B. O. Barefoot (Eds.), *Challenging and supporting the first-year student: A handbook for improving the first year of college* (pp. 86–107). Jossey-Bass.

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press.

Lefebvre, H. (1991). *The production of space*. Blackwell.

Malone, T. W., & Lepper, M. R. (1987). Making learning fun: A taxonomy of intrinsic motivations for learning. In R. E. Snow & M. J. Farr (Eds.), *Aptitude, learning, and instruction, volume 3: Conative and affective process analyses* (pp. 223–253). Lawrence Erlbaum.

Meyer, D. (2012). Broadening language learning strategies for Asian EFL students. *Language Education in Asia, 3*(2), 243–251. https://doi.org/10.5746/LEiA/12/V3/I2/A12/Meyer

Poll, K., Widen, J. & Weller, S. (2014). Six instructional best practices for online engagement and retention. *Journal of Online Doctoral Education*, *1*(1), 56–72. Loyola eCommons.

Sharma, P., & Barrett, B. (2007). *Blended learning: Using technology in and beyond the language classroom*. Macmillan.

Scollon, R. (2001). *Mediated discourse: The nexus of practice*. Routledge.

Soltani, B. (2018). Academic socialization as the production and negotiation of social space. *Linguistics and Education, 45*, 20–30.

Soltani, B. (2021). International students' socialisation and transition experiences in high school: An empirical study. In T. Pham & B. Soltani (Eds.), *Enhancing Student Education Transitions and Employability* (pp. 49-65). Routledge.

Thorne, K. (2003). *Blended learning: How to integrate online & traditional learning*. Kogan Page.

Ushioda, E. (2011). Motivating learners to speak as themselves. In G. Murray, X. Gao, & T. Lamb (Eds.), *Identity, motivation and autonomy in language learning* (pp. 11–24). Multilingual Matters.

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Leading by Example: Leveraging Academic Innovation Centers in Times of Crisis

Ken Baldauf, Paul Marty, Rienne Saludo, Iskandaria Masduki, Eric Adams, and Ebrahim Montazeri

> *We can't solve problems by using the same kind of thinking we used when we created them.*
>
> *Albert Einstein*

1   Introduction

Institutions of higher education worldwide have opened academic innovation centers for the benefit of their students (Barrett et al., 2015; Kim et al., 2018; Levy et al., 2016; Waters, 2016). These innovation centers provide a wide range of educational opportunities. Some, like the Invention Studio at Georgia Tech or the Texas Inventionworks at the University of Texas at Austin, focus on providing students with access to the latest technological innovations (Forest et al., 2014; Galaleldin et al., 2016; Hynes & Hynes, 2018; Wilczynski, 2015). Others, like the Siebel Center for Design at the University of Illinois or the Integrative Design, Arts, and Technology Center at Carnegie Mellon University, focus on encouraging innovation, creativity, design thinking, and problem-solving among students through collaborative working spaces (Böhmer et al., 2015; Bowler, 2014; Farritor, 2017; Jennings et al., 2018; Rieken et al., 2017).

Over the past few years, many educational researchers have studied the relationship between academic innovation centers and higher education (McCarthy et al., 2018; Schrock, 2014). The benefits that these centers offer university students are increasingly well-known (Carlisle & Weaver, 2018). For example, academic innovation centers are known to foster students' interests in science, technology,

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engineering, and mathematics (Honey & Kanter, 2013; McKenna & Bergie 2016; Sheridan et al., 2014; Whitmer, 2016). Innovation centers can also be particularly effective in terms of engaging underrepresented populations (Sheffield et al., 2017), improving undergraduate classroom experiences (Blackley et al., 2017; Hira et al., 2014; Maloy & Edwards, 2018; Sweeney, 2017), helping students forge pathways into technology careers (Clauson & Sheth, 2017; Monis, 2018; Pines et al., 2015), and encouraging students to develop new literacy skills (Gravel et al., 2018; Koh & Abbas, 2015).

As a result of this research, universities around the world are investing their resources in building academic innovation centers, offering new programs centered around design thinking and emerging technologies, and encouraging their students to pursue careers focused on innovation and technology (Dugdale & Strawn, 2017; Halverson & Sheridan, 2014; Wong & Partridge, 2016). These initiatives are driven by the idea that providing students with access to the resources of academic innovation centers will have a positive effect on higher education and encourage more students to pursue entrepreneurial and collaborative opportunities (Kurti et al., 2014; Peppler, 2010; Youtie & Shapira, 2008). But what happens to these initiatives during crisis situations? How can academic innovation centers respond to the needs of their institutions and students during disasters such as the COVID-19 pandemic?

This chapter addresses these questions by exploring how an academic innovation center at Florida State University – the Innovation Hub – was able to encourage its students to engage in creative problem-solving through design thinking, emerging technologies, and experiential learning during the COVID-19 pandemic. The results demonstrate that academic innovation centers, during a time of global crisis, have a unique opportunity to lead by example, enhancing their educational impact by connecting students directly with real-world challenges as creative problem-solvers with the power to make a difference.

2 The Innovation Hub at Florida State University

The Innovation Hub at Florida State University – https://innovation.fsu.edu/ – was established in 2018 with the mission to foster a collaborative community founded on a culture of creativity and innovation that identifies issues, explores opportunities, and develops solutions using design thinking and emerging technologies. It makes the latest technological innovations (such as 3D printers, laser cutters, and virtual reality devices) freely available to all students at Florida State University in a 15,000 square foot setting that includes program rooms, study spaces, hang-out spaces, a digital fabrication lab, and a virtual reality lab (see Fig. 1).

Like other academic innovation centers, the Innovation Hub is motivated by the belief that the real-world challenges our students will face will be unprecedented in complexity and importance. We share a vision of students from all disciplines working together to combine their unique expertise and perspectives under the guidance of experienced mentors and educators to create novel and effective solutions to the

Fig. 1 The innovation hub at Florida State University

vexing, complex, and wicked problems of our day through experiential learning, transdisciplinary collaboration, technical skills acquisition, critical thinking, creative problem-solving, co-curricular opportunities, and teamwork.

Every week during the academic year, thousands of students representing a hundred different majors from across campus come together in the Innovation Hub to experiment with new technologies and explore new ideas. Earnest students desire more than anything to have a positive impact in the world, and the Innovation Hub provides a space where curious and thoughtful individuals from different backgrounds, experiences, and disciplines are inspired to work together to engage in creative activities, break down barriers, and design new solutions to challenging problems that have real-life implications.

The faculty and staff of the Innovation Hub view problems as learning opportunities. When the COVID-19 pandemic struck Florida State University, the Innovation Hub pivoted along with the rest of the university to find solutions to the problems facing us all. In the early weeks of the coronavirus crisis, with campus closed to students and classes moved online, we looked for opportunities that would enable the Innovation Hub to have a positive impact on our students, our university, and our community during this crisis. We identified three initiatives that offered the Innovation Hub the opportunity to lead by example:

1. Leveraging the power of Design Thinking to develop innovative solutions to pandemic-related challenges by students.

2. Leveraging the power of emerging technologies to transform our Digital Fablab into a manufacturing facility for personal protective equipment (PPE).
3. Leveraging the power of experiential learning to develop online co-curricular training resources for students to develop new skills with innovative technologies.

Together, these three initiatives allowed the Innovation Hub to make full use of its resources during this global crisis, provide robust new services to the campus community, and battle the spread of COVID-19 in our local community. They also allowed us to demonstrate to our students and faculty that the Innovation Hub not only teaches creativity and problem-solving skills in the abstract but also is fully capable of implementing those skills in a concrete fashion to solve real-life problems in a time of crisis.

3   Leveraging the Power of Design Thinking to Solve Complex Problems

Design Thinking serves as the foundation of the Innovation Hub. As the key to student engagement, it provides the motivation for helping students gain technical skills for creative problem solving. The process of Design Thinking places the emphasis on problem-solving rather than technology. It provides a framework through which students identify and empathize with a problem, reframe the problem to make it actionable, utilize unique methods of ideation to develop solutions, then prototype, and test their solutions (Brown, 2009; Bielenberg, et al., 2016). The Design Thinking practice is rooted in interdisciplinary teamwork, and values diversity to understand problems from many perspectives. Through its focus on Design Thinking, the Innovation Hub can attract a wide range of students based on their shared passion for improving the world.

How could the Innovation Hub continue to emphasize the power of Design Thinking for our students during the COVID-19 pandemic? Our answer to this question came directly from a course on Design Thinking – "Innovation by Design" – that the Innovation Hub teaches to 240 students each semester. When classes moved online in Spring 2020, we seized the opportunity to encourage students to apply their design thinking skills to coronavirus-related challenges. This allowed us to demonstrate the relevance of Design Thinking in crisis situations and helped us explore new methods for practicing and teaching the process of Design Thinking online.

To accomplish this goal, we used Google Slides to create Design Thinking tools such as virtual post-it notes and collaborative whiteboards that replicated the methods of Design Thinking online, including stakeholder mapping, research sense-making, persona cards, journey maps, ideation, idea filtering, and prototyping (see Fig. 2). Students developed solutions that included an app that uses a reward system to incentivize people to stay home; personalized online gym service; biodegradable
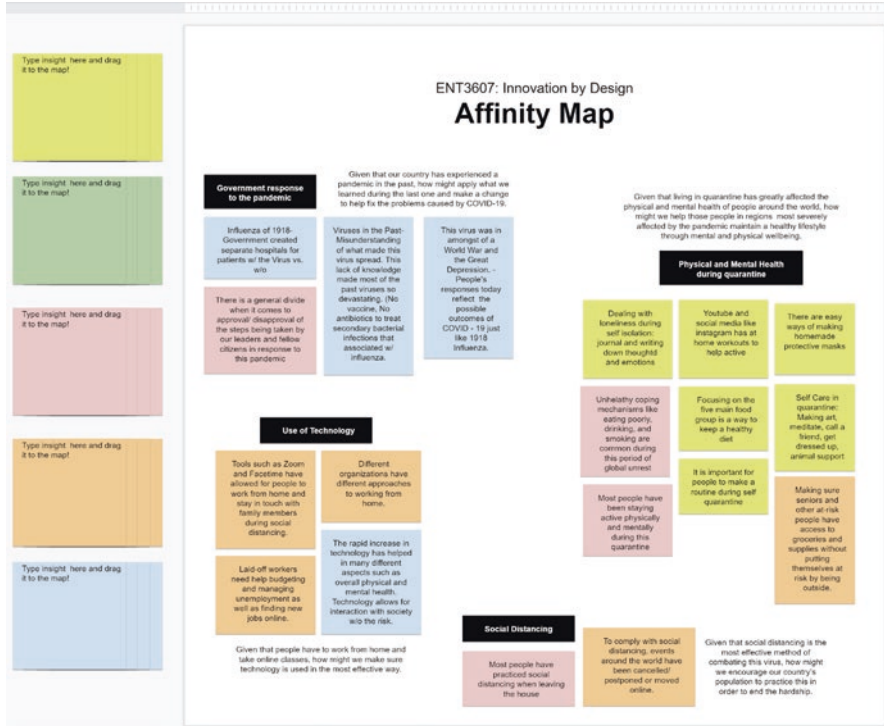
Fig. 2 Design Thinking in the online "Innovation by Design" classroom

packaging for online shopping; recruitment of social media influencers to reduce social isolation; and an academic task tool to help students stay on top of their schoolwork.

Design Thinking techniques also feature prominently in another class offered by the Innovation Hub – "Designing Your Life with Innovation" – which leverages Design Thinking to explore potential career opportunities, prototype lifestyles, and build student confidence. After this course moved online, students identified three alternative career paths they could explore to overcome the challenges posed by the COVID-19 pandemic regarding the job market and their future opportunities. They collaborated in small design teams that helped them ideate, prototype the life they would like to have, and provide encouraging support to each other (Burnett & Evans, 2016).

These outcomes are significant because they document the Innovation Hub's ability to provide rich interactive environments that serve the Design Thinking process and help comfort isolated students by connecting them with their classmates and giving them a sense of purpose. The world's grand challenges and technical innovations are increasing in parallel exponential rates. It is our responsibility as educators to leverage these technologies creatively to help our students develop innovations that will address these challenges. The methods we developed and

implemented with our classes in the Hub will live on well past the COVID-19 threat, providing educational opportunities that will be valuable for students and faculty for years to come.

4   Leveraging Emerging Technologies to Manufacture Personal Protective Equipment

The Innovation Hub makes many different emerging technologies available to students and faculty at Florida State University, including 3D printers, a laser cutter, a vinyl cutter, electronics kits, ARM computers, and VR head-mounted displays. As students begin developing their ideas, they often require a means of prototyping solutions to move their projects forward. In the Hub, students can operate virtual, reductive, and additive techniques of prototyping solutions. Rapid iterative fabrication allows students to fail quickly as they work toward more successful solutions (Sheridan et al., 2014; Wilczynski, 2015). The concept of "failing forward" (Marsh et al., 2017; Smith et al., 2015) feeds directly into the goals of physical prototyping.

How could the Innovation Hub continue to use emerging technologies for physical prototyping during the COVID-19 pandemic? Our answer to this question came when the Innovation Hub staff learned about the high demand for ventilator valves, as well as the opportunities for 3D-printing plastic replacement valves to meet that demand. We immediately asked our undergraduate student interns to research projects and design solutions related to the COVID-19 pandemic. Their ideas inspired us to explore how we might use the Innovation Hub's 20 3D printers and digital fabrication equipment to fight the spread of COVID-19 in our local community.

To accomplish this goal, the Innovation Hub worked with FSU's College of Medicine and College of Engineering to research the types of medical equipment we might be able to fabricate. We quickly realized that we did not have the necessary equipment to manufacture highly complex medical devices such as ventilator valves, so we decided to focus on mass-producing personal protective equipment (PPE) for frontline healthcare workers (Wellock, 2020). With PPE shortages looming across the state, this equipment was already in high demand in Tallahassee, Florida, where we are located, so we began exploring NIH-approved face shield designs that could be sanitized for reuse and that would be relatively simple to produce (face shields do not need to be air-tight like masks). After working collaboratively with local healthcare providers and frontline workers to finalize our designs, the Innovation Hub started producing face shields in April 2020 (see Fig. 3).

Our efforts to produce face shields quickly encountered issues with material sourcing as viable materials were difficult to acquire. We worried that we would be unable to meet the high demand for PPE (printing one face shield initially required nearly 4 hours on a 3D printer). Thankfully, with the expertise of the Innovation Hub's digital fabrication lab manager, we were able to reduce this print time to

Fig. 3 Personal protective equipment manufactured at the Innovation Hub

slightly over 1 hour per shield. Additional 3D printers donated from FSU's Learning Systems Institute also nearly doubled our throughput capability, and our external and internal partners were also able to help the Innovation Hub locate, transport, and fabricate viable shields for PPE assembly. With these production obstacles circumvented, the Innovation Hub manufactured and distributed more than 2000 face shields to local hospitals, physicians, and healthcare providers over the course of 5 weeks.

These outcomes are significant because the Innovation Hub was able to leverage the same equipment that our students use for their projects to learn valuable lessons about manufacturing while building connections and making a difference in our local community. By serving as an exemplar in this way, the Innovation Hub encourages undergraduate students to find value and validity in their own work. We do not innovate and design in a vacuum, and it is important for innovation centers to find solutions to complex problems that meet community needs (Hennelly et al., 2019; Holman, 2015). Thanks to the lessons learned from this collaborative endeavor, the Innovation Hub will be able to support our local community more effectively and work together with our partners to solve future problems through emerging technologies.

5 Leveraging Experiential Learning Opportunities Through Online Resources

Experiential learning is a core requirement at Florida State University where all students are required to engage in at least one experiential learning activity prior to graduation. The Innovation Hub serves as a central location on campus where a

Project-based Tutorials

These tutorials enable you to follow along with the learning videos and engage in hands-on learning. Work files are provided and can be downloaded to your computer beforehand. Works best if you have a second monitor or another mobile device to view two screens at the same time.

3D Print a Starwars X-Wing

3D Printing & Ultimaker Cura (Basic Level)
by Genevieve Ferguson

Print a Star Wars X-Wing while you explore the world of 3D printing, learn how to search for free 3D models, slice them, and print them online or at the Innovation Hub.

Download Work File

Part 1: Introduction

Part 2: What is 3D Printing

Part 3: Manipulate Objects in Cura

Part 4: Slicing in Cura

Part 5: Printing

Additional Resource

Learning 3D Printing

Making Positivity Sticks

Vinyl Cutting & Adobe Illustrator (Basic Level)
by Jordan Wiener

Design a sticker or poster to keep you feeling positive during the pandemic while learning some basic Adobe Illustrator techniques for vector graphics.

Download Work File

Part 1: Introduction

Part 2: Illustrator Basics

Part 3: Vinyl Cutting

Additional Resource

Essential 2020 Illustrator Training

Make a Collage Poster

Adobe Photoshop (Basic Level)
by Estefania Touza

Learn some of the most commonly used tools in Photoshop to design a social distancing guidelines poster.

Download Work File

Part 1: Introduction

Part 2: Working with Images

Part 3: Using Selection Tools

Part 4: Assembling the Poster

Part 5: Adding Text

Additional Resource

Photoshop 2020 Essential Training: The Basics

Fig. 4 Online tutorials developed by Innovation Hub students

wide variety of experiential learning opportunities related to innovation and technology come together. Each week during the academic year, students at the Innovation Hub have opportunities to participate in workshops, hackathons, design sprints, and other formative experiences related to innovation and technology.

How could the Innovation Hub continue to support these experiential learning opportunities during the COVID-19 pandemic? Our answer to this question involved moving these educational opportunities online during the Spring 2020 semester by creating a series of asynchronous learning modules including such topics as 3D Design; Advertising, Media, and Public Relations; Computer Programming; Content Development; Design Thinking; Digital Fabrication; Entrepreneurship; Graphic Design; Photography and Digital Media; Social Entrepreneurship; Unmanned Aerial Systems; Video Production; Virtual Reality; and Web Development.

To accomplish this goal, we invited our undergraduate student interns to develop a series of interactive video tutorials designed by university students for university students (see Fig. 4). Thanks to the funding from the Office of the Provost, the Innovation Hub employs more than 20 undergraduate student interns each year, representing more than a dozen different departments from across campus. This

paid student internship program is highly competitive (more than 300 talented students applied to intern in the Innovation Hub during the 2019–2020 academic year). As a result, each intern was able to bring a wide range of valuable innovation and technology skills to their work at the Hub. When the university moved online in March 2020, these student interns pivoted their work efforts to develop video tutorials in their own areas of expertise, supervised by the Innovation Hub's Assistant Director of Education.

The resulting suite of video lessons (https://www.innovation.fsu.edu/learn) provides students with the chance to acquire innovative skills while working from home in times of crisis. These lessons also help build community online, as students can share the results of their training, and collaborate on projects using online tools. For the student interns, creating tutorials for others promoted deep learning (Pellegrino & Hilton, 2012), since they not only had to figure out new technologies but also learn instructional design, scriptwriting, audio recording, video editing, and webcasting skills. Student interns also received expert mentorship on how to plan for and deliver training in various formats. Some students even created mobile applications to provide access to information about COVID-19 (https://covid19-central.com/).

These outcomes are significant because they help demonstrate to students how to solve problems in ways that will retain their educational value in the post-COVID-19 age. These video tutorials will help FSU teach future online courses more effectively. These tutorials can also be arranged into a comprehensive suite of co-curricular lessons that students can follow outside of class, earning badges through the university's online badging system, and perhaps even earning the designation of "Innovation Scholar" at graduation. These results point to the larger benefits that academic innovation centers can offer institutions of higher education, all of which can help increase student engagement with innovation and technology across the university.

6   Academic Innovation Centers and the Future of Education in Crisis Situations

In a time of crisis, the Innovation Hub at Florida State University was able to engage in creative problem-solving using the very tools, technologies, and methods that we teach to our students. These accomplishments have positive implications for the future of teaching and learning in the post-COVID-19 era – implications that will benefit not just university students, but academic faculty and staff as well. They make it clear that the mission, vision, and goals of academic innovation centers such as the Innovation Hub are not abstract concepts. The Hub accomplishes the very tasks that we teach our students – empathizing with human needs, engaging with emerging technologies, and designing solutions to meet those needs. From an educational perspective, there can be no greater lesson (Marty et al., 2020).

By leveraging the resources of the Innovation Hub during the COVID-19 pandemic, we were able to document the educational powers of academic innovation centers and demonstrate the value of design thinking, emerging technologies, and experiential learning in times of disaster. By serving as positive role models for students learning how to adapt in times of global crisis, academic innovation centers such as the Innovation Hub can help students better understand how to leverage the power of innovation to solve difficult problems. They also help educators better understand how to teach those lessons to their own students. By building closer relationships with academic innovation centers, educators can see how their facilities, equipment, and creative potential can be transitioned to community service with educational benefits; provide students with experiential learning opportunities to have a positive societal impact; and learn how their classes can be repurposed to leverage new educational opportunities during crisis situations.

We believe that the demonstrated success of the educational philosophies shared by academic innovation centers today will help carry academic institutions into the post-COVID-19 era. The skills and abilities that academic innovation centers are designed to teach are the very skills and abilities that can help students make sense of our complex world and help instructors teach effectively in the post-COVID-19 classroom. We sincerely hope that our experiences at Florida State University will inform and inspire other institutions to embrace the power of academic innovation centers to encourage their students and faculty to face challenging situations as they arise, and to work together to find positive solutions to the complex problems of our day.

References

Barrett, T.W., Pizzico, M.C., Levy, B., Nagel, R.L., Linsey, J.S., Talley, K.G., Forest, C.R., & Newstetter, W.C. (2015). A review of university makerspaces. *122nd ASEE Annual Conference and Exposition*. Seattle, WA: American Society for Engineering Education. https://smartech.gatech.edu/handle/1853/53813

Bielenberg, J., Burn, M., Galle, G., & Dickenson, E. E. (2016). *Think wrong: How to conquer the status quo and do work that matters*. Instigator Press.

Blackley, S., Sheffield, R., Maynard, N., Koul, R., & Walker, R. (2017). Makerspace and reflective practice: Advancing pre-service teachers in STEM education. *Australian Journal of Teacher Education, 42*(3), 22.

Böhmer, A. I., Beckmann, A., & Lindemann, U. (2015). Open innovation ecosystem: Makerspaces within an agile innovation process. In E. Huizingh, S. Conn, &I. Bitran (Eds.), *Proceedings of the ISPIM innovation summit: Changing the innovation landscape*, Brisbane, .

Bowler, L. (2014). Creativity through "maker" experiences and design thinking in the education of librarians. *Knowledge Quest, 42*(5), 58–61.

Brown, T. (2009). *Change by design: How design thinking transforms organizations and inspires innovation*. HarperCollins.

Burnett, W., & Evans, D. J. (2016). *Designing your life: How to build a well-lived, joyful life*. Alfred A. Knoft.

Carlisle, D.L, & Weaver, G.C. (2018). STEM education centers: Catalyzing the improvement of undergraduate STEM education. *International Journal of STEM Education, 5*.

Clauson, C., & Sheth, R. (2017). University-industry collaborations are driving creation of next-generation learning spaces. *Planning for Higher Education, 45*(4), 105–117.

Dugdale, S., & Strawn, B. (2017). Crafting an innovation landscape. *Planning for Higher Education, 45*(2), 2–16.

Farritor, S. (2017). University-based Makerspaces: A source of innovation. *Technology & Innovation, 19*(1), 389–395.

Forest, C. R., Moore, R. A., Jariwala, A. S., Fasse, B. B., Linsey, J., Newstetter, W., & Quintero, C. (2014). The invention studio: A university maker space and culture. *Advances in Engineering Education, 4*(2).

Galaleldin, M., Bouchard, F., Anis, H., & Lague, C. (2016). The impact of makerspaces on engineering education. In *Proceedings of the Canadian Engineering Education Association (CEEA)*.

Gravel, B. E., Tucker-Raymond, E., Kohberger, K., & Browne, K. (2018). Navigating worlds of information: STEM literacy practices of experienced makers. *International Journal of Technology and Design Education, 28*(4), 921–938.

Halverson, E. R., & Sheridan, K. (2014). The maker movement in education. *Harvard Educational Review, 84*(4), 495–504.

Hennelly, P. A., Srai, J. S., Graham, G., Meriton, R., & Kumar, M. (2019). Do makerspaces represent scalable production models of community-based redistributed manufacturing? *Production Planning & Control, 30*(7), 540–554.

Hira, A., Joslyn, C. H., & Hynes, M. M. (2014). Classroom makerspaces: Identifying the opportunities and challenges. *2014 IEEE Frontiers in Education Conference (FIE) Proceedings*, pp. 1–5.

Holman, W. (2015). Makerspace: Towards a new civic infrastructure. *Places Journal*. https://placesjournal.org/article/makerspace-towards-a-new-civic-infrastructure/

Honey, M., & Kanter, D. E. (2013). *Design, make, play: Growing the next generation of STEM innovators*. Routledge.

Hynes, M. M., & Hynes, W. J. (2018). If you build it, will they come? Student preferences for Makerspace environments in higher education. *International Journal of Technology and Design Education, 28*(3), 867–883.

Jennings, M. F., Talley, K. G., Smith, S. F., & Ortiz, A. M. (2018). Creation of a New University Makerspace. In *Proceedings from 2018* ASEE Annual Conference & Exposition. Salt Lake City, UT.

Kim, Y. E., Edouard, K., Alderfer, K., & Smith, B. K. (2018). *Making culture: A national study of education makerspaces*. Drexel University.

Koh, K., & Abbas, J. (2015). Competencies for information professionals in learning labs and makerspaces. *Journal of Education for Library and Information Science, 56*(2), 114–129.

Kurti, R. S., Kurti, D. L., & Fleming, L. (2014). The philosophy of educational makerspaces. *Teacher Librarian, 41*(5), 8–11.

Levy, B., Morocz, R. J., Forest, C., Nagel, R. L., Newstetter, W. C., Talley, K. G., Smith, S.F., & Linsey, J. S. (2016). MAKER: How to Make a University Maker Space. In *Proceedings from 2016* ASEE Annual Conference & Exposition. New Orleans, LA.

Maloy, R. W., & Edwards, S. (2018). Learning through making: Emerging and expanding designs for college classes. *TechTrends, 62*(1), 19–28.

Marsh, J., Kumpulainen, K., Nisha, B., Velicu, A., Blum-Ross, A., Hyatt, D., Jónsdóttir, S.R., Levy, R., Little, S., Marusteru, G., Ólafsdóttir, M. E., Sandvik, K., Scott, F., Thestrup, K., Arnseth, H. C., Dýrfjörð, K., Jornet, A., Kjartansdóttir, S. H., Pahl, K., Pétursdóttir, S. & Thorsteinsson, G. (2017) *Makerspaces in the early years: A literature review*. University of Sheffield: MakEY Project.

Marty, P. F., Saludo, R., & Kim, U. (2020). Innovation Centers and the information schools: The influence of LIS faculty. *Journal of Education for Library and Information Science, 61*(4).

McCarthy, S., Barnes, A., Holland, K. S., Lewis, E., Ludwig, P., & Swayne, N. (2018). Making it: Institutionalizing collaborative innovation in public higher education. In *4th International Conference on Higher Education Advances (HEAD'18), 1549–1557*. Editorial Universitat Politècnica de.

McKenna, B. W., & Bergie, L. (2016). Creating the next generation of innovators. *Publications & Research, 6*. https://digitalcommons.imsa.edu/stratinnov_pr/6

Monis, I. (2018). Designing for STEM: California community colleges are helping shape the STEM workforce of the future. *Planning for Higher Education, 47*(1), 32.

Pellegrino, J. W., & Hilton, M. L. (Eds.). (2012). *Education for life: Developing transferable knowledge and skills in the 21st century*. National Academies Press.

Peppler, K. A. (2010). Media arts: Arts education for a digital age. *Teachers College Record, 112*(8), 2118–2153.

Pines, E., Sullivan, P., & Nogales, L. (2015). Broadening participation through engagement in the maker space movement. *ASEE Annual Conference and Exposition Proceedings*.

Rieken, B., Schar, M., Shapiro, S., Gilmartin, S., & Sheppard, S. (2017, June 25–28). Exploring the relationship between mindfulness and innovation in engineering students. *Proceedings of the American Society for Engineering Education Annual Conference*, Columbus, .

Schrock, A. R. (2014). "Education in disguise": Culture of a hacker and maker space. *InterActions: UCLA Journal of Education and Information Studies, 10*(1).

Sheffield, R., Koul, R., Blackley, S., & Maynard, N. (2017). Makerspace in STEM for girls: A physical space to develop twenty-first-century skills. *Educational Media International, 54*(2), 148–164.

Sheridan, K., Halverson, E. R., Litts, B., Brahms, L., Jacobs-Priebe, L., & Owens, T. (2014). Learning in the making: A comparative case study of three makerspaces. *Harvard Educational Review, 84*(4), 505–531.

Smith, R. C., Iversen, O. S., & Hjorth, M. (2015). Design thinking for digital fabrication in education. *International Journal of Child-Computer Interaction, 5*, 20–28.

Sweeney, R. W. (2017). Making and breaking in an art education makerspace. *Journal of Innovation and Entrepreneurship, 6*(1), 9.

Waters, J. K. (2016). What makes a great Makerspace? *THE Journal (Technological Horizons In Education), 43*(5), 26.

Wellock, B. (2020). FSU innovation hub builds face shields to protect local health care workers in COVID-19 fight. *Florida State University News*. https://news.fsu.edu/news/university-

news/2020/04/22/fsu-innovation-hub-builds-face-shields-to-protect-local-health-care-workers-in-covid-19-fight/

Whitmer, S. (2016). Makerspaces that set the stage for lifelong learning. *Open 2016*. Portland, OR. https://venturewell.org/open2016/wp-content/uploads/2016/03/whitmer.pdf

Wilczynski, V. (2015). Academic maker spaces and engineering design. *American Society for Engineering Education, 26*(1).

Wong, A., & Partridge, H. (2016). Making as learning: Makerspaces in universities. *Australian Academic and Research Libraries, 47*(3), 143–159.

Youtie, J., & Shapira, P. (2008). Building an innovation hub: A case study of the transformation of university roles in regional technological and economic development. *Research Policy, 37*(8), 1188–1204.

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Empowering Teacher Agency in the North: Reflections on Teaching and Learning and Social Justice in Northern Educational Contexts Through the Lens of COVID-19

Joanie Crandall

> *I cannot be a teacher without exposing who I am.*
> *Paulo Freire*

1 Introduction and Context

The contexts of remote learning in the north vary widely. In the northern Canadian community, I was in at the height of the pandemic in March 2020; there were internet data limits. Overage fees were exorbitant, making online learning a challenge even for families with internet access and devices. How, then, to make accessing learning opportunities equitable? Then there were also food and water security issues at home for both students and teachers. Thankfully, the community had two stores and the locals were very generous in sharing wild game with the teachers, so food security, from the standpoint of availability rather than cost, was better than during when I had to travel 120 kilometers to the nearest grocery store, although the food there was much more affordable. In a previous community I lived in before the pandemic, I was nine days without running water. However, this time thankfully, the water truck filled my unit's tank every day, for which I was profoundly grateful. I raise these basic quality of life issues as they can interfere with the ability to concentrate on teaching and learning. We were all grateful to have food and water and especially thankful that no one in the community fell ill with COVID-19.

Teachers in northern communities experience different levels of agency in being able to respond to their teaching context and provide equitable and meaningful learning opportunities. This chapter frames its exploration of teacher agency during a pandemic through the intersections of critical pedagogy, sociocultural criticism, social justice, and the lens of autoethnography. Critical pedagogy seeks to engage the interstices of knowledge and structures of power (Giroux, 2016) and must

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"recognize its own indeterminate and partial character, particularly since it is constantly being shaped by the particular contexts in which it is taken up" (Giroux, 2001, p. 15). Freire's articulation of conscientization and the teacher/learner-learner/teacher paradigm (1971, 1985, 1987, 2003) also underpins this chapter in exploring the effect of teacher agency on education in the north. In the framework of this article, *agency*, or the ability to act, is understood through ecological terms, dependent on the relationship and temporal context, the particular internal and external contexts shaping teacher decisions, actions, and ability to become self-reflective practitioners (Biesta et al., 2017; Phelan & Hansen, 2018; Priestley et al., 2015). The context of teacher identity, linked to understandings of professional integrity (Palmer, 2003) and sense of agency also needs to be considered through the complex interconnections of cultural identity, language, professional and cultural learning opportunities, and broader community context (Holland et al., 1998; Scollon, 2002). Supporting educators in teaching for social justice, and in having the agency to do so – informed by Bourdieu's (1973) influential frameworks of social capital and cultural capital, a broad understanding of inclusivity in learning (Brandon & Charlton, 2011; Florian & Linklater, 2010; Lawrie et al., 2017; Thomas, 2016), and the growing awareness of the potential in Indigenizing education (Findlay, 2000; Gaudry & Lorenz, 2018; Ragoonaden & Mueller, 2017) – is a key foundation for this chapter.

I am a non-Indigenous woman who has had the great privilege of working with Indigenous learners in many contexts as a kind of "border crosser" (Giroux & Penna, 1981) who has experienced a range in agency as an educator. Working with Indigenous youth has inspired me to explore social justice potential through responsive teaching (Davis et al., 2008), culturally responsive teaching (Castagno and Brayboy, 2008; Ukpokodu, 2011; Rigney, 2017), and contextual pedagogy (Gorodestsky, Keiny, Barak & Weiss, 2003; Johnson, 2002). The chapter also draws its impetus from autoethnography (Anderson, 2006; Ellis & Bochner, 1996) and narrative inquiry (Clandinin & Connelly, 1994; Connelly & Clandinin, 1990) and my personal experiences in northern schools. There are complex issues to consider and negotiate around agency and empowerment when teachers are members of the dominant society and do not share the cultural, linguistic, or experiential backgrounds of the student population. From what I have witnessed as a teacher and administrator, an "empathetic approach" or "an ethical stance in favor of the individual or group being studied" (Fontana & Frey, 2005, p. 696) or, to put it more broadly, positive educational culture (Bruner, 1996) better supports an empowering teacher-learner/learner-teacher paradigm as articulated by Freire (1971). Teachers' sense of agency, from my own experience, is often intertwined with their ability to engage meaningfully in decolonizing education (Battiste et al., 2002; Smith, 1999). Indigenous northern communities are still healing from historical traumas – and often negotiating issues like access to clean water, affordable healthy food, and adequate housing – so while for many these are unprecedented times, Waterfall (2020) argues powerfully that for many Indigenous peoples, there is indeed precedence. This chapter, a reflection upon my experiences in the north and the current challenges for teaching and learning post-COVID-19 in remote northern

communities, seeks to respond to the gap in the current literature on teacher agency in supporting Indigenous learners in northern Canada.

2　Teaching and Teacher Agency Through COVID-19

COVID-19 has not only brought the existing gaps in education into sharp relief but has instead widened those gaps, necessitating attention to teacher agency in responding to student needs, including in remote learning (Daniel, 2020). It is presumptive to assume that all students, even in urban centers, have access to the technology and connections necessary for online learning. This is an opportunity to move forward together, to explore what remote learning means for cultural connections, particularly Indigenous connections, teaching approaches, assessment, and systemic or policy change. As has been noted recently by Morse (2020), president of the Canadian Teachers' Federation, governments and teachers can collaboratively make a return to learning possible. Collaboration and cooperation (Howitt, 2000) will increase opportunities for Indigenous learners (Nichols & Nichols, 1998; Papp, 2016), making education more equitable. Fogarty et al. (2018), speaking critically to the disconnection of Indigenous literacy policy from context, especially for those in remote communities, and the undermining of collaborative opportunities when proscriptive approaches are promoted, argue that improvements will occur only "through doing policy 'with' rather than 'to' communities" (p. 192). Local context has a significant role in shaping social justice education and education policy is most effective when shaped in collaboration with the local community. Many remote northern students are deemed at-risk learners, many of whom are viewed as more dependent on the teacher. Vernon-Feagans et al. (2018) argue that "Proximal learning interactions are particularly important for children at risk" (p. 528). In order to be effective, educators require the agency to be able to respond and adapt to student needs, particularly in remote learning.

Educators require agency to create appropriate authentic learning opportunities for students that reflect the specific context of the learning community for socially just education to occur. Agentic teachers can engage students in situated learning (Lave & Wenger, 1991) and place-based learning (Wason-Ellam, 2010), enact a culturally specific reading practice (Womack, 1999), engage explicitly and in critical terms with hidden curriculum (Giroux, 1992a, b; Reyes, 2016) and the pedagogy of poverty (Haberman, 2003), and draw upon culturally responsive pedagogy (Gay, 1980; Ladson-Billings, 1995) or transformative pedagogy (Cummins, n.d.; Cummins et al., 2007), particularly when students resist remote learning (Kim, 2010; Last, 2020). It speaks to the level of teacher de-professionalization and pressures to be what is termed efficient (Hennessy & Mannix McNamara, 2013) occurring in some regions and the continued dependence on the educational deficit model (Burciaga, 2015; Comber & Kamler, 2004; Cummins, 2003; Dharamshi, 2019; Stacey, 2019; Zakaria et al., 2016) to which some administrations tend to default. The deficit model leads to inequities in opportunities for addressing economic,

political, and social inequities in learning, whereas a strengths-based model (Brownlee et al., 2012; Haberlin, 2019; Hattam & Prosser, 2008; Hawthorne, 2009) can enable a pedagogy that "also stresses the labor conditions necessary for teacher autonomy, cooperation, decent working conditions, and the relations of power necessary to give teachers and students the capacity to restage power in productive ways that point to self-development, self-determination, and social agency" (Giroux, 2016, p. 65). Agentic autonomous teachers who have good working conditions can collaborate organically to support learners from diverse cultural backgrounds and with diverse learning needs more effectively. Well-supported learners become more active in positive classroom relationships (Phillippo, 2012) and more agentic advocates in and out of educational contexts.

3   Discussion: Implications for Theory and Practice

Agency is necessary in order to be able to respond to systemic or structural racism, or what Kendi (2019) refers to as policy racism. He argues that "The source of racist ideas was not ignorance and hate, but self-interest" (Kendi, 2019, p. 230) and urges readers to "Admit racial inequity is a problem of bad policy, not bad people" (p. 231; emphasis in text) and to "Investigate and uncover the racist policies causing racial inequity" (p. 232; emphasis in text). Schools suffering under racist policies that arise from a deficit model, at their root, can be seen to be suffering from the negative effects of the self-interest that informs bad policy. It is our collective responsibility, then, to uncover these policies that result in inequitable educational opportunities and work collaboratively to address them, or we become complicit with social injustice in education. Administrations who view teachers as professionals are stronger, supporting their agency and acknowledging the time needed to implement initiatives and engage in reflection as part of an evolving practice, rather than imposing standardized tasks and tests, checklists, and, unfortunately, even logbooks that incrementally track educators' time. Environments that discourage teachers from coming together as collaborators and learners undermine teacher agency. If teachers are undermined from a personal professional agency, they are effactually prevented from supporting learner agency. And without learner agency valued, proscriptive approaches and gaps in educational attainment will continue to be an issue.

Teachers require agency to work collaboratively to improve social justice pedagogy and policy. Here, the importance of incorporating local Indigenous knowledge must be both underscored and supported. Teachers' combined knowledge empowers them to create stronger responses to shared concerns. Within a collaborative space, which can be – and often is – a virtual one, shared resources with differentiated delivery and assessment variations need to be recognized as a starting point rather than a prescriptive all-purpose response, for "Pedagogy must always be contextually defined, allowing it to respond specifically to the conditions, formations, and problems that arise in various sites in which education takes place" (Giroux, 2001, p. 18). Contextualization of learning is fundamental to meaning-making

(Caraballo Soleimany, 2019; Hiebert, 1984, 1987) and "reflection on practice is essential to learning and to sustaining organizational improvement" (Rallis et al., 2006, p. 4). Administration at all levels must respect context to improve response to local educational conditions and issues.

Perhaps one of the most surprising practices that was endorsed by some administration in northern communities during COVID-19 was a patronizingly prescriptive daily routine, neglecting to appreciate traditional seasonal on-the-land experiences and cultural practices. Just as families must be respected to have the agency to determine their needs in a crisis context, so must teachers. Empowering teacher agency also means that they can create a safe space for themselves in which to consider steps toward rewriting disempowering educational practices and policies in their own context to promote social justice approaches to education in their community school.

Teacher agency enables educators to empower students, recognizing that capitalist culture controls who does or does not have access to knowledge – and the accessibility or inaccessibility of knowledge has pronounced long-term effects. The pandemic is widening the gap (Mackay, 2020), but not only in education, and not only in the north: "In a culture drowning in a new love affair with empiricism and data, that which is not measurable withers. Lost here are the registers of compassion, care for others, the radical imagination, a democratic vision, and a passion for justice" (Giroux, 2016, p. 58). Johnson (2012) urges us to support teachers in linking critical theory and practice with their own expertise and history, to be strengths-based in their approach, and to be explicit that "teaching requires emotional labor (Hochschild, 2003) as well as intellectual labor" (p. 177), for the "Commitment to the promotion of a democratic learning experience which values and recognizes the needs and aptitudes of all, remains the central responsibility of the teacher" (Hennessy & Mannix McNamara, 2013, p. 17). Often, if teachers feel like they have agency and the opportunity to be effective, one of the results will be less teacher turnover. Northern communities often decry challenges with teacher retention. Where there are retention issues, there are often signals of cause(s) for a high turnover rate (Lumadi, 2008), one of which, from my own experience, is teacher satisfaction with their sense of agency as educators. Teachers must be supported in empowering students to create a better, more just world.

4   Recommendations for the Future of Education, Teaching, and Learning

The COVID-19 pandemic marks a significant opportunity to follow the Truth and Reconciliation Commission's Calls to Actions and address Indigenizing provincial curricula, to give Indigenous educators agency to share local knowledge and culture with colleagues and students who will benefit from understanding their local Indigenous context, and to make this an explicit value in education. Nunavut has the

Inuit Qaujimajatuqangit (Nunavut Department of Education, 2007), and the Northwest Territories has the *Dene Kede* (Northwest Territories Department of Education, Culture, and Employment, 1993) and *Inuuqatigiit* (Northwest Territories Department of Education, Culture, and Employment, 1996) as foundational documents as important as the territorially approved curriculum. Developing similar documents for each province would empower educators to be agentic in decolonizing education.

Basic technological infrastructure must be put in place to ensure equitable access for teachers to have the agency to be able to respond to students' needs to enact social justice education. Then, training to support teachers in best practices for content delivery needs to occur (Moorhouse, n.d.). Small steps can have a profound impact: during the pandemic, one northern community internet service provider offered free internet to those without current access, opening opportunities to the local school population to continue their learning (Bowling, 2020) provided they had access to modems and computers. The inequities in technological spaces – such as Wi-Fi access and reliability, or even the ability to access computers at all – is not only an issue in the north (Morse, 2020), although it is compounded by geography. Moreover, for online teaching and learning to be effective, teachers must have the agency to be able to address and adapt to their context (Cecilio-Fernandes et al., 2020; Sandars et al., 2020; Sleeter, 2001).

5   Conclusion

Teacher agency empowers educators to respond to local student populations through best practices, thus enabling students to become agents of a more just society. My own experiences working with Indigenous students inspired me to learn more about what social justice looks like in the classroom and to continue to learn about and with the diverse Indigenous peoples of Canada. I am deeply grateful for these opportunities as each continues to shape who I am as an educator.

Here I would like to return to Giroux's (2016) call for pedagogy that "must always be attentive to the specificity of different contexts and the different conditions, formations, and problems that arise in various sites in which education takes place. Such a project suggests recasting pedagogy as a practice that is indeterminate, open to constant revision, and constantly in dialogue with its own assumptions" (p. 66). Educational responses will need to be flexible to changing contexts. These responses must be constantly queried and reshaped. This is most effective when there is agency for collaboration and a dialogic community is both valued and supported. When educators are treated like the professionals they are, no matter their context; and, when they are not placed in a micro-managed cycles of teaching-to-the-test and a multiplicity of standardized tests that only increase student anxiety around assessments; and, when teachers are able to work together professionally to create collaborative solutions, just as health professionals work tirelessly to help citizens flatten the curve of illness, then educators will be able to work together to

flatten the curve of inequalities in education and make learning more equitable for all.

References

Anderson, L. (2006). Analytic autoethnography. *Journal of Contemporary Ethnography, 35*(4), 373–395.

Battiste, M., Bell, L., & Findlay, L. M. (2002). Decolonizing education in Canadian universities: Aninterdisciplinary, international, indigenous research project. *Canadian Journal of Native Education, 26*(2), 82–95.

Biesta, G., Priestley, M., & Robinson, S. (2017). Talking about education: Exploring the significance of teachers' talk for teacher agency. *Journal of Curriculum Studies: Teachers Matter – But How?, 49*(1), 38–54.

Bourdieu, P. (1973). Cultural reproduction and social reproduction. In R. Brown (Ed.), *Knowledge, education, and cultural change (pp. 77–112)*. Tavistock.

Bowling, E. (2020). *New North Networks donates free bandwidth to Beaufort Delta students*. Inuvik Drum. Retrieved from https://nnsl.com/inuvikdrum/new-north-networks-donates-free-bandwidth-to-beaufort-delta-students/

Brandon, T., & Charlton, J. (2011). The lessons learned from developing an inclusive learning and teaching community of practice. *International Journal of Inclusive Education, 15*(1), 165–178.

Brownlee, K., Rawana, E. P., & MacArtthur, J. (2012). Implementation of a strengths-based approach to Teaching in an elementary school. *Journal of Teaching and Learning, 8*(1), 1–12.

Bruner, J. S. (1996). *The culture of education*. Harvard University Press.

Burciaga, R. (2015). Presuming incompetence from preschool to the professoriate: How leadership preparation programs perpetuate or prevent deficit thinking. *Educational Leadership and Administration: Teaching and Program Development, 26*, 4.

Caraballo, L., & Soleimany, S. (2019). In the name of (pedagogical) love: A conceptual framework for transformative teaching grounded in critical youth research. *The Urban Review, 51*(1), 81–100.

Castagno, A., & Brayboy, B. (2008). Culturally responsive schooling for indigenous youth: A review of the literature. *Review of Educational Research, 78*(4), 941–993.

Cecilio-Fernandes, D., Parisi, M. C. R., Santos, T. M. & Sandars, J. (2020). The COVID-19 pandemic and the challenge of using technology for medical education in low and middle income countries. *MedEdPublish, 9*(1).

Clandinin, J., & Connelly, M. (1994). Personal experience methods. In N. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research*. Sage.

Comber, B., & Kamler, B. (2004). Getting out of deficit: Pedagogies of reconnection. *Journal of Teaching Education, 15*(3), 293–310.

Connelly, F. M., & Clandinin, D. J. (1990). Stories of experience and narrative inquiry. *Educational Researcher, 19*(5), 2–14.

Cummins, J. (2003). Challenging the construction of difference as deficit: Where are identity, intellect, imagination, and power in the new regime of truth? In P.P. Trifonas (Ed.), *Pedagogies of difference: Rethinking education for social change* (pp. 39–59).

Cummins, J. (n.d.). *Biliteracy, empowerment, and transformative pedagogy*. Retrieved from https://www.researchgate.net/profile/Jim_Cummins5/publication/241492125_Biliteracy_Empowerment_and_Transformative_Pedagogy/links/0deec534e935756ca3000000.pdf

Cummins, J., Brown, K., & Sayers, D. (2007). *Literacy, technology, and diversity: Teaching for success in changing times*. Pearson Education, Inc.

Daniel, S. (2020). Education and the COVID-19 pandemic. *Prospects*, 1–6.

Davis, B., Sumara, D., & Luce-Kapler, R. (2008). *Engaging minds: Changing teaching in complex times* (2nd ed.). Routledge.

Dharamshi, P. (2019). "I remember being aware of how I was being positioned by my school": How early experiences with deficit views of education influence the practices of literacy teacher educators. *Teaching and Teacher Education, 77*, 90–99.

Ellis, C. & Bochner, A. P. (Eds.). (1996). Introduction. *Composing ethnography: Alternative forms of qualitative writing. Ethnographic Alternatives Series. Volume 1* (pp. 13–45). Walnut AltaMira Press

Findlay, L. (2000). Always indigenize! The radical humanities in the postcolonial Canadian university. *ARIEL: A Review of International English Literature, 31*(1&2), 307–326.

Florian, L., & Linklater, H. (2010). Preparing teachers for inclusive education: Using inclusive pedagogy to enhance teaching and learning for all. *Cambridge Journal of Education, 40*(4), 369–386.

Fogarty, W., Riddle, S., Lovell, M., & Wilson, B. (2018). Indigenous education and literacy policy in Australia: Bringing learning back to the debate. *The Australian Journal of Indigenous Education, 47*(2), 185–197.

Fontana, A., & Frey, J. (2005). The interview: From neutral stance to political involvement. In N. Denzin & Y. Lincoln (Eds.), *Handbook of Qualitative Inquiry* (3rd ed., pp. 695–728). SAGE.

Freire, P. (1971). *Pedagogy of the oppressed.* (M. Bergman Ramos, Trans.). Herder and Herder.

Freire, P. (1985). *The politics of education: Culture, power, and liberation* (D. Macedo, Trans.) Bergin & Garvey Publishers, Inc.

Freire, P. (1987). Reading the word/Reading the world. In P. Freire & D. Macedo (Eds.), *Literacy: Reading the word and the world* (Critical Studies in Education Series). The Jossey-Bass Reader on Teaching, Bergin & Garvey Publishers, Inc.

Freire, P. (2003). *Education for critical consciousness.* 1974 (M. Bergman Ramos, Trans. and Ed.) Continuum, 2005. The Jossey-Bass Education Series. Jossey-Bass, pp. 52–61.

Gaudry, A., & Lorenz, D. (2018). Indigenization as inclusion, reconciliation, and decolonization: Navigating the different visions for indigenizing the Canadian academy. *AlterNative: An International Journal of Indigenous Peoples, 14*(3), 218–227.

Gay, G. (1980). Ethnic pluralism in social studies education: Where to from here? *Social Education, 44*(1), 52–55.

Giroux, H. (1992a). *Border crossings: Cultural workers and the politics of education*. Routledge.

Giroux, H. (1992b). The hope of radical education: A conversation with Henry Giroux. *Border crossings: Cultural workers and the politics of education*. Routledge, 9–18.

Giroux, H. (2001). Pedagogy of the depressed: Beyond the new politics of cynicism. *College Literature, 28*(3), 1–32.

Giroux, H. (2016). Beyond pedagogies of repression. *Monthly Review, 67*(10), 57–71.

Giroux, H. A., & Penna, A. N. (1981). Social education in the classroom: The dynamics of the hidden curriculum. In H. A. Giroux, A. N. Penna, & W. F. Pinar (Eds.), *Curriculum & instruction: Alternatives in education* (pp. 209–230). McCutchan Publishing Corporation.

Gorodetsky, M., Keiny, S., Barak, J., & Weiss, T. (2003). Contextual pedagogy: Teachers' journey beyond interdisciplinarity. *Teachers and Teaching: Theory and Practice, 9*(1), 21–33.

Haberlin, S. (2019). Something always works: A self-study of strengths-based coaching in supervision. *Journal of Educational Supervision, 2*(1).

Haberman, M. (2003). The pedagogy of poverty versus good teaching. *The Jossey-Bass Reader on Teaching*. The Jossey-Bass Education Series. Jossey-Bass, 239-50.

Hattam, R., & Prosser, B. (2008). Unsettling deficit views of students and their communities. *The Australian Educational Researcher, 35*, 89–106.

Hawthorne, R. (2009). Strength based teaching and learning. *English in Aotearoa, 68*, 7–9.

Hennessy, J., & Mannix McNamara, P. (2013). At the altar of educational efficiency: Performativity and the role of the teacher. *English Teaching, 12*(1), 6–22.

Hiebert, P. G. (1984). Critical contextualization. *Missiology: An International Review, XII*(3), 287–296.

Hiebert, P. G. (1987). Critical contextualization. *International Bulletin of Missionary Research, 11*(3), 104–112.

Holland, D., Lachiotte, W., Skinner, D., & Cain, C. (1998). *Identity and agency in cultural worlds*. Harvard University Press.

Howitt, R. (2000). For whom do we teach?: The paradox of 'excellence'. *Journal of Geography in Higher Education, 24*(3), 317–323.

Johnson, E. B. (2002). *Contextual teaching and learning: What it is and why it's here to stay*. Corwin Press.

Johnson, J. (2012). "A rainforest in front of a bulldozer": The literacy practices of teacher candidates committed to social justice. *English Education, 44*(2), 147–179.

Kendi, I. X. (2019). *How to be an antiracist*. One World.

Kim, J. H. (2010). *Understanding students resistance as a communicative act*. Retrieved from http://krex.ksu.edu

Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal, 32*, 465–491.

Last, J. (2020). *Why on-the-land educators see opportunity in a global pandemic*. CBC North. Retrieved from https://www.cbc.ca/news/canada/north/on-the-land-education-covid-19-1.5571602

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press.

Lawrie, G., Marquis, E., Fuller, E., Newman, T., Qiu, M., Nomikoudis, M., Roelofs, F., & van Dam, L. (2017). Moving towards inclusive learning and teaching: A synthesis of recent literature. *Teaching & Learning Inquiry, 5*(1), 9–21.

Lumadi, M. (2008). Teachers' exodus in south African schools: A smoke with burning fire. *Contemporary Issues in Education Research, 1*(3), 31–40.

Mackay, J. (2020). COVID-19 creating education gaps between Nunavut students. *CBC News North*. Retrieved from https://www.cbc.ca/news/canada/north/covid-19-nunavut-students-1.5595556

Moorhouse, B. (n.d.). Adaptations to a face-to-face initial teacher education course 'forced' online due to the COVID-19 pandemic. *Journal of Education for Teaching* (Ahead-of-print), 1–3.

Morse, S. (2020). In reopening schools, Canada will get a passing grade if we listen to teachers. *The Globe and Mail*. Retrieved from https://www.theglobeandmail.com/opinion/article-in-reopening-schools-canada-will-get-a-passing-grade-if-we-listen-to/

Nichols, L. S., & Nichols, T. (1998). 2 + 2 + 2: Collaborating to enhance educational opportunities for Native Americans. *Journal of Family and Consumer Sciences, 90*(1), 38–41.

Northwest Territories Department of Education, Culture and Employment. (1993). *Dene Kede. Education: A Dene perspective.*. Retrieved from https://www.ece.gov.nt.ca/en/services/curriculum/dene-kede-and-inuuqatigiit

Northwest Territories Department of Education, Culture and Employment. (1996). *Inuuqatigiit: The curriculum from the Inuit perspective*. Retrieved from https://www.ece.gov.nt.ca/sites/ece/files/resources/inuuqatigiit_k-12_curriculum.pdf

Nunavut Department of Education. (2007). *Inuit Qaujimajatuqangit: Education Framework for Nunavut Curriculum.* Nunavut Department of Education: Curriculum and School Services Division.

Palmer, P. J. (2003). The heart of a teacher: Identity and integrity in teaching. *The Jossey Bass Reader on Teaching.* The Jossey-Bass Education Series. Jossey Bass, pp. 3–25.

Papp, T. (2016). Teacher strategies to improve education outcomes for Indigenous students/ Les stratégies des enseignants pour améliorer les résultats scolaires des élèves autochtones. *Comparative and International Education, 45*(3), 1–14.

Phelan, A., & Hansen, D. (2018). Reclaiming agency and appreciating limits in teacher education: Existential, ethical, and psychoanalytical readings. *McGill Journal of Education, 53*(1), 128–145.

Phillippo, K. (2012). "You're trying to know me": Students from nondominant groups respond to teacher personalism. *Urban Review, 44*(4), 1–27.

Priestley, M., Biesta, G., & Robinson, S. (2015). Teacher agency: What is it and why does it matter? In *Flip the system: Changing education from the ground up* (pp. 134–148). Taylor andFrancis.

Ragoonaden, K., & Mueller, L. (2017). Culturally responsive pedagogy: Indigenizing curriculum. *Canadian Journal of Higher Education, 47*(2), 22–46.

Rallis, S., Tedder, J., Lachman, A., & Elmore, R. (2006). Superintendents in classrooms: From collegial conversation to collaborative action. *Phi Delta Kappan, 87*(7), 537–545.

Reyes, R. (2016). In a world of disposable students: The humanizing elements of border pedagogy in teacher education. *The High School Journal, 99*(4), 337–350.

Rigney, L. I. (2017). Defining culturally responsive digital education for classrooms: Writing from Oceania to build indigenous Pacific futures. In E. McKinley & L. T. Smith (Eds.), *Handbook of Indigenous education* (pp. 1–17). Springer.

Sandars, J., Correia, R., Dankbaar, M., de Jong, P., Goh, P. S., Hege, I., Masters, K., Oh, S., Patel, R., Premkumar, K., Webb, A., & Pusic, M. (2020). Twelve tips for rapidly migrating to online learning during the COVID-19 pandemic. *MedEdPublish, 9*(1).

Scollon, R. (2002). Cross-cultural learning and other catastrophes. In C. Kramsch (Ed.), *Language acquisition and language socialization: Ecological perspectives* (pp. 121–139). Continuum.

Sleeter, C. (2001). Preparing teachers for culturally diverse schools – Research and the overwhelming presence of whiteness. *Journal of Teacher Education, 52*(2), 94–106.

Smith, L. T. (1999). *Decolonizing methodologies: Research and indigenous peoples*. Zed.

Stacey, M. (2019). Deficit discourses and teachers' work: The case of an early career teacher in a remote indigenous school. *Critical Studies in Education*. https://doi.org/10.1080/17508487.2019.1650383

Thomas, l. (2016). Developing inclusive learning to improve the engagement, belonging, retention, and success of students from diverse groups. In M. Shah, A. Bennett & E. Southgate, (Eds.), *Widening higher education participation: A global perspective* (pp. 135–159). Truth and Reconciliation Commission. Calls to Action Retrieved from http://www.trc.ca/websites/trcinstitution/File/2015/Findings/Calls_to_Action_English2.pdf

Ukpokodu, O. N. (2011). How do I teach mathematics in a culturally responsive way? Identifying empowering teaching practices. (research). *Multicultural Education, 18*(3), 47–56.

Vernon-Feagans, L., Bratsch-Hines, M., Varghese, C., Cutrer, E., & Garwood, J. (2018). Improving struggling readers' early literacy skills through a tier 2 professional development program for rural classroom teachers: The targeted reading intervention. *The Elementary School Journal, 118*(4), 525–548.

Wason-Ellam, L. (2010). Children's literature as a springboard to place-based embodied learning. *Environmental Education Research, 16*(3–4), 279–294.

Waterfall, H. P. (2020). For first nations, these are precedented times. *The Tyee*. Retrieved from https://thetyee.ca/Opinion/2020/05/22/First-Nations-Precendented-Times/

Womack, C. (1999). *Red on red: Native American literary separatism*. University of Minnesota Press.

Zakaria, Z., Care, E., & Griffin, P. (2016). Scaffolding instruction where it matters: Teachers' shift from deficit approach to developmental model of learning. *Journal of Education and Practice, 7*(23), 144–152.

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Proven Practices in Community College Distributed Learning During the COVID-19 Pandemic: An Appreciative Inquiry

Diane Burt, Karen Campbell, Stacey Coffey, Lexi Keast, Dave Kell, and Hazel Richardson

> *Participation is not a choice. We ignore people's need to participate at our own peril. If they're involved, they will create a future that already has them in it.*
>
> *Margaret Wheatley (Wheatley and Kellner-Rogers, 1998)*

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1   Background

It is difficult to predict the long-term impacts of COVID-19 on the future of post-secondary education; however, as the spring of 2020 turned into summer, return-to-campus plans, following current public health and safety guidelines, were in the works for colleges across Canada (CiCan, 2020). The curve of the COVID-19 pandemic was continuing to flatten. In New Brunswick, Canada, there were 165 confirmed cases of COVID-19. Of these cases, 160 had recovered, 3 were still active cases, and 2 people had died. Although the province had gone nine days without a new case, the provincial chief medical officer of health said New Brunswickers should expect to see more cases of COVID-19 in the province until a vaccine is developed (Fraser, 2020).

The New Brunswick Community College (NBCC) recognized the need to accelerate its strategic plan to offer more flexible and distributed program deliveries, while at the same time maintaining as much hands-on, practical application of learning as possible. NBCC recognized, as Picciano (2017) asserted: "it is likely that in the not-too-distant future, all courses and programs will have some online learning components, as an integrated model of blended or distributed learning becomes the "dominant form of instruction throughout all levels of education" (p. 187).

NBCC is a small, multi-campus college, known for and proud of its effective delivery of applied learning. The College offers over 90 programs in areas such as business, hospitality and tourism, community and protective services, information technologies, engineering technologies, healthcare, and trades. With an expectation that physical distancing measures and large group limitations will continue over the next academic year, NBCC, like other colleges, is planning significant changes to program deliveries, incorporating distributed learning methods that utilize technology to overcome the barriers of location and time experienced in the traditional on-campus learning experience. While distributed learning is not dependent on the physical presence of the instructor and students in the same place at the same time, it may include some elements of face-to-face delivery.

In the 2020 spring semester, NBCC converted most programs to distributed delivery through its learning management system (LMS) and videoconferencing technologies. Many programs were already utilizing the LMS to some degree, but the pandemic required a quick transition to full utilization. As a result, NBCC faculty, leadership, academic support, and technology innovation teams moved into collective action, using available technologies and innovative and creative approaches to ensure students met course competencies.

2 Program Delivery Exploration and Assessment Methodology

At the end of the spring semester, a research team explored and assessed the experiences of faculty and students. Applying a collaborative action research approach, the team sought to discover and examine best practices, innovations, and solutions for program delivery (Reason & Bradbury, 2001). The questions explored included:

- What were the key learnings from the spring 2020 delivery experience?
- What worked well? What best or proven practices were most effective?
- How can the results be used to inform a future practice of more flexible applied learning?

The team, consisting of two academic directors, the teaching and learning innovation lead, two faculty members, and the student union President, utilized appreciative inquiry (AI) as their research methodology. A key benefit of this approach was the faculty and student engagement in identifying and implementing solutions for the future. Appreciative inquiry is a process for facilitating positive change; its main purpose is to identify good practices and implement successful change (Shuayb et al., 2009). AI focuses the research process on what works rather than what does not. It engages key stakeholders in positive conversations and therefore encourages participation and promotes ownership of the process and the outcomes (Shuayb et al., 2009).

The AI process involves four (Ds): Discover, Dream, Design, and Deliver (Cooperider & Whitney, 2005). The team utilized the Discover and Dream phases of the methodology to collect stories of effective practices in distributed learning from the spring term. There were three faculty focus group sessions and three student focus group sessions with between five and nine participants in each group, for a total of 18 faculty participants and 19 student participants. The 75-minute AI sessions were held through videoconferencing technology. The faculty research team members facilitated the faculty sessions and the student research team member facilitated the student sessions. The involvement of instructors and a student in the research and facilitation process was important. Table 1 outlines the session format and the appreciative inquiry questions.

Table 1 AI session format

Introduction to appreciative inquiry	Introduction of the purpose and format for the session	*5 minutes*
Question 1 (discover)	Think about your experience teaching/learning over this semester. What worked well? Tell us about what worked for you and why	*30 minutes*
Question 2 (dream)	Thinking about what worked well this semester, what could our fall program delivery look like? What could be?	*30 minutes*
Wrap up	Final questions and next steps	*10 minutes*

2.1 Survey Participants

Key themes from the sessions were identified and compiled into a short survey, along with demographic questions and sent out to all 37 participants; 24 completed the survey (12 students and 12 faculty). In terms of the demographics in the faculty group, nine respondents were female and three were male. All of the faculty who responded were over 40 and most were over 50. Four had dependents at home. In the student group, seven of the respondents were female, four were male, and one was non-binary. Student ages ranged from 19 to 54, with the majority between 30 and 39 years old. Seven had dependents at home. The program areas of instruction and study varied, but Business Administration had the highest participation of both students and faculty.

2.2 Positive Participation

Appreciative inquiry encourages positive participation as it allows people to connect and create meaning together (Burt, 2011; Kolb, 2014). In addition to the examples of best practices and ideas for the future shared in response to the appreciative questions, the added value was the opportunity for faculty and students to be heard and to contribute to the future state of the college. This was voiced mainly by faculty, but also acknowledged by students. In AI, people come together to co-construct their preferred future and that future is more likely to happen if they have been asked positive questions that help them see challenges as opportunities and problems as possibilities (Cockell & McArthur-Blair, 2018). The following quotes from participants highlight the importance of faculty and student engagement and the value of focusing on the positive.

> I would like to be part of that conversation. I would like to participate and offer insights from the student's point of view. Our experience on the receiving end is highly important. I would assert it is equally as important as instructors' experience on the supply side.

> The fact you asked for and value feedback from staff was greatly appreciated.

> Your research has an added outcome that you may or may not be aware of -- having our (faculty) voices heard.

> Thank you for taking the time to do this research. All the good news positive stories gave me the boost I needed to turn around my attitude.

3   Discover and Dream

The appreciative conversations of what worked well and what could be possible were insightful. The Discover stories of best practices in the spring semester highlighted how well and how quickly students and instructors adjusted to online learning during the pandemic. Faculty shared how they remained positive about the situation and instructors who knew more about online learning helped others who did not.

> Students who had been quiet in class found their voice online and became more interactive.

The Dreams created a vision of what might be in the future. Faculty dreamed of starting off on a "whole new foot" and being able to do "all the cool, interactive things." They appreciated having lead time, knowing that they will be working in this model. Students dreamed of being prepared for the worst-case scenario, with well-trained and prepared faculty and courses being ready for online or remote delivery. They wished for more interaction, engagement, and bi-directional learning experiences; they wanted to learn with and from their fellow students with more of the in-class experience online and with virtual study groups.

> My instructor asked students what would work for us when it came to his delivery, which worked really well.

Common themes emerged from the Discover and Dream stories, which were grouped into the following nine categories: consistent delivery standards, communication and instructor availability, test/assignment flexibility, creative student engagement, effective technology utilization, access to technology, support for faculty, support for students, and textbook access.

3.1   Design: Recommendations for Planning and Implementation

The appreciative inquiry Design phase involved the research team analyzing the findings to identify the most effective proven practices and dreams for future practice and implementation in the Deliver phase. Reed (2007) proposed the outcomes of an appreciative inquiry will contribute to practice "by identifying how successful activities can be recognized and developed" (p. 107). In the survey, participants were asked to rate the nine themes in order of importance for consideration in planning and implementation for the fall. Five key areas emerged, with three ranking the highest for both groups. These five categories are depicted in (Fig. 1) and discussed in the following recommendations.
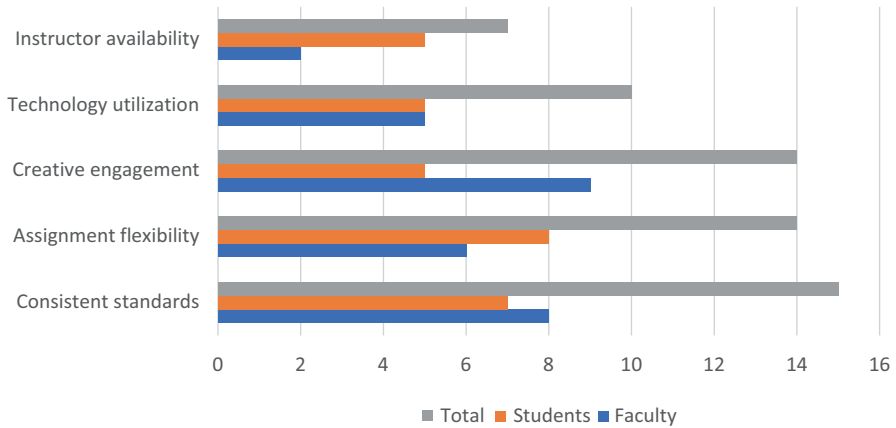
Fig. 1 Top five rated themes

3.1.1 Consistent Standards and Expectations for Delivery

The need for consistency in the student learning experience was the top-rated combined category for students and faculty in terms of current best practices and dreams for future program delivery. Learners' desire for consistency in distributed delivery is not a surprise and is confirmed by other researchers and practitioners (Li & Lalani, 2020; Picciano, 2017; Schiefelbein, 2020). Students indicated all instructors should use the LMS communication functions to provide a consistent experience across classes. Instructors indicated a need for the college to set clear expectations for delivery standards. One suggested a minimum standard for consistency in delivery, layout, and structure that is not too restrictive and allows for an individual style.

> Two of my three instructors had clear outlines of how the course was to go and deadlines, and that worked well. The other wasn't as structured and it didn't go as well.

> We need a delivery standard – statement from academic chairs that spells out the expectations for online delivery and what online tools need to be standardized.

> Each instructor is using what works best for them and this is not good for students. Students must have consistency. We shouldn't have instructors using a mix of tools. We need a decision.

Based on the AI responses, a consistent delivery standard for all instructors should include the components outlined in (Table 2).

3.1.2 Assignment and Test Flexibility

Flexibility in tests and assignments was raised in every student discussion and was rated the highest in the student survey. The best practices and dream suggestions included: more flexibility in assignment due dates, module summaries to help with

Table 2 Consistent standards

1.	Layout and format	Create a standard look and feel for online courses with every instructor using the same, consistent format so that things are easy to find in each course
2.	Course outline	Create clear and consistent course outlines
3.	Structure	Provide information in advance, laying out tasks and assignments, summarizing what was covered (module summaries), including weekly outlines or checklists of what is happening each week
4.	Schedule	Provide a schedule in advance, indicating days and times of class meetings, and instructor online office hours
5.	Virtual classes	Use one standard platform for all online video conference classes. Ensure consistency in how often virtual classes are held and duration (could be short "bite-sized" chunks)
6.	LMS tools	Implement a consistent standard for the use of tools (e.g., use the LMS for submission of assignments rather than email)
7.	Tutorials	Offer scheduled times for students to ask questions and get feedback from instructors
8.	Communication	Share expectations for instructor communications and response time. Ensure frequent and consistent communication from instructors in how and how often they communicate, flexibility in time (e.g., evenings), and methods (e.g., texts, uploading comments, one-on-one meetings)
9.	Group work	Integrate interactive discussion activities to exchange/share ideas. Have focused, organized, and collaborative teamwork classes (break out rooms). Students want to see and talk to one another
10.	Recorded lectures and demonstrations	Include pre-recorded videos and PowerPoint presentation recordings
11.	Office hours	Schedule specific times when students can connect with their instructors

studying for tests and quizzes, more adaptable assignments (e.g., video pitches versus in-person presentations), flexibility in how assignments are submitted, different assignment options, having flexibility in quiz start and end times, and extensions or more time to submit quizzes, tests and assignments, feedback on assignments as soon as possible (especially before tests). Students also liked being able to see test results right after they are marked and having a review session on quizzes so they could see what they got wrong. The faculty groups did not focus on assignment flexibility, except one instructor indicated students like flexibility in testing time, such as the ability to complete a test within a 24-hour period, enabling those with children to complete it during the evening.

3.1.3   Creative Engagement

Creative student collaboration and interaction is well-recognized as the key to effective online pedagogy. (Lederman, 2020; Teach Online, 2018). The dream for students was to find more interesting and effective ways to replicate in-class discussions.

They want more interaction and engagement and the opportunity to participate and learn from fellow students. In addition to pre-recorded presentations, they want the chance to pause, review, reflect, and question. One faculty best practice was to form teams for senior project presentations, where students take control of the videoconference and present. One instructor live-streamed student presentations on YouTube so industry partners could watch.

Other creative ideas included students having Facebook chats, leaving the videoconference open after a review so students could have side conversations (and stopping recording at that point), and student-created study groups and meetings. Having students turn on their cameras during videoconferences was suggested as a good practice to encourage engagement and relationship building. The use of discussion boards using provocative questions and instructor feedback was also mentioned as a way to engage students.

For large classes, one best practice shared was to break the class into two to allow for more interaction; small groups enable better engagement. The use of tutorials was another best practice for student engagement. Many of the best practices utilized the concept of the flipped classroom, where instructors provided learning resources that students could access in advance and after class so that the class meeting time could be spent on interaction.

3.1.4   Technology Utilization

> I know what engages my students, but the technology stops me.

The best practices and dreams for technology utilization are integrated with consistent delivery standards and faculty support. First, effective and consistent utilization of the features of the learning management system and the videoconferencing platform is essential. A need for technical support to help instructors present things in an engaging way through effective use of "the bells and whistles" was mentioned in a faculty session. It was suggested simple software could help faculty create engaging lectures with presentations on camera. Students liked having access to recordings. One instructor purchased recording and screen capture software for recording lectures that give the ability to edit rather than rerecord. Scripting things out and practicing was shared as a helpful tip. Using voiceover on PowerPoint was used, but it was suggested that video recording that could be stopped or paused was better.

Students envisioned the use of augmented, mixed, or virtual reality so they could observe practical instruction. Access to simulation was also in the students' dream. Observation aids motor skill learning, so video recordings that demonstrate techniques are recommended (Andrieux & Proteau, 2016). However, although watching others perform allows students to learn the steps, they still need the ability to practice, and simulation can enable that (Chittaro & Buttlussi, 2015; Kardas & O'Brien, 2018).

3.1.5 Communication and Clarity in Instructor Availability

Superficial or lack of communication between students and instructors can negatively impact how well content is absorbed (Guest et al., 2018). In fact, Jaggers and Xu (2016) found that the "quality of interpersonal interaction within a course relates positively and significantly to student grades" (p. 270). Instructors need to be available to students and let students know at the outset of the course when and how they can be reached. While many instructors effectively utilized the available technologies to provide content, it was clear that students appreciated access to the real person as well. They said that regular communication with instructors was helpful. Examples of what worked well in terms of instructor availability included:

- Having online office hours.
- Being in the online class during regularly scheduled class time.
- Allowing dedicated time for students to just come and ask questions.
- Holding tutorials where students could ask questions and get immediate feedback.
- Setting boundaries on when instructors are available.
- Flexibility in meeting with students.
- Being available when students are working on weekends and evenings.
- Having one-on-one meetings with students.

> There was a lot of communications on weekends and nights. As an instructor, I would like to have that flexibility in the future, but this will impact on my 9 to 5.

> Videoconference online office hours were really helpful instead of having to type an email to my instructor.

> Responsive, frequent, clear and consistent communication from all instructors. Instructors that communicated well, the marks showed that.

3.1.6 Other Recommendations

There were four other categories that were identified in the AI sessions: access to technology, support for faculty, support for students, and textbook access. In addition, the topic of flexibility was raised. Although they were not ranked as highly as the five discussed above, they do deserve some consideration.

Access to Technology While students had dreams of simulation and mixed reality technology utilization, access to basic teaching technologies was a concern for faculty. They also wished for improvements to information technology support, such as helpdesk access at lunchtime and in the evenings.

Support for Faculty Support for faculty was discussed in all the faculty sessions and also in two student sessions. The feedback emphasized the need for and importance of learning and teaching support. This need for pedagogical and technological expertise is also identified in the literature, "especially instructional designers, edu-

cational technologists and other professionals who work in places like centers for teaching and learning" (Lederman, 2018). Students suggested that instructors should be trained on the LMS platform. Instructors acknowledged there was plenty of professional development and training provided, but they need more.

> I feel completely ill-equipped to create a good online course. I don't know where to start. We need a training path. We need support.

A suggestion was to use successful, experienced online instructors to help others. Mentorship or teaming up with other faculty or support was mentioned as a best practice. Instructors said that it is really important to collaborate and connect with other faculty for support, advice, and feedback.

Support for Students   The student survey respondents ranked support for students fairly low, and there was minimal mention of it in the sessions. Although there was no mention by students of their needs for specific student services support, the two areas that they talked about were "support from instructors and support from one another."

Textbook Access   Textbook access was mentioned briefly in all three student sessions as a dream. Students hoped bookstores could be open so they could pick up books rather than have them delivered. A couple mentioned preferring physical copies of texts rather than e-books; one suggested having both. They suggested curbside pick-ups, home delivery, and pick-up by appointment.

Flexibility   This final observation was raised in some of the Dream conversations. Instructors could see that students were accessing course content at all hours of the day and night. This was confirmed by an LMS log-in report for the spring term – 59% of all log-ins were outside of the Monday to Friday, 8 am to 5 pm timeframe. The ability to work from home and the flexibility for both students and faculty to manage their own time were highlighted as positive outcomes to consider in future planning. The flexibility and accessibility offered by online delivery have been identified as major benefits to students (Guest et al., 2018).

4   Delivery: Conclusion

For NBCC, COVID-19 has certainly fast-forwarded the college's plans for more flexible and innovative programming. In its efforts to increase technology-enabled delivery, improve teaching approaches, and maintain capacity for applied learning, NBCC learned a great deal about what works well and what could be continued and improved. Evaluating the teaching strategies employed during and after the COVID-19 pandemic is essential, "Institutions will need to use postmortem feedback from both their students and faculty to improve their contingency plans and how they prepare students and faculty to engage in remote learning and teaching,

respectively, when institutions have to close due to a crisis. It will also be important for institutions to update their existing plans yearly and discuss how such plans can be improved upon based upon available research on how best to use technology to positively impact student learning" (Lederman, 2020).

Consistent delivery standards, assignment flexibility, creative student engagement, effective technology utilization, and instructor availability are five key areas for focus in assessment and planning. Most importantly, engaging students and faculty in the assessment and planning process is recommended. This chapter has highlighted just a few teaching and technology solutions that were applied and/or dreamed of in a time of pandemic and crisis. The recommendations will help educators and administrators maneuver through this critical time of change and foster new and improved practices for flexible distributed learning to meet student needs in the future.

References

Andrieux, M., & Proteau, L. (2016). Observational learning: Tell beginners what they are about to watch and they will learn better. *Frontiers in Psychology, 7*(51). https://doi.org/10.3389/fpsyg.2016.00051

Burt, D. (2011). *Exploring employee involvement in change: Appreciative conversations with community college leaders*. Doctoral dissertation. Fielding University, Santa Barbara, CA. https://pqdtopen.proquest.com/doc/907104959.html?FMT=AI

Chittaro, L., & Buttlussi, F. (2015). Assessing knowledge retention of an immersive serious game vs. a traditional education method in aviation safety. *IEEE Transactions on Visualization and Computer Graphics, 21*(4), 529–538.

CiCan. (2020, July). Perspectives. May 19, 2020. https://www.collegesinstitutes.ca/news-centre/perspective/perspectives-may-19-2/

Cockell, J., & McArthur-Blair, J. (2012). *Appreciative inquiry in higher education: A transformative force*. Jossey-Bass.

Cooperider, D., & Whitney, D. (2005). *Appreciative inquiry: A positive revolution in change*. Berrett-Koehler.

Fraser, E. (2020, July 2). *N.B. goes 9 days without confirmed case of COVID-19*. CBC. https://www.cbc.ca/news/canada/new-brunswick/covid-19-numbers-public-health-1.5635061

Guest, R., Rohde, N., Selvanathan, S., & Soesmanto, T. (2018). Student satisfaction and online teaching. *Assessment and Evaluation in Higher Education, 43*(7), 1084–1093.

Jaggers, S., & Xu, D. (2016). How do online course design features influence student performance? *Computers and Education, 95*, 270–284.

Kardas, M., & O'Brien, E. (2018). Easier seen than done: Merely watching others perform can foster an illusion of skill acquisition. *Psychological Science, 29*(4), 521–536.

Kolb, D. A. (2014). *Experiential learning: Experience as the source of learning and development*. Prentice-Hall.

Lederman, D. (2020). Will shift to remote teaching be boon or bane for online learning? *Inside Higher Education*. https://www.insidehighered.com/digital-learning/article/2020/03/18/most-teaching-going-remote-will-help-or-hurt-online-learning

Li, C. & Lalani, F. (2020). *The COVID-19 pandemic has changed education forever. This is how*. World Economic Forum. https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid19-online-digital-learning/

Picciano, A. (2017). Theories and frameworks for online education: Seeking an integrated model. *Online Learning, 21*(3), 166–190.

Reason, P., & Bradbury, H. (2001). Introduction: Inquiry and participation in search of a world worthy of human aspiration. In P. Reason & H. Bradbury (Eds.), *Handbook of action research: Participative inquiry and practice*. Sage.

Reed, J. (2007). *Appreciative inquiry: Research for change*. Sage.

Schiefelbein, J. (2020). What do students expect from online courses? In *Preparing to Teach Online*. Magna Publications. https://www.magnalearning.com/

Shuayb, M., Sharp, C., Judkins, M., & Hetherington, M. (2009). *Using appreciative inquiry in educational research: Possibilities and limitations*. National Foundation for Educational Research.

Teach Online. (2018). *A new pedagogy is emerging… and online learning is a contributing factor.* https://teachonline.ca/tools-trends/how-teach-online-student-success/new-pedagogy-emerging-and-online-learning-key-contributing-factor

Wheatley, M. & Kellner-Rogers, M. (1998). Bringing life to organizational change. *Journal for Strategic Performance Measurement.* https://www.margaretwheatley.com/articles/life.html

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Teaching and Learning During COVID-19: Perceptions of Students, Parents, and Teachers in Egypt

Mohamed Mahgoub and Eleanore Hargreaves

> *There are students whose financial circumstances won't allow them to… pay for Internet access... They previously relied on low-cost tutoring centers, but now … they can't find any alternatives because they're too expensive.*
>
> *(UFS-1)*

1   Background

Since its outbreak on December 29, 2019 (WHO, 2020), Coronavirus (COVID-19) has caused school closures across the globe. More than 9.1 million students at high school level were affected by this closure in Egypt (UNESCO, 2020). The Egyptian government closed schools and private tutoring places as of March 152,020 and kept extending this closure until exam times (Al Masry Al Youm, 2020 & Al Youm Al Sabea, 2020a). During COVID-19, around 560,000 students took the high school leaving exams (Al Youm Al Sabea, 2020b). Meanwhile, students, who were planning to take these crucial exams, and their teachers and parents had the dilemma of protecting their health and well-being while preparing for these exams. In this chaotic situation, there was a gap in identifying lived experiences of Grade 12 students, their parents, and teachers.

This chapter aims to describe teaching and learning resources, technological innovations, and well-being challenges as perceived by two groups of Grade 12 students, their parents, and teachers in two different settings (urban and rural) in Egypt under COVID-19. It also proposes policy and further research recommendations.

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This chapter is uses research-based literature to address such a topic in the Egyptian context. Above all, it is based on qualitative data, which is scarce in research on educational issues in Egypt (Hartmann, 2013).

2 Parity of Participation

Nancy Fraser (2008) proposes that "parity-of-participation" is a crucial aspect of social justice. In other words, all society members should be enabled to participate in social activities on the same footing as equals. To facilitate such "participatory parity," leaders in society need to enable its members to participate equally in society. In so doing, they need to work on three integrated dimensions: economic, cultural, and political. First, and according to the economic dimension, the leaders in society need to make sure there is nothing barring economic participation – that is, a social class that obstructs people from having full access to all resources they need in order to achieve their full participation in society. Thus, all enjoy distributive parity in society. Second, and as per the cultural dimension, the leaders in society need to guarantee that everyone enjoys such a participatory parity in terms of "status." In other words, society needs to recognize them all as having equal status, irrespective of their cultural values and backgrounds. Fraser called this "parity of recognition." Thus all – regardless of their cultural values or social positions – are to be recognized as equally worthy, including the underprivileged and minorities. Third, in accordance with the political dimension, "representational parity" must be granted to all. In other words, criteria and procedures must be applied that enable everyone to be equally represented in the society to achieve their full political participation. Fraser emphasized that these three dimensions should exist and work in an integrated way (pp. 13–14).

3 Background Literature

Since the COVID-19 outbreak, there has been scarce literature on our topic in Egypt. However, there have been some publications such as Van Lancker and Parolin (2020); Dorn et al. (2020); Montacute (2020); and Sobhy (2020) that have suggested that school closure under COVID-19 can widen the learning disparity gap between students from low-income socioeconomic backgrounds and their counterparts from high-income households. While the former may lack comfortable, well-equipped, and supportive study environments at home, the latter enjoy these resources. Besides, there can be a disparity in nutrition and healthcare, where students from poor backgrounds stop receiving a daily meal and healthcare services from the school system. Montacute (2020) also suggested that learning disparity may increase as teachers in government and disadvantaged schools are less likely to support online and remote learning and teaching for their students compared to their

counterparts at private and expensive schools. In Egypt, Abou Zaid (2017) suggested that the public school system suffers from high levels of inequality due to poor policies, using one-size-fits-all policy approaches, and a lack of effective teacher pedagogical development.

Likewise, we did not find any research-based publications focusing on shadow education in the specific context of COVID. However, at the international level, Bray and Kwo (2013) suggested that private tutoring may widen the disparity gap among students. In Egypt, Hargreaves (1997), Sobhy (2012), and Hartmann (2013) suggested that private tutoring in Egypt may widen disparity among public school students.

None of the currently available literature tells us how students, parents, and teachers perceive teaching and learning under COVID-19 in the Egyptian context. This has not been investigated in the two strikingly different contexts we address in this study: urban and rural. Such a need was previously expressed in the existing context by scholars such as Abou Zaid (2017), who studied blended learning and recommended further research on "socio-economic disparities … and geographic challenges" especially using qualitative data (Hartmann, 2013, p. 51).

4   Research Design

This chapter is based on a multi-site case study approach (Stake, 1994, 1995, 2006; Merriam, 1998). It adopted an interpretivist, constructivist approach (Crotty, 1998). That is, it did not start with a theory or a hypothesis; rather, it identified a theory based on the participants' perceptions and experiences. It describes the COVID-19 mitigation actions taken by the Ministry of Education and Technical Education in Egypt. It narrates teaching, learning, and well-being challenges, solutions, and innovations taken by two groups of General High School Grade 12 students, parents, and teachers in two settings (one urban case and one rural case). It has used an online open-ended questionnaire that collected purely qualitative data from 18 participants, who included five students, five teachers, and eight parents in each of these two contexts. Due to a lack of literature on this recent topic – as explained above – we used a "purposive" sampling technique for identifying participants whose lived experiences would inform this research (Merriam & Tisdell, 2016, p. 97). We sent the online questionnaire to two groups of participants in the two contexts; and, in a few cases, they sent it to other participants who were willing to complete it. Informed consent was sought for the online questionnaire.

Although this chapter has been based on rigorous policy analysis and empirical data analysis, the results it presents are not meant to be generalizable. However, they are built on the firsthand descriptions of the experiences of participants in these two case studies. Although these experiences are particular to the participants and the two contexts of these two case studies, readers of the chapter and policymakers in similar situations can relate to and benefit from understanding them. Thematic analysis (Braun & Clarke, 2012) has been used to build narratives that inform this

chapter. Key findings have been drawn with reference to Fraser's concept of parity of participation (Fraser, 2008).

5 Findings

During our inductive analysis of the participants' responses, the following three groups of themes emerged. They summarize the main findings according to the following points.

5.1 The Ministry of Education and Technical Education Provided Insufficient Support and Resources

Participants described measures taken by the Ministry of Education and Technical Education to mitigate the outbreak of COVID-19, which included closing schools and banning private tutoring centers and places as of March 15th; canceling syllabus content supposed to be taught following March 15th until the end of the school year; and making resources available online such as the Egyptian Knowledge Bank, and exam booklets and materials, in addition to TV educational channels. But some parents in both urban and rural cases found the support insufficient. For example, a female parent from the urban case said:

> The Ministry did lots of things… but I don't see this as enough. They should have recognized that there were poor students who couldn't access the Internet and couldn't buy booklets, and… should have found solutions for them. (UFP-2)

From the perspective of Fraser's parity of distribution (2008) lens, these quotes suggest that sufficient structural policies and procedures were not in place to ensure these students were provided with their equal share of access and support. This prevented them from participating in learning on an equal footing with their peers.

5.2 Challenges: Teaching and Learning, Mental Health, and Financial Issues

Participants in both cases described three types of challenges faced under COVID-19: disrupted teaching and learning, poor mental health/well-being, and financial strain.

5.2.1 Disrupted Teaching and Learning

Participants in both cases stated that prior to COVID-19, Grade 12 high school students depended mainly on private tuition, which took different forms depending on the student's household income, including private one-to-one tutoring; small groups of a maximum of five students; large groups of up to 30 students; low-cost private tutoring centers; and expensive private tutoring center halls which take hundreds of students and are taught using video screens. All these forms were common in both cases except the huge halls, which were common only in the urban case because they required large numbers of students and charged costly fees. Under COVID-19, all forms of private tutoring stopped except one-to-one and small groups of up to three students per group. These continued because teachers were secretly conducting them at their own or their students' homes. This was very expensive in both cases. This situation created a further disparity of distribution (Fraser, 2008) among students based on their household socioeconomic backgrounds. For example, a teacher from the rural case described the situation of one of his students. He explained:

> I know an excellent student from the countryside who used to take lessons in some of these big groups.... Once the pandemic happened, teachers said that anyone wanting tuition would have to go private and pay high prices. So… he stayed at home revising on his own. (RMT-2)

In addition to the disparity of having access to face-to-face private tuition, students from low-income households suffered from disparity of distribution to online resources that the Ministry provided because they could not afford constant Internet access. For example, a student from the urban case reported:

> There are students whose financial circumstances won't allow them to… pay for Internet access... They previously relied on low-cost tutoring centers, but now … they can't find any alternatives because they're too expensive. (UFS-1)

Illustrating the unequal distribution of resources (Fraser, 2008), this disparity of access to learning was similarly suggested by Van Lancker and Parolin (2020), Montacute (2020), and Sobhy (2020). They proposed that closing schools and learning places contributed to increasing learning disparities among students because poor students were less likely to get the same opportunities that their advantaged peers would get in their homes.

Teachers in both cases complained that neither they nor their students were trained in online teaching and learning. This lack was especially acute in the rural case. A female teacher from a rural school noted that after schools had closed:

> At first, we started trying to contact the students through the Internet and apps like WhatsApp and Facebook, but… because we have no experience..., it failed …Students don't know how to handle it. (RFT-3)

Our data also illustrated Montacute's (2020) proposition that teachers in private schools were more able to support students online than their counterparts at government and disadvantaged schools because the former were generally provided with

more training on how to use and support online teaching and learning. This factor also illustrates the disparity of distribution. Had disadvantaged students been recognized as especially needy by policymakers, they could have been provided with the resources they needed for learning. They and their teachers could have been trained in using online learning resources.

5.2.2   Mental Health and Well-being Issues

Participants in the two cases described that parents, students, and teachers were afraid of getting infected from private tutoring sessions, either one-to-one or small groups. For example, a female student in the urban case said:

> We started to be frightened... We started worrying in a way that we didn't before. … This had a psychological impact on us. (UFS-1)

A female teacher from the rural case said:

> My family are afraid … because I go out and have direct contact with many students … they're worried I might catch the virus and pass it on to them. (RFT-3)

Participants in both cases also described purchasing preventive measures such as masks, gloves, and sanitizers. However, as Montacute (2020) suggested, our data revealed that closing schools might have increased disparity in terms of access to healthcare and wellbeing as students may not have had the resources or the opportunities to buy essential healthcare items.

5.2.3   Financial Challenges

Participants in both cases described financial challenges they faced under COVID-19 due to the increased fees of private tutoring and expenses related to Internet access and preventive measures. One parent from the rural case explained:

> Before the coronavirus lessons cost about 3,700 EGP (232 USD), and since then they've become about 5,900 EGP (389 USD). The difference has come at the expense of other needs like clothes and household expenditure. (RMP-1)

In both cases, teachers complained about reductions in their income, especially those who were teaching at low-cost private tutoring centers. For example, one teacher noted:

> My income has gone down, and that's been reflected in the family's living conditions. (UMT-1)

5.3 Innovations and Solutions

Participants in both cases described how all teachers tried to sustain their private lessons using mobile applications such as WhatsApp and online social media platforms such as YouTube, Facebook, and Zoom. However, our data showed clear differences between the two cases in this respect. Teachers in the rural case used only WhatsApp for a limited period and then resumed their face-to-face private tutoring in small groups. This happened because not all their students had computers, smartphones, or internet access, as described below by a female teacher in the rural case:

> A lot of students don't have a personal computer, and they were relying on their mobiles… this wasn't helping them much, because some students' mobiles weren't smart phones. (RFT-3)

However, their counterparts in the urban case used platforms such as YouTube, Facebook, and Zoom because they had greater access to technology and Internet. Some teachers created their own online channels and collected fees from the students. Some others offered online teaching for free but then marketed their exam expectation notes for students to buy, as one female student from the urban case explained:

> We watched their videos, practiced exams… and bought their revision notes. (UFS-4)

6 Discussion and Implications

Our findings suggest that there is a learning disparity among Grade 12 general high school students from different socioeconomic backgrounds. This results primarily from distributive inequality where the additional needs of those in poorer, rural areas recognized, they could have been provided with additional teaching and learning resources to prepare for General High School leaving exams. In addition to suffering from disparity of distribution, we suggest that the status of those in rural areas may have been considered lower than those in urban contexts and that this was why insufficient efforts were made to reach them. Finally, access to representation appears to have been further obstructed in the rural case than in the urban case, in that no explicit attempts were made by policymakers to investigate how people were experiencing the rural situation and did not act on their needs.

In terms of parity of participation with its three dimensions, the most beneficial policies and practices would be those that would provide additional support and resources to students, parents, and teachers in disadvantaged contexts, such as poor and rural ones. Of course, this should be based on these populations being well-represented to identify their actual needs, which are recognized as equally important. Appropriate policies would provide these students and their families with free or discounted Internet access, free tutoring lessons, and free materials. They would provide teachers and students in these disadvantaged contexts with training on how

to use online platforms for teaching and learning and use communication vehicles that are easily accessible to all those in rural areas.

Our findings suggest that the following measures could help to mitigate the disparity of advantage caused by COVID-19. Policies and practices should be introduced to (a) offer free/subsidized internet coverage and technological devices for students from poor backgrounds; (b) train teachers and students in using mobile learning techniques and technologies; (c) make online interactive teaching and learning sessions available for all students in all subjects; (d) regulate how private-school teachers and private tutors are releasing their own video-recorded sessions; and (e) conduct further empirical research on how COVID-19 affects examination outcomes in relation to previous years.

In conclusion, our findings underline the concern that COVID-19 can widen the learning disparity gap between students from low-income socioeconomic backgrounds and their counterparts from high-income households. Our comparison between rural and urban populations has indicated how COVID-19 has affected the two groups in starkly different ways, raising concerns about parity of participation (Fraser, 2008). Findings also suggest that, at such times, leaders in societies around the globe need to take particular measures to protect the learning and health of their less advantaged citizens.

References

Abou Zaid, S. E. D. (2017). A blended learning education policy in Egypt: The road for better access and social inclusion. MA thesis at the American University in Cairo.

Al Youm Al Sabea. (2020a). Minister of Education approves General high school leaving exams to start June 21st, 2020. Last accessed on July 21st, 2020 on https://www.youm7.com/story/2020/5/18/4779383

Al Youm Al Sabea. (2020b-Minister of Education says: 650 students takes general secondary school leaving certificate exams. Last accessed on July 21st, 2020 on https://www.youm7.com/story/2020/4/1 /4700633

Al Masry Al Youm. (2020). المصري اليوم | (فيديو) «الهلع من كورونا» بسبب وزير التعليم يتوقع تمديد فترة تعليق الدراسة. [online] Available at: https://www.almasryalyoum.com/news/details/1627579. Accessed 28 July 2020.

Braun, V., & Clarke, V. (2012). *Thematic analysis*. SAGE.

Bray, M., & Kwo, O. (2013). Behind the façade of fee-free education: Shadow education and its implications for social justice. *Oxford Review of Education, 39*(4), 480–497.

Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. Sage.

Dorn, E., Hancock, B., Sarakatsannis, J., & Viruleg, E. (2020). *COVID-19 and student learning in the United States: The hurt could last a lifetime*. McKinsey & Company. Last accessed July 22, 2020 on https://www.mckinsey.com/industries/public-sector/our-insights/covid-19-and-student-learning-in-the-united-states-the-hurt-could-last-a-lifetime

Fraser, N. (2008). *Scales of justice: Reimagining political space in a globalizing world*. Polity. Cambridge, UK.

Hargreaves, E. (1997). The diploma disease in Egypt: Learning, teaching and the monster of the secondary leaving certificate. *Assessment in Education: Principles, Policy & Practice, 4*(1), 161–176. https://doi.org/10.1080/0969594970040111

Hartmann, S. (2013) Education 'home delivery' in Egypt. In M. Bray, A.E. Mazawi, R. G. Sultana (Eds.), *Private tutoring across the Mediterranean. Comparative and international education* (A diversity of voices). SensePublishers.

Merriam, S. B. (1998). *Qualitative research and case study application in education*. Jossey-Bass.

Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation*. Jossey-Bass.

Montacute, R. (2020). Social mobility and Covid-19: Implications of the Covid-19 crisis for educational inequality. Last accessed July 22, 2020 on https://dera.ioe.ac.uk/35323/2/COVID-19-and-Social-Mobility-1.pdf

Sobhy, H. (2012). The de-facto privatization of secondary education in Egypt: A study of private tutoring in technical and general schools. *Compare: A Journal of Comparative and International Education, 42*(1), 47–67. https://doi.org/10.1080/03057925.2011.629042

Sobhy, H. (2020). *COVID-19 and remote learning: Can we do without schools?* (an opinion piece by Hania Sobhy in Arabic). Last accessed on July 21st, 2020 on https://www.shorouknews.com/columns/view.aspx?cdate=23032020&id=84a5ce94-965d-459c-ae2c-c06b0d6310b0

Stake, R. E. (1994). Case Studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research*. Sage.

Stake, R. E. (1995). *The art of case study research*. Sage.

Stake, R. E. (2006). *Multiple case study analysis*. The Guilford Press.

UNESCO. (2020). *Education: From disruption to recovery*. Last accessed on July 21, 2020 on https://en.unesco.org/covid19/educationresponse

Van Lancker, W., & Parolin, Z. (2020). *COVID-19, school closures, and child poverty: A social crisis in the making*. The Lancet Public Health.

WHO. (2020). *WHO Archived Timeline – COVID-19*. Last accessed on July 21, 2020 on https://www.who.int/news-room/detail/27-04-2020-who-timeline%2D%2Dcovid-19

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The Show Will Go On: Theater and Entertainment During Times of Crisis

John Tench

> *Educating the mind without educating the heart is no education at all.*
>
> *Aristotle*

1 Prelude

The problems in our Modern World are sometimes even greater than they were for our ancestors. Populations are greater. The World is shrinking with huge advances in e-technology and transportation and the concepts of globalism and sharing resources are now prevalent. Ideas and think tanks continue our evolution and progress. In addition to education and the pursuit of knowledge, we realize how important are the various forms of entertainment offered at these critical times – whether it be comedy and the ability to laugh at ourselves and satirize our problems and shortcomings; poignant drama to help us understand our own grief and to realize that others are going through the same situations; and programs and documentaries about our fellow humans living through a similar crisis. The importance is in having someone tell us that story, so we can then understand, sympathize or empathize regardless if it be a film about a viral pandemic or an abandoned village, a world war, or the madness of a tyrant and the brutalization of a people. Thus, we can live it, experience it, and learn from it. We are given the opportunity to see how we have lived through it all, and for the most part as a species, and still progress and develop our better and kinder natures. Sometimes too, it is good to get a "break" from it all and just sit back and be entertained, to have a laugh, and to slap a knee and enjoy

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life for a moment. Knowing how important it is for those of us who are left to carry on, to hold high the torch and help our fellow humans deal with the types of complexities we are dealing with during critical times such as Covid-19.

A wise King of an ancient and proud realm was once asked by one of the Gods: "Who do you think are the most important and necessary people in your kingdom?" He put his head down and thought long and deeply. He then raised his head and proclaimed to the God:

> I need four people to help me minister to my people and my kingdom. They are: A General and great Warrior who will protect my people from harm and my lands and borders from conquest; a great and learned Doctor who will help heal the ills of my people and the wounds of my soldiers; a great and wise Philosopher who will help me ponder the mysteries of life and keep me humble in the eyes of the Gods; and lastly, but not least... a great Actor, a Storyteller, who will entertain me, make me laugh and make me cry and make me forget, if even for a moment about all the troubles that the others daily bring me! (*John Tench* (2014). *Essay. History of Theatre Course Lecture and Notes.*)

2 Performers, Storytellers, and Entertainers: Important in a Troubled World

Empires come and go, wars are fought, tyrants rise and are brought down, regimes change. We are regularly visited it seems by the Four Horsemen of the Apocalypse; yet our theaters, our storytellers, our film makers survive and adapt. Always and forever. We are driven into basements and sometimes hideouts, into the streets, into the ruins, but somehow, somewhere, someone is still performing theater, telling stories around a campfire, passing on the knowledge, sifting through the wreckage to put the Film Lab back together and start cutting the film again – by hand, if necessary.

During the fall of Rome comic actors continued to perform in the streets and squares, to entertain and distract the people and satirize the fallen leaders and their policies, thereby beginning the traditions that lasted up until the creation of the ribald and irreverent Commedia dell'Arte centuries later. During the great Plagues of London and during war, religious persecution and censorship, the great theaters of William Shakespeare and Christopher Marlowe were shut down three times! Yet, it did not stop them. They formed touring companies and hit the provinces. Shakespeare, with his finger on the pulse and often using the current events of the day as subject matter, wrote plays that talked about these events, albeit in metaphor and cleverly disguised puns. He allowed his plays to be influenced by the zeitgeist of the times. We see this to a great extent in the dark and divided "King Lear," written after the death of Queen Elizabeth the First, during the dark times of the reign of James the First and the birth of the new Stuart Dynasty. James was preoccupied in the early days of his reign with bringing the three kingdoms of England, Scotland, and Ireland together as one United Kingdom. The parallels in the figure of King Lear, dividing his kingdom into three equal parts and the ensuing anarchy and civil

war that this would create, through Shakespeare's deft words, are fascinating. Likewise, the equally dark and troubled "Macbeth," written during the same period, details the troubles that Scotland was having in staying unified and free of war and destruction, the ongoing interclan wars, and the political machinations of its leaders at the time. These plays are so different from the earlier comedies and histories written during the heady days of the Elizabethan Empire that we must embrace the idea that Mr. Shakespeare was aware of his place and importance in the politics and times.

The great French playwright Moliere with his satires aimed his pen at Louis IV and his aristocratic and relatively hedonistic court. He wrote scathingly of the corruption of the Church and the religious leaders of the time, as well as many of the nobles and courtiers of Louis. He did it all cloaked in comedy. His wit and repartee were instrumental in helping the theater continue as a champion of freedom of expression and the desire of the people to be able to watch and read what they wanted. Even though the criticism leveled at Moliere was immense, thanks to the patronage of Phillip, the brother of the King, he enjoyed continued success and free reign. If he had not thought of himself as a necessary "voix des gens", the voice of the People, he would not have been as prolific – an ongoing inspiration to future generations of players and comedians.

Often during times of conflict, both in Europe and the Americas, the population is heavily involved in the "war effort," sometimes through no choice of their own, working for the Government as a civilian in supply or joining up and serving as a soldier in the various "theaters of war." This continues to this day. During these times, theaters often close, are censored, or people can no longer patronize their favorite theater or comedy club due to safety or financial concerns. The people in theater, film, and entertainment, cannot stop; will not stop. The theater may be closed, but the work continues behind the scenes, awaiting the day that things open back up, or the bombs stop falling, or the squads of armed men stop roaming the streets, killing and arresting the citizenry. The actors and playwrights, the players, and the producers realize that the show must go on. They never stop. The plays are still written, often directly affected by the times, and the companies strive to put them on or get them seen. Perhaps it is not in the best plush theaters or the small intimate playhouses of the amateurs, but they still get done – even if it is someone's domicile, a back alley, or in a park or the country. We see great art and theater movements resurfacing after a time of war, destruction, or pandemic like the plagues of the Middle Ages, which burgeoned due to the absence of medical knowledge and the studied "ignorance" of the times. After war and unrest, we see new innovations, new freedoms, and new ideas that are pushed on by those involved in sustaining art and theater.

During the Great War, touring companies traveled to the trenches to entertain the troops. The madness and chaos of both wars caused the birth of the amazing Theatre of the Absurd and the Theatre of Cruelty (Artaud, 1938/1997). Writers continued to take up their pens, and actors continued to perform. After the Russian Revolution in 1917, Constantin Stanislavski continued his inspiring work with the Moscow Art Theatre, contributing his greater innovations with his Stanislavski System while Stalin's tyranny held Russia in its terrible grip, filling the gulags with free-thinking

artists and writers. During the Second World War, the great opera houses and theaters were leveled, destroyed by bombs, and so the little "Black Box" theaters flourished. The theater companies did not stop. Hollywood and world cinema adapted and continued to make movies under duress; indeed, they grew and adapted because of the privations. In fact, they produced one of the great films of the era, "Les Enfants du Paradis" (Children of Paradise) during the occupation, under the eyes of the Nazis, amid the devastation of Paris.... The People long for their storytellers, their entertainers, so we adapt and serve. In the time of pandemic, we still have stories to tell and people need their entertainment - now more than ever.

We must be inspired by the way in which the entertainment industry and, indeed, even the study of acting adapt and develop during times of crisis. We surmise that storytelling and the passing on of knowledge, both didactic and theoretical, is essential and is sought out by the citizenry and the social web. Progress is often made; innovations are embraced and incorporated into new forms and styles; and, as necessity is often the mother of invention, great strides and developments are made in the arts.

We ask ourselves if the great schisms and movements in art directly result from current events. Are they affected by it, and in turn, do they then affect society and its ways of looking at that which surrounds their creators? The great art movements and shifts at the end of the twentieth and the beginning of the twenty-first century often went hand-in-hand with great upheavals. The Expressionist movement in the Visual Arts, coupled with Dadaism, Surrealism, and Post Expressionism, were a direct result of the First and Second World Wars, with their lurid and violent colors and imagery. The new styles of theater and performance that developed after the First World War and during the Weimar Republic in Germany with its boundary-pushing innovations – the Theater of the Absurd, the Theater of Cruelty developed by Antonin Artaud, and the Grand Guignol, and the Theater of Paris - were a direct result of the chaos created by war and destruction. The "Theater of the Absurd," which was developed throughout the post-war years, was not coined as a style until Martin Esslin wrote a definitive text about this period and its writers naming it for all time (Esslin, 1961). Then there was Samuel Beckett's "Waiting for Godot" (Beckett, 1954/1982) with its post-apocalyptic set, and its two principal characters lost in a wasteland – waiting. Consider as well the pre-war chaos and confusion of Tom Stoppard's delightful anarchic romp, "Rosencrantz and Guildenstern are Dead" (1967), in which the recurring theme of the absurd with its lead characters constantly lost in a void are principal staples of the post war deprivations experienced by the populations. Throughout the century, we continued to see these developments both in the worlds of theater, film, and television. These were born of the necessity to use what we could, what we had left, what was available.

This also rings true during times of financial hardship, recessions, and depressions. The storytellers, the theater creators, and producers, always find a way to adapt, to overcome obstacles, to "take the theater to the streets" – if necessary. During the great developmental years of the 1960s, we witnessed groups staging protest theater against the travesties of the Vietnam War. The experimental theater of Richard Schechner (Schechner, 1973) and the Living Theater in New York City

with Judith Molina and Julian Beck (Rostango, A. et al., 1970) were always adapting to limited budgets, cuts to the arts, financial constraints, the inability to afford the spiraling costs of rentals on Broadway – opening up theaters in warehouses and setting up their own box office and security teams. Once again, necessity became the mother of invention.

How does this apply to the Business of the Arts and Performance? We find answers in the new and never-ceasing mediums that become available to us, especially in film and television production, but also in the theater and its use of multimedia to develop new forms to entertain our audiences. We find this in the case of the Canadian innovator Robert Lepage in Quebec, Canada, and his visionary multimedia theater (Allen, 2007). Also, the advent of motion capture, performance capture, and inroads in green screen technology and CGI (Computer Generated Imagery) continue at a great rate, much of it being created for extraordinary times such as these. Then there has been the transitional period in March and April 2020 when during the COVID-19 pandemic we realized that we may not be able to go back to classes in person – how quickly we adapted to Zoom and the use of technology to enable us all to become our own producers for a time with all the challenges that entails. "Saturday Night Live" and late-night talk show hosts readily embraced this new way of doing entertainment – within a week they were all broadcasting from their home office sets and systems. A few short years ago, this was the province of computer IT specialists, technicians, and dare I say (albeit lovingly), geeks and computer gamers and nerds. Now we are all adapting to and doing home production, as well as the teaching of theater and film remotely and online.

I read once that a definition of the word "crisis" in Chinese is written with two brush strokes. One stroke means "danger"; the other means "opportunity." I have always loved that. It is our duty, our responsibility to keep the "troops" and the people entertained. We have an obligation and take danger in stride. I believe we will continue to take the "bull by the horns," so to speak, as we so often do in the performing arts, and embrace this challenge as an opportunity.

An early Roman actor took his dead son's ashes in an urn onto the stage with him to do a particularly dramatic and emotional monologue of remembrance. This was the first use of affective memory as outlined years later by Stanislavski in his books on his System and the Method (Stanislavski, 1936). On a stage in Ancient Rome, as a father lamented his son's death in the Punic Wars, the tears were real. His obligation to tell his story was heartfelt, both for him and his appreciative audience. Not a dry eye in the house. His duty was to perform despite his grief – to tell his story, to share it with his fellow humans.

As well as teaching a course in Acting for the Camera, I also teach Performance History, a course about the times of the ancient Greeks up to the collective creation theaters formed in Canada during the 1960s and early 70s, many of which are still in operation today. These include Theatre Passe Muraille, Factory Theatre Lab, Buddies in Bad Times, Tarragon Theatre, and others in Toronto, Canada. These theaters and companies grew through fierce dedication to theater and innovation using what they had available to them at the time with the creation support of the Canada Council to help defray the sometimes prohibitive costs of running a theater

company at that time. These groups forged on ahead. Today many of them stand as a living example of what can come out of times of political strife, societal divisions, and hard times. Life in the Theater and entertainment industries must go on. We have no choice. We are the voice of the people and the people need us, their storytellers.

Now we are moving forward at a great rate, faster than ever before with innovations and inventions in the Internet and media, and all that entails in the modern world of e-pitches, e-packages, social networking, webinars, and e-platforms. These have enabled us to strive and share knowledge swifter than ever before, moving ahead into the future, adapting, and using awe-inspiring technologies that have become available to us as an industry.

In my time as an actor and acting instructor, I have seen in a few short decades how we have sped through technological advances at an unprecedented rate. We have run through the early days of making home movies with Super 8 and the Bolex camera, video tape recording with reel to reel and then three quarter inch cassette, on to High 8 and camcorders, digital cameras, and technologies like the red camera, Panavision, SLR Cameras, SD Cards, remote video, iPhones, and now editing systems like Premiere and video Co-Pilot, and the new CGI systems for the video gaming world. Sweeping technology changes in self-taping have occurred almost overnight. As well, we have seen more and more classes turn to Zoom or other video conference platforms for education and e-classrooms. Sometimes, because of crises, we all learn a new way of doing things, improving our minds and our businesses.

We will continue to adapt, aspire, and strive for education to advance in spite of crises such as the COVID-19 pandemic. That suits the pioneering nature of the Arts and the Avant Garde perfectly.
We have a saying in the theater: "The show must go on."
And it will.... in some form.

Here's to the Future...and our next show, in whatever form.

References

Allen, J.P. (2007). *Robert LePage. A documentary*. National Film Board: Canada.
Artaud, A. (1938/1997). The theater and its double. Grove Press.
Beckett, S. (1954/1982). *Waiting for Godot*. Grove Press.
Esslin, M. (1961). *Theater of the Absurd*. Vintage Books, Random House.
Schechner, R. (1973). *Environmental theater*. EP Dutton.
Stanislavski, C. (1936). *An Actor Prepares*. Theatre Arts, Inc..
Stoppard, T. (1967). *Rosencrantz and Guildenstern are dead*. Grove Press.
Tench, J. (2014). History of theatre. Course Lecture and Notes.

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The Digital Divide: An Ongoing State of Emergency in Adult Literacy Programs

Matthias Sturm and Christine Pinsent-Johnson

> *There's never been a time that's more important for us all to be digitally connected than right now.*
>
> *Goudie, 2020, para. 2, citing Dan Meades*

1   Background

When we spend most of our days working, learning, relaxing, and interacting in digital spaces, it is nearly impossible to imagine not having "anytime, anywhere" digital connections. But differences in income, age, education, immigration status and whether we live in an urban or rural community mean many Canadians have no or limited Internet access (Haight et al., 2014). The divides between the "have-lots" and the "have-nots" are widening because the access and use of digital resources and services not only reproduce social inequality, they accelerate its development (Van Deursen & Van Dijk, 2014). Rapidly expanding and ever more entrenched digitally driven processes and practices at work, at home, and in the community exacerbate existing social and economic inequalities (White, 2016, p. 5–6). Digital access is an ongoing accomplishment that is provisional and contingent for many adults (Smythe & Breshears, 2017, p. 77). Adult literacy programs play an important, albeit limited role in mitigating the digital divide. Most adults who attend these programs have low incomes and precarious and poorly paid work or depend on some form of income support. The programs operate with small budgets and are

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often dependent on volunteers and fundraise to supplement government funding. Many staff work part-time and have few or no benefits. Most jurisdictions have no mandated qualifications to do this work, and the available professional development budgets are limited.

2   Theoretical Framework

We are building on Selwyn (2004) and Haight et al.'s (2014) descriptions of the levels of the digital divide. Both argue that the digital divide as defined by connectivity and affordability – the "have-lots" and "have-nots" – is persistent and that second-tier divides play an important part in the use of digital access, that is, their effects exacerbate the lack of connectivity and affordability resulting in a lack of online activity and benefits from this activity. Both draw on Bourdieu's notions of cultural and social capital (Bourdieu, 1977, 1990). Cultural capital (accumulation of knowledge and skills linked to cultural competence and social status) and social capital (aggregate of resources connected to membership in a specific group) result from "capital-enhancing" uses of online resources (Zillien & Hargittai, 2009).

Specifically, Haight et al. (2014) argue that levels of education and poverty compound the effects that marginalized groups experience in negotiating access to resources and services online. Economically, educationally, and socially marginalized adults have become further marginalized when considering that Internet access and digital literacy have now become a basic requirement of social, economic, and educational inclusion.

Additionally, the confluence of Internet access and digital literacy is further exacerbated by the way institutions, employers, and agencies have developed exclusively online points of entry in terms of access, services, and communication (Dailey et al., 2010). Robinson et al. state that "digital inequalities continue to combine with race, class, gender, and other offline axes of inequality" (2015, p. 570). The "offline axes of inequality" further contribute to the disparities experienced by many adults, compounded by the lack of online problem-solving skills and access to learning supports that contribute to the existing digital divide and add to the marginalization of adults, who may be or may become vulnerable as a result.

3   Three Layers of the Digital Divide

In a 2017 report on digital opportunities for vulnerable populations, we state that "economically, educationally and socially vulnerable adults are stuck in a double bind" (Pinsent-Johnson & Sturm, 2017, p. 16). Having a convenient, reliable, and affordable home connection is only one of three elements to consider when discussing digital divides and digital inequities. Therefore, we describe and conceptualize the digital divides articulated according to three interacting layers: connection,

activities, and benefits. We see the digital divide as not leveled but layered because we recognize that adult learners are resourceful users of digital technology who meet challenges of the digital age at every level (Fig. 1). The three layers of the digital divide need to be addressed at the same time by sustained, substantial, and coordinated efforts that recognize the right to affordable, universal Internet access and to digital learning opportunities for all:

1. **Connection:** Differences in how people do or do not connect to the Internet.
2. **Activity:** Differences in the types of online activities they engage in.
3. **Benefits:** Differences in how people benefit from their interactions with services, resources, and networks that are only available online.

4   The Online Connection Divide

The cost of Internet service, mobile data plans, or the right device, combined with other factors, means that a surprising number of Canadians do not have Internet at home. Forty-two percent of Canadians with the lowest incomes ($30,000 or less) do not, compared to only 2% of those with high incomes (Statistics Canada, 2013). Anti-poverty activists like Dan Meades, cited in the beginning of this chapter, have been warning that "low-income Canadians are caught on the wrong side of a digital divide" (Goudie, 2020, para. 1).

Attempting to understand these impact differences is becoming more challenging as surveys have adopted online-first or online-only information collection methods. The 2018 Canadian Internet use Survey (CIUS) indicates only 19% of Canadians with the lowest incomes do not have home Internet access (Statistics Canada, 2019). However, this primarily online survey potentially limited people's participation (Pinsent-Johnson & Sturm, 2020; Smythe, 2020).

An intransigent issue for Canada is the development of broadband infrastructure in rural and remote communities. While 86% of Canadians have high-speed,

Fig. 1 Three layers of the digital divide (Pinsent-Johnson & Sturm, 2020, p. 4)

unlimited data, only 41% of those in rural and remote areas do (CRTC, 2020). Northern territories are not even included in the CIUS. The federal government has a long-term goal of closing the infrastructure divide in the next 10 years.

According to the Canadian Internet Registration Authority (CIRA) (2020, para. 3), rural download speeds were nearly 12 times slower in April 2020, and speeds have fallen for rural users, and increased for urban users, effectively widening Canada's digital divide since the pandemic began. Jane Wouda, an instructor at a rural training and learning center, says that "it feels like a lot of the world is managing to get going, but a lot of our learners feel stuck" (Panico, 2020, para. 10). Many instructors in Ontario have to rely on regular mail and phone calls to reach students (AlphaPlus, 2020).

Not considered in national statistics are unknown numbers of Canadians who access the Internet using pay-as-you-go, low data plans, and public Wi-Fi. A regional snapshot found 23% of adults in Kitchener, Ontario, relied on public Wi-Fi (Sharkey, 2015). When public Wi-Fi is the primary connection mode or used to supplement limited access, people must devote substantial time, effort, and planning to get connected. They are also more vulnerable to security and privacy breaches and may have to take risks, exposing their personal information and transactions. Those with low incomes also rely more on their cellphones, and not a computer, as a primary means of digital access (CRTC, 2018). Complex activities, such as completing an online form, using a learning management system or undertaking extensive web searches, are challenging, if not impossible, to complete.

5   The Online Activity Divide

Limited and no home connectivity translate into differences in why, when, and how people are online. In 2012, Canadians with lower incomes and education banked online, visited government websites, researched community events, downloaded apps, and made phone calls at half the rate of those with higher incomes and education, as illustrated by Fig. 2.

They were also less likely to search for medical or health-related information or to use the Internet for education or training (Statistics Canada, 2012a). Those with limited access and who may be hesitant Internet users spend less than 5 h per week online (Ipsos, 2015). People with low incomes also spend a higher percentage of their budget on communications, sometimes sacrificing other basic needs to pay for them (Association of Community Organizations for Reform Now, 2016).
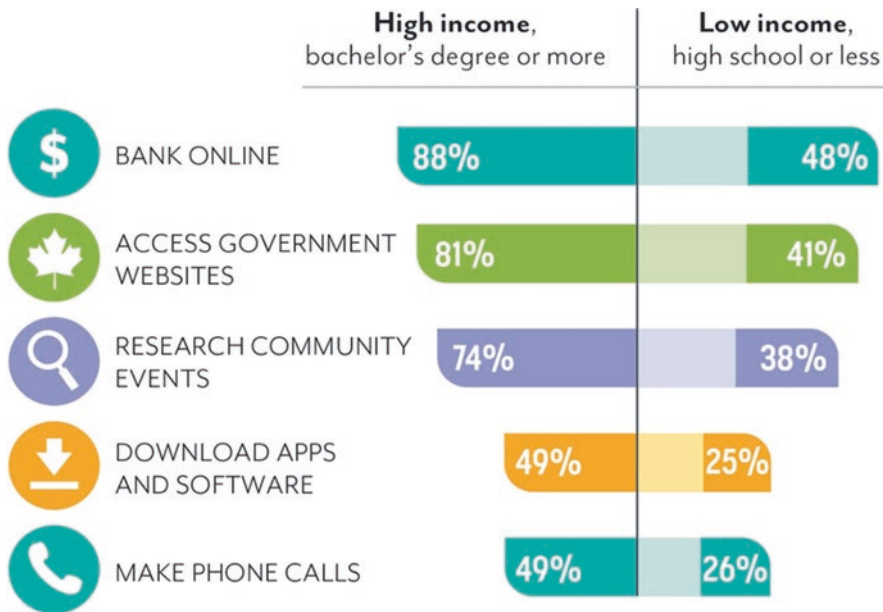
Fig. 2 Online activity Canada (Pinsent-Johnson & Sturm, 2020, p. 1; Statistics Canada, 2012a)

6 The Online Benefits Divide

Our society grows more polarized when all are not digitally included. Those who are excluded or have limited access do not have the digital means to take part in increasingly online-only interactions. They are unable to fully engage with technology and benefit from its use. Public services, workplaces, and businesses operate with an incomplete understanding of citizens, employees, and customers. Because some cannot participate, survey and usage data may not be representative. Therefore, the benefits divide hurts not only those with lower incomes and education but also taxpayer-supported public services, which become less effective and cause businesses to have lower returns.

The 2018 CIUS itself is an example of the benefits divide. Canadians with limited or no access were far less likely to participate, and our understanding of the digital divide could be incomplete (Pinsent-Johnson & Sturm, 2020, endnote 4). Keep Me Posted supports the 90% of people who said in a recent survey that they'd like to have the right to choose how they communicate, and another study revealed that invoices received electronically are more likely to result in late payments (Keep Me Posted North America, 2020a, para. 5–6). During COVID-19, some service providers capitalized on consumer uncertainty by pushing paperless billing for safety reasons (Keep Me Posted North America, 2020b, para. 1).

7 Impacts on Efficiency, Expertise, and Inclusion

The digital divide and its interconnected layers of connection, activity, and benefits have cascading impacts. Those effects may challenge and, in many cases, prevent citizens from accessing essential information, goods, and services. That occurs as more and more of our interactions with government and consumer services, work-places, financial institutions, health care, learning organizations, and businesses are becoming online only (Figs. 3 and 4).

With high incomes and seamless access, we spend more time online (5–20 hours per week) (Ipsos, 2015), have more devices and resources to pay for them, and are more than twice as likely to use the Internet for personal use while at work (Statistics Canada, 2012b). While some who are already advantaged gain even further advantages from employers, others with limited access must devote more personal time and effort when using public Wi-Fi. Less sustained online activity has effects on our education and learning. In those cases, our participation is contingent on precarious resources. This further exacerbates the lack of online activity, especially when many activities are moved online.

Digital skills and technical know-how compound positively for those with seamless access. In contrast, those with contingent connections and limited access are pushed back even further, exacerbating an ever-widening divide. Intensifying the divide even more for some are traditional print-based challenges – the literacy skills and knowledge needed to interpret, respond to, and use digital texts. Impacted the most are the already marginalized. Improving skills alone is not enough. Public policies need to reach beyond superficial skill improvement approaches and ensure access to "capital-enhancing" uses (e.g., health, finance, and government services) (Zillien & Hargittai, 2009).

When we are not able to access outcomes, opportunities and benefits from education, businesses, and financial and public services, we are not able to be counted, voice opinions and participate in consultations, surveys and focus groups. Policy-making itself is a challenge and policy-makers may be contributing to the challenges. If people are unable to participate and be represented in the policy-making process as a result of the compounded factors of limited connectivity, tenuous skills and comprehensive digital repertoires, online data collection, consultations, and information-gathering efforts fail to be representative. Women, underrepresented racial and ethnic groups, and those of lower socioeconomic status participate less in

Fig. 3 Seamless access (Pinsent-Johnson & Sturm, 2020, p.2)

Fig. 4 Limited access (Pinsent-Johnson & Sturm, 2020, p.3)

online conversations, limiting representation and leading to long-term under-representation in social science research and resulting policy (Hargittai & Jennrich, 2016).

8 Spotlight on Ontario

In Canada, education and training is under provincial and territorial control. Adult literacy programs differ as a result and have limited funding and no common over-arching policy to mitigate the digital divide. The benefits of adult literacy programs are hindered when learners do not have connectivity and devices at home. Many are not able to participate in online and blended learning. Not having adequate digital access at home also means that they are not able to transfer their in-program learning to their everyday lives. Not only are the adult learners on the other side of a gaping digital divide, the very programs they attend face parallel issues.

In Ontario, a recent comprehensive survey of programs by TrendSpire (2018) revealed issues of the online connection, activitiy, and benefits divide. Experiences of low-income adults are mirrored in some of the programs they turn to for support. Before COVID-19, 39% of programs had connectivity issues, as well as difficult to obtain or weak service. Over half (52%) of the nearly 280 respondents stated they needed more training and support to integrate technology into learning programs. Even more, 62% stated there was a need for training to integrate mobile technology, the devices that many of their learners rely on. Respondents also said they are not able to make sound decisions about new devices, applications, and software, since they had no opportunities to use them.

During the initial shutdown, program staff estimated that 55% of learners had no Internet at home; 27% had limited access, relying on smartphones and limited data plans, AlphaPlus (2020). In addition, the readiness to make a sudden shift to remote instruction varied across the sector. Uneven access to targeted and accessible professional training and educational technologies, in addition to learners' limited access, restricted the efforts of some programs to pivot to online-only remote delivery. On average, respondents used five different outreach methods including paper-based packages, phone calls, emails, and online instruction.

Policy adjustments and additional funding are needed to allow adult literacy programs to fully develop their potential to contribute to solutions that close the digital

divides. Changes needed include ongoing and equitable professional development opportunities, a more systematic approach to ensuring that equitable infrastructure and tech support is in place, more collaborative and comprehensive access to collections of quality resources and digital learning collections.

Literacy programs in Canada are largely marginalized and run independently. During COVID-19, many had to figure things out for themselves without any cohesive federal and provincial efforts to mitigate the effects of the digital divide. Some provincial support organizations stepped up, such as AlphaPlus in Ontario, but in Canada, generally there has not been a national support infrastructure for sharing resources, research, and best practices for instruction and program delivery since funding was discontinued in 2014 (Pearson, 2014). As Canada's support infrastructure for adult literacy has been dismantled at the federal level, provincial and regional support organizations and local delivery programs need to be supported to mitigate these effects.

9   Conclusion

COVID-19 reveals many of Canada's hidden social inequalities and has shown that unequal access to the Internet is as common in many cities as in remote communities. These social inequalities have existed, but the pandemic has sharpened the digital divide (Jacobsen, 2020, para. 1–2, 6) as the ways people supplemented their limited and precarious access disappeared when public, institutional, and organizational access spaces closed. Especially vulnerable people are forced to make decisions about which essential basic needs they can afford. Laura Tribe, Director of Open Media, states that "at the end of all of this, we're going to see a really big shift in people's understanding of what that digital divide looks like and what it means" (Jacobsen, 2020, para. 26).

We argue that unless the digital divide is recognized as more than affordable Internet access, the existing social inequalities will prevail. This recognition needs to address affordable, seamless on-demand access at home, at work, and on the go; online activity and learning opportunities for meaningful engagement with online resources; and a citizen right to the benefits that flow from this kind of access. An ongoing effort is needed, not just because technology is rapidly changing but more so because the access challenges are complex and have been persisting and increasing, so that continued efforts are essential to mitigate the digital divide effects.

Federal, provincial, and municipal governments in Canada have an essential role to play in helping people respond to rapidly changing and expanding digital demands, particularly when governments and businesses add to that demand by moving more essential services online. Digital learning and access opportunities provided by public libraries and by adult learning programs can make a difference, but they need to be consistently supported. Home Internet access needs to be expanded and affordable. Digital devices that are easy to use and maintain need to be available to everybody. Support programs need continuous funding to help

people to manage digital devices and access resources. The benefits that flow from digital access cannot be exclusive to those who are in a position to leverage cultural and social capital, especially when benefits from the very services that are designed to narrow the digital divide are curtailed by digital access. COVID-19 presents us with a moment to pause and reflect on how to address the social inequities here at home.

References

AlphaPlus. (2020). The Sudden Shift to Remote Delivery in LBS: A survey report addressing the challenges and priorities in Ontario's Literacy and Basic Skills program during the spring of 2020. https://alphaplus.ca/download/shift-remote-delivery-report/

Association of Community Organizations for Reform Now. (2016). *Internet for all: Internet use and accessibility for low-income Canadians*. https://acorncanada.org/sites/default/files/Internet%20for%20All%20report_0.pdf

Bourdieu, P. (1977). *Outline of a theory of practice*. Cambridge University Press.

Bourdieu, P. (1990). *The logic of practice*. Polity Books.

Canadian Internet Registration Authority (CIRA). (2020, May 8). New internet performance data shows the staggering scale of Canada's urban-rural digital divide. *GlobeNewswire News Room*. http://www.globenewswire.com/news-release/2020/05/08/2030417/0/en/New-internet-performance-data-shows-the-staggering-scale-of-Canada-s-urban-rural-digital-divide.html

Canadian Radio-television and Telecommunications Commission (CRTC). (2018). *Communications monitoring report 2018*. Retrieved May 12, 2020, from https://crtc.gc.ca/eng/publications/reports/policymonitoring/2018/cmr1.htm

Canadian Radio-television and Telecommunications Commission (CRTC). (2020). *Broadband fund: Closing the digital divide in Canada*. Retrieved May 12, 2020, from https://crtc.gc.ca/eng/internet/internet.htm

Dailey, D., Bryne, A., Powell, A., Karaganis, J., & Chung, J. (2010). Broadband adoption in low-income communities. Social Sciences Research Council. https://www.ssrc.org/publications/view/1EB76F62-C720-DF11-9D32-001CC477EC70/

Goudie, Z. (2020, April 6). Digital disconnect: How poor people are isolated because they don't have online access. *CBC News*. https://www.cbc.ca/news/canada/newfoundland-labrador/nl-digital-divide-low-income-1.5519009

Haight, M., Quan-Haase, A., & Corbett, B. A. (2014). Revisiting the digital divide in Canada: The impact of demographic factors on access to the internet, level of online activity, and social networking site usage. *Information, Communication & Society, 17*(4), 503–519. https://doi.org/10.1080/1369118X.2014.891633

Hargittai, E., & Jennrich, K. (2016). The online participation divide. In M. Lloyd & L. A. Friedland (Eds.), *The communication crisis in America, and how to fix it* (pp. 199–213). Palgrave Macmillan. https://doi.org/10.1057/978-1-349-94925-0_13

Ipsos Public Affairs. (2015). *Public perspectives: Participation in the digital economy 1.0*. https://www.ipsos.com/sites/default/files/publication/2015-12/7086-ppt.pdf

Jacobsen, A. (2020, May 11). *"Internet is the only lifeline they have": Canada needs to confront "digital divide" amid COVID-19 crisis*. CBC Radio. https://www.cbc.ca/radio/spark/working-from-home-data-surge-a-balancing-act-for-isps-tech-expert-1.5511650/internet-is-the-only-lifeline-they-have-canada-needs-to-confront-digital-divide-amid-covid-19-crisis-1.5513206

Keep Me Posted North America. (2020a, May 14). *Keep Me Posted North America: Paper or Digital? It's your choice!* https://keepmepostedna.org/

Keep Me Posted North America. (2020b, June 10). *COVID-19 and paper product safety—Keep me posted releases new fact sheet.* https://keepmepostedna.org/covid-19-and-paper-product-safety-keep-me-posted-releases-new-fact-sheet/

Panico, G. (2020, June 3). Without internet, rural adult students feeling shutout. *CBC News.* https://www.cbc.ca/news/canada/ottawa/rural-students-training-internet-challenges-renfrew-1.5595519

Pearson, M. (2014, May 20). *Literacy organizations say federal government abandoning them.* Ottawa Citizen. https://ottawacitizen.com/news/local-news/literacy-organizations-say-federal-government-abandoning-them

Pinsent-Johnson, C., & Sturm, M. (2017). *Digital opportunities and barriers for Ontario's vulnerable adults: A research synthesis project examining the digital divide and the policies, programs and practices that could make a difference.* https://alphaplus.ca/project-results-digital-opportunities-barriers-ontarios-vulnerable-adults-literature-review-project/

Pinsent-Johnson, C., & Sturm, M. (2020). *Ontario's digital divide: A spotlight on the differences in online connection, activity and benefits* [Research brief]. https://alphaplus.ca/download/the-impact-of-ontarios-digital-divide/

Robinson, L., Cotten, S. R., Ono, H., Quan-Haase, A., Mesch, G., Chen, W., Schulz, J., Hale, T. M., & Stern, M. J. (2015). Digital inequalities and why they matter. *Information, Communication & Society, 18*(5), 569–582. https://doi.org/10.1080/1369118X.2015.1012532

Selwyn, N. (2004). Reconsidering political and popular understandings of the digital divide. *New Media & Society, 6*(3), 341–362. https://doi.org/10.1177/1461444804042519

Sharkey, J. (2015, October 8). Wi-Fi hotspot loans from Kitchener, Ont. library a Canadian first. *CBC News.* https://www.cbc.ca/news/canada/kitchener-waterloo/kitchener-library-lends-portable-wifi-1.3258791

Smythe, S. (2020). Digital equity and community solidarity during and after COVID-19. *Policy Note.* https://www.policynote.ca/digital-equity/

Smythe, S., & Breshears, S. (2017). Complicating access: Digital inequality and adult learning in a public access computing space. *Canadian Journal for the Study of Adult Education, 29*(1), 67–81.

Statistics Canada. (2012a). *Table 27-10-0016-01 Internet use by internet activity, age group, sex, level of education and household income.* https://doi.org/10.25318/2710001601-eng

Statistics Canada. (2012b). *Table 27-10-0017-01 Internet use by location of use, age group, household income and geography.* https://doi.org/10.25318/2710001701-eng

Statistics Canada. (2013). Canadian internet use survey, 2012. *The Daily.* http://www.statcan.gc.ca/daily-quotidien/131126/dq131126d-eng.pdf

Statistics Canada. (2019). *Table 22-10-0113-01 Use of Internet services and technologies by age group and household income quartile.* https://doi.org/10.25318/2210011301-eng.

TrendSpire Consultants. (2018). *LBS digital technology capacity and requirements consultation: Final report.* Available from authors.

Van Deursen, A., & Van Dijk, J. (2014). The digital divide shifts to differences in usage. *New Media & Society, 16*, 507–526. https://doi.org/10.1177/1461444813487959

White, D. (2016). *Digital participation and social justice in Scotland.* Carnegie UK Trust.

Zillien, N., & Hargittai, E. (2009). Digital distinction: Status-specific types of internet usage. *Social Science Quarterly, 90*(2), 274–291. www.jstor.org/stable/42940587

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Connecting Technology and Pedagogy (CTAP) for Student Engagement and Learning in Higher Education

Mary A. Drinkwater

> *"The creation of high quality, engaged virtual learning environments must involve a continual dialectic and relationship between technology and pedagogy."*
>
> *(Mary Drinkwater)*

1 Introduction and Chapter Organization

As universities around the world engaged in a time-sensitive rush to move programs and course delivery into a *virtual format* in response to COVID-19 in March 2020, there was a simple statement delivered to both faculty and students… "we will be moving our course delivery online." What became apparent, within the first few weeks, was that neither professors/instructors nor students were prepared for this sudden shift, as well as the realization that teaching involves much more than the one-way delivery of information through the frameworks of learning management systems (LMSs) and Wi-Fi connectivity. Despite the significant push to promote the use of educational technology for teaching and learning, there has not been an accompanying push to include professional development which connects educational technology and pedagogical approaches (Bégin-Caouette et al., 2015; DePietro, 2013; Koehler et al., 2013). Additionally, the creation of collaborative communities of practice in which innovation in pedagogy and assessment, in online-blended environments, is supported, shared, assessed, and refined can help to promote and sustain this professional development (Garrison & Arbaugh, 2007; Garrison, 2011).

This chapter will describe the structure, findings, and recommendations of a two-year (2018–2020) *Instructional Technology Innovation Fund* (ITIF) grant project,

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called *Connecting Technology and Pedagogy* (CTAP), that was conducted at the Ontario Institute for Studies in Education (OISE)/ University of Toronto. The goal of the CTAP project was to pilot, assess, and refine a set of principles and strategies (Drinkwater, 2018a), and to support faculty capacity building for the development of accessible, collaborative, and engaging online or blended graduate-level learning environments. The chapter is divided into four sections. The first section outlines the background, context, and theoretical framework which were both the impetus and foundation for the development of the CTAP model. The second section describes the CTAP model and principles. The third section provides an overview of the CTAP-ITIF project and timelines, including its four capacity building elements: CTAP workshops, pilot faculty support, Microsoft Teams OISE-COLC (Collaborative Online Learning Community), and the CTAP website (Drinkwater, 2018b). Finally, it presents and discusses the interim findings from faculty and students involved in the project. The CTAP model, principles, and findings from the OISE-University of Toronto ITIF-CTAP project will be useful to inform the development or modifications to capacity development programs in Centers for Teaching and Learning at institutions of higher education in Canada and globally.

2 Context and Rationale for the Development of the CTAP-ITIF Project

Unlike many of those who had suddenly been thrown into the transition from *physical classroom* teaching to *virtual teaching* as a result of Covid-19 school policies in March 2020, my development in and understanding of the *virtual teaching and learning* environment have been regular and ongoing for the past 9 years. As a secondary school teacher and administrator in Ontario, Canada, prior to beginning my PhD studies at the University of Toronto, I had a strong background in instructional design and assessment strategies and had conducted workshops for teachers and administrators around the province. During my third year at the Ontario Institute for Studies in Education (OISE), in 2012, one of my professors came to me with a challenge. *Would it be possible to create a 3-university virtual CIDEC (Comparative International and Development Education) graduate course for students and professors at OISE-University of Toronto, University College London, and Melbourne Graduate School of Education, to replace a 'face-to-face' international summer institute?* I accepted the challenge and, over the next year and a half, began to learn, use, and adapt a variety of synchronous and asynchronous technology platforms and pedagogical approaches (Google Hangout, Blackboard Collaborate, Adobe Connect, Connect to Create-C2C, Pepper) in 4 graduate courses. My aim was to develop a model and approach which would increase and support access, collaboration, and engagement in this international tri-university graduate course environment. Since 2012, I have now taught over 22 virtual and blended graduate courses and have had the opportunity to continue to develop and refine the CTAP model.

In 2017, a call came out at the University of Toronto for new ITIF proposals, and the OISE-CTAP ITIF project was created. The impetus for the development of the OISE-CTAP project came directly from an institutional strategic planning document, called *Learning and Leading from Within: OISE Academic Plan 2017–2022* (OISE, 2017). Some of the key elements of the plan were the importance of leveraging the strengths of individuals, building collaborative partnerships within and outside of the institution to develop innovative professional development programming, and capacity building to help prepare faculty and students. The OISE-CTAP project development was guided by four additional cross-institutional thematic areas that were identified in ITIF project guidelines (University of Toronto, 2019): First, the *application of technology tools in support of enriched learning opportunities.* Although the project is focused on graduate-level courses, findings from the project can be adapted, modified, and transferred to further inform the development of online courses at the undergraduate level. Secondly, the incorporation of *diversity-related initiatives.* A focus on innovations in pedagogical and assessment strategies goes beyond access to include recognizing, valuing, and promoting different approaches for student learning, communicating, and expressing understanding (critical, creative, and culturally relevant). Thirdly, expand *the availability of learning opportunities in authentic and relevant contexts.* Within the tri-university course, CIE1006, students from three different countries can work collaboratively on cross-cultural projects related to democracy, human rights, and education. Finally, *multi-or inter-disciplinary and inter-divisional teaching and learning collaborations* were encouraged. The inclusion of faculty participation from across all four departments at OISE will facilitate and promote the sharing of pedagogical and assessment strategies in *online learning platforms,* across disciplinary courses.

The overarching questions for the OISE-CTAP project asked: How can the use of a CTAP model and principles be used to increase access, collaboration, and student engagement in graduate courses? How can the use of a collaborative community of inquiry further support faculty capacity building for online teaching and learning in higher education?

3   CTAP Model

The development of the CTAP model (Drinkwater, 2018a) – see (Fig. 1) has been informed by a two-pronged theoretical framework which incorporates critical democratic theory and decolonial theory. Critical-democratic theorists argue for the importance of linking individual lived experience to critical analysis, reflection, and growth (Freire, 1998, 2000; Giroux, 1989, 1997; Kincheloe, 1999, 2008). Decolonial theorists argue for the importance of delinking from the dominant epistemological approaches that have been privileged by colonial modernity and opening to trans-ontological and epistemological approaches which recognize and value pluriversality and mutuality (Abdi, 2012; Maldonado-Torres, 2011; Mignolo, 2011; Smith, 2006). Both of these theoretical lenses connect well to student engagement
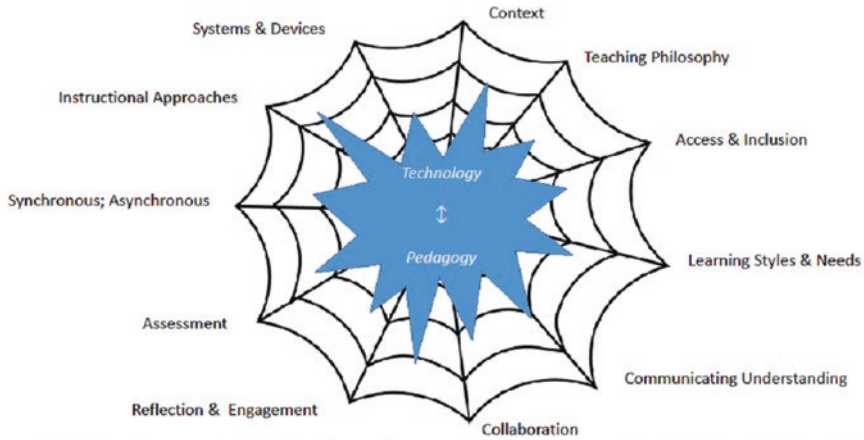
Fig. 1 CTAP model (Drinkwater, 2018a)

literature which speaks to the importance of connecting to student's experiences, collaboration, and active learning (Montgomery et al., 2015) and providing opportunities for diverse forms of expression of understanding, including culturally relevant and sustaining approaches (Montgomery et al. 2015).

This model is grounded on the student engagement literature (Brugmann et al., 2019; Gilliver, 2019; Ingram & Drinkwater, 2015; Keddie & Niesche, 2012; McMahon & Portelli, 2012; Montgomery et al., 2015) which sees a direct connection between pedagogy, student engagement, and learning. Given the immense and constant changes in technological innovation, combined with the impacts of globalization, institutions of higher education are being confronted with both the opportunities and challenges of bringing an increasingly diverse student body into their online course offerings. In considering the integration of technology into the learning process, the model posits that the creation of high quality engaged virtual learning environments must involve a continual *dialectic and relationship* between technology and pedagogy. Multiple and often competing elements will continually be influencing this ongoing and dynamic dialogue.

4 CTAP Principles

To inform the dialectic between technology and pedagogy, the CTAP model is guided by a set of eight principles, which can be transferred to different learning platforms.

4.1 Connect Your Pedagogy to Your Teaching Philosophy

Critical pedagogy (Kincheloe, 2008) sees an important non-hierarchical relationship between the student and teacher; connects learning to student's lived experiences; values critical inquiry and reflection; promotes robust dialogue and agonistic pluralism (Mouffe, 2002); takes difference seriously; and contributes to social transformation. Decolonial pedagogy (Wane & Todd, 2018) aims to delink from colonial structures and values and promotes opportunity for other ways of learning, expressing, and engaging (trans-ontological; pluriversality; mutuality-collaboration; orality/visual representations), in an effort to recognize past privileging of written, academic, formal structures in the English language.

4.2 Learning Outcomes Drive Assessment (Assessment FOR and AS Learning) and Pedagogical Approaches

As in face-to-face-courses, online course design should be driven by a *backward design* approach (McTighe & Wiggins, 2012), in which the starting point is the learning outcomes – professors/instructors choose assessment strategies and pedagogical approaches to facilitate and support learning for all toward the learning outcomes and then look for ways that technology can enhance these.

4.3 Access and Inclusion

The dialogue between technology and pedagogy for access and inclusion must extend well beyond the issues of Wi-Fi connectivity to include considerations around working schedules, geographic locations/time zones, language, culture, learning disabilities, and even family responsibilities. Insights can be drawn from the literature on Universal Design for Learning (UDL). UDL is intended to provide a framework for curriculum, teaching, learning, and assessment of learners who are diverse along many dimensions, including gender, ethnicity, socioeconomic status, age, ability, and disability (Burgstahler, 2010). Principles include (1) *multiple means of representation* (providing multiple ways for students to acquire and access information); (2) *multiple means of action and expression* (offering flexible ways for students to apply information and demonstrate their learning); and (3) *multiple means of engagement* (promoting student interest in content) (CAST, 2011).

4.4   Enhancing Student Engagement and Student Learning

The connections between the UDL literature and the literature on critical and deco-
lonial pedagogy and student engagement, including pedagogical approaches which
are critical, creative, collaborative, culturally relevant, and responsive, provide even
greater connections to students' lived experiences and ways of knowing, being, and
engaging (Drinkwater, 2020; Ingram & Drinkwater, 2015; Keddie & Niesche, 2012;
Brugmann et al., 2019).

4.5   Importance of Context

Each professor must carefully consider the context in which their course is situated
to further inform the dialogue between pedagogy and technology, particularly in the
choice of integration of synchronous and asynchronous pedagogical approaches. If
possible, the findings from this project indicate the value of combining some forms
of both synchronous and asynchronous approaches.

4.6   Simple and Scaffolded Design

The sudden immersion into an online teaching and learning environment can be
overwhelming for both professors and students. Learning design literature speaks to
the importance of beginning a simple foundation and then scaffolding the design
and approach as both teachers and students build their capacities (Johnston et al.,
2018; Montgomery et al., 2015).

4.7   Structure and Flexibility

Teaching and learning in the online environment, as teaching in the F2F environ-
ment, requires a great deal of initial planning and structure to set up course shells,
syllabi, reading lists, unit/lesson plans, and discussion forums. However, it is vital
to recognize, prepare for, and value opportunities for flexibility, especially student
involvement and input. Do not be afraid to disrupt a carefully constructed lesson or
unit to recognize teachable moments, emerging local and global issues, and connec-
tions to students' lived experiences. As one of my former students reminded me, it
is also important to remember to give "power to the proletariat," particularly to these
youths who live with these new and emerging modes of virtual communication and
engagement, and also to encourage, value, and consider *new ways of interacting,
collaborating, and expressing of understanding that they put forward.*

4.8   Creating and Sustaining Communities of Practice

To support ongoing faculty capacity building in the everchanging context of online teaching and learning in higher education, institutions need to develop different approaches. Some of these methods are to support collaborative communities of practice, which bring together educational technology specialists in the institution with new and experienced faculty to support each other, assist with troubleshooting, and share innovative pedagogical and assessment strategies to support access, collaboration, and engagement.

5   OISE-CTAP Project Overview and Methodology

Driven by the key project aim to build faculty capacity to utilize a wide variety of *pedagogical and assessment* strategies to increase and support access, collaboration, and engagement, the OISE-CTAP project has four main elements: *CTAP Workshop, CTAP pilots (for interested faculty), OISE-CTAP Collaborative Online Learning Community (COLC),* and an *OISE-CTAP website.*

In addition to the project leader, cross-institutional leadership and collaboration within the CTAP project came from the CTAP Core Team: Coleen Scully-Stewart (professor-Leadership, Higher and Adult Education); Sherida Ryan (professor-Adult Education and Community Development); Derek Hunt (Education Commons); Neil Tinker (Education Commons); Rubaina Khan (GA); and Yufei Zheng (GA). This cross-institutional leadership and collaboration from professors, student graduate assistants, and our Education Commons technical specialists at OISE provided a broad and diverse range of vantage points and experience.

5.1   CTAP Workshops

Three (3-hour) CTAP workshops were conducted (January 2019; October 2019; January 2020), with one additional workshop to be held *virtually* in August 2020. CTAP workshops are advertised *across all 4 departments* at OISE and are *free of charge* for OISE faculty. Currently, we have had 20 faculty from across all 4 departments attend the workshops. Most faculty join the workshops *in-person;* however, some faculty have joined the workshops through either an *Adobe Connect* or *Zoom* platform. All participants, whether F2F or virtual, can take part in all of the experiential, interactive, and collaborative workshop activities. The CTAP workshop includes an experiential skill-building component; introduction and background of the CTAP project; CTAP model and principles; embedding the CTAP principles (pre-course; pre-class; during class; post-class); aids and challenges; student reflections; open dialogue; and discussion. Pre- and post-workshop feedback is gathered from participants.

5.2 CTAP-Pilots-Embedding CTAP Principles in Graduate Courses (Interested Faculty)

OISE faculty and instructors, who have attended one of the CTAP workshops and who are interested in beginning to integrate some of the CTAP principles into their 2019–2020 online or blended graduate courses, were invited to join a *CTAP pilot* collaborative community to assess and refine the integration and implementation of the CTAP principles in their courses. Through GA-funding programs at OISE, we were able to secure two graduate assistants (GAs), who were available to support faculty, during the capacity building pilot phase. Data collected from pre- and post-pilot meetings with faculty helped to further inform the refinement of the CTAP principles, as well as the content of the CTAP website. Pilot faculty were also invited to join the OISE-CTAP COLC to be able to reach out to and collaborate with other members of the COLC.

5.3 OISE-CTAP COLC

Following the workshop, all participants were invited to join an ongoing Microsoft TEAMS group called *CTAP Collaborative Online Learning Community (COLC),* to share ideas and support and collaborate with each other in their application of the CTAP principles. CTAP GAs and members of the CTAP Core Team monitor the OISE-CTAP COLC and join in this community of practice.

5.4 OISE-CTAP Website (Drinkwater, 2018b)

Using the feedback provided from participants in the workshops, pilots, and COLC, the Core Team has developed a CTAP website that is faculty-informed, including a wide variety of innovative pedagogical and assessment strategies, help guides for Quercus (the University of Toronto LMS), and educational software, troubleshooting tips for common issues identified by faculty, as well as links to OISE Education Commons and University of Toronto Online Learning Strategies sites and a series of CTAP videos from faculty and students. The collaborative nature of the CTAP website speaks to the value and importance of sustainability of the OISE-CTAP COLC. This centrally located (Education Commons), web-based repository of pedagogical and assessment strategies for online teaching and learning is continually updated and available to OISE faculty.

5.5   *Collaborative Community of Inquiry*

In keeping with the methodological approach of participatory inquiry to build faculty capacity and to create a sustainable model for a collaborative community of inquiry (Garrison & Arbaugh, 2007; Garrison, 2011; Kopcha, 2010), this project drew on the experiences of both students and professors/instructors who had taught in or had been taught in, online, or blended learning environments that were incorporating CTAP principles. Pre- and post-survey data was gathered from faculty participating in the CTAP workshops. Individual interviews were conducted with six faculty involved in the pilot phases and OISE-CTAP COLC, as well as with faculty on the CTAP Core Team. Additional interviews were conducted with six students (two male and four female) who had taken part in three different online graduate courses, in which the professor utilized CTAP principles through the design and delivery of the courses. Thematic qualitative analysis was undertaken on this broad range of faculty and student data to inform the findings.

6   Results

Three narratives, created from the interim data, are presented here as qualitative evidence of the three emerging themes related to the two research questions. It is important to set the context for the student narratives, as all the students interviewed took part in courses which integrated CTAP principles across a combined *synchronous* and *asynchronous* course design. The faculty/instructor narrative reflects a broad range of experience utilizing the CTAP principles, from novice to experienced, in blended and fully online courses.

6.1   *Student Narrative I: Creating a Culture for Engaged Learning*

The experience of students within the CTAP virtual learning culture highlights several key elements which contributed to their engagement and learning. Three overarching and intersecting themes which arose from their experiences spoke to the *human, social, and relational* elements, to the balance between *structure* and *flexibility,* and to *starting simply and scaffolding.* The first theme focuses on the creation of inclusive, safe, and respectful relationships and building a sense of community. One student said that she felt the culture was very engaging because it "connected with her personal experiences and opened opportunities for the sharing of a diversity of conversations." Another student shared:

> I never felt that I was not *present i*n the class. It felt as if I was present in a *virtual class* and I had everybody around me. All of the students were all hooked up to their own computers,

but we could see and hear each other, and their expressions…and it felt just like we were present in the class, but in the comfort of our own homes.

A third student shared that he had been "a bit hesitant about doing an online course at first, but I found that we quickly developed a sense of community and enthusiasm, which came to characterize the learning environment."

Many of the students had previously taken solely asynchronous courses and felt that these lacked this element of relationship and community building. Sharing their concerns about a solely asynchronous course, one student expressed that she "felt disconnected and was not sure if she was getting the full meaning that someone was trying to get across." Another student found the totally asynchronous experience to be "too passive" and felt that "the very limited social interaction limited the learning environment." A third student felt "disengaged" due to the "limited interaction, moderation and uncertainty about how to place herself within conversations." All students, who had experienced courses led by professors who had experience in integrating the CTAP principles into an online course environment, expressed strong support for the value of the inclusion of synchronous pedagogical approaches. One student felt that the "synchronous environment allows for a more fluid face-to-face interaction and feels like you are with your colleagues." Another student shared:

> In this combined synchronous and asynchronous environment, we formed friendships and felt much more like a community. Just simply turning on your camera when speaking made the learning environment so much better because you could put a face to a name. It was fun to see people's faces and where they were coming into the class from (their own homes, with babies, children and even pets)

The combination of *structure and flexibility* within these courses further contributed to the creation of an engaged learning environment. Many students recognized the planning that had gone into both course and lesson design and felt that instructor presence in both the synchronous and asynchronous environments was important for the construction and facilitation of learning. One student shared that "both of these courses were obviously very carefully and coherently structured in terms of planning sequence, progression, content, and pedagogy." Another said there was a "perfect amount of everything, mini-lectures, breakout room discussions about readings, different ways to express learning, and diverse analytic approaches." In addition to these structural elements, students also commented on the importance of flexibility, surprise, and student-centered approaches. A student noted that "although guided questions were prepared in advance to challenge and deepen our understanding of the readings, the professor would often surprise us with something that pushed us further." A second student commented on the efforts he saw the professor make to connect the course and discussions questions to student interest, background, and experience, as well as to emerging national and international issues. Breakout room sessions enabled the students to engage in deeper dialogue, share diverse perspectives and connect to their own experiences. After returning to the virtual main room, students would report back and the professor would then build on, or probe deeper, to open a wider discussion for all students to engage further.

The final theme connected to the importance of "*starting simply and then scaffolding*" the learning environment. For many students new to online learning, there was a degree of anxiety. One student spoke about the scaffolding of technology skills, sharing that "the professor took time in the initial class, and prior to the introduction of any new technology-enhanced skill, to build student capacity and comfort in its use, so that students were able to use the technology in their interactions with peers, to further support their individual and collective learning." Another student spoke of the importance of creating a safe, inclusive, and respectful culture, prior to beginning any small group breakout sessions, so that students "felt comfortable in sharing opinions, and even disagreeing, with their peers."

6.2 Student Narrative II: Deepening the Engagement Through CCCCRR Pedagogical Approaches

Students saw a strong connection between the use of a variety of pedagogical strategies, such as collaborative, critical, creative, and culturally relevant and responsive (CCCCRR) approaches, and their overall engagement and learning in these courses. One student, who was taking the course along with her husband, shared:

> I found the pedagogical approaches to be very innovative and very engaging, they made us hooked to the class. There was no week in which my husband and I felt that we could skip the class because we knew that if we even missed one class, it would be our loss, as we would miss a lot and catching up would be really difficult. We made an effort to be present throughout the course. We viewed others as giving 100% and we gave 100%.

The contributions to engagement of a *strong collaborative learning culture* within these courses was noted by other students as well. One student felt that a distributed approach to weekly readings, across individuals and groups, and assigning breakout room group roles (leader, notetaker, reporter) helped to "increase accountability, create a sense of responsibility and a feeling that my own contributions were valued." This same student also noted that by spreading out the responsibility for individual reading responses to every second week "helped to ease the writing load and enabled more time for critical reflection, which contributed to making the large group and breakout room sessions in the synchronous session more fruitful." A number of students noted the importance of having small group breakout room sessions each week as these "provided the opportunity for even the most shy people in our class to express their opinions, bring in diverse thoughts and perspectives about the course readings, and be more at ease and engaged. It gave us the opportunity to interact with each other on a more personal level with our class colleagues, and to be more expressive and open when the professor is not around." Responsibilities were put on each breakout room group to become *experts* on their assigned readings and to present their responses to some guided questions to their colleagues and professor to stimulate further discussion and deepening of knowledge when they all returned to the main room. Students valued the opportunity and freedom to engage

in a group project in which they collectively chose a real-life, context-specific issue, or policy to apply course theory and concepts in creating an educational solution. As one student commented: "we appreciated the flexibility to create our own systems of collaboration." In one of the global cross-institutional courses, a student commented that "even though my colleagues in my group were located in the US, UK and China, we were able to choose collaborative platforms that worked for all of us, for both synchronous and asynchronous planning, and for our summative presentation." Another student added "that the project task was designed such that all students could connect and focus their energies; diverse opinions mattered and were valued. This increased our motivation to contribute to both the project and the course. I would never have been able to have created this on my own as all group members came from different vantage points to create knowledge and also to co-create knowledge."

In connecting collaboration with criticality, a number of students voiced the importance of having a guiding structure, such as the guided questions for individual readings responses and breakout room discussions, that would challenge students to critically analyze, reflect on, and discuss the readings to collectively deepen their understanding. In the asynchronous platform, students would begin unpacking the core and assigned readings through individual reading responses and two additional peer responses. For their group assigned readings, they were challenged to become experts, prior to the synchronous class session, by using guided discussion questions. Another student felt that the "creation of a diverse reading list within the syllabus, which drew from authors from both the global north and south, and reflected different historical eras, geopolitical contexts and theoretical frameworks, combined with a critical pedagogical approach, helped to guide us to a next level of thinking and heightened level of understanding." One of the students felt that this critical unpacking of the readings helped to connect the synchronous and asynchronous portions of the course, as "everything seemed to be interconnected. You had to do the readings before class, but after the discussions in the synchronous session, you wanted to go back into the asynchronous forums to see if anyone had posted an exciting link, or made some additional connection or commented on one of the reading threads and invited you to engage further in the thread."

The use of creative pedagogical approaches, which valued and promoted opportunities for diverse modes of learning and communicating understanding, further promoted engagement in these courses. As one student commented, "the graphic organizers and presentations brought out our creative side and allowed students to express their understanding in a very creative and innovative way. As we are doing the readings, we are often creating an image in our mind, and this is what we need to express. Sometimes these images are difficult to express in words." Another student shared that "one of my favorite assignments was when I could create my reading response through a visual. I made a video and narrated a PowerPoint presentation. Capturing ideas with art (visual, spoken word, poetry) creates a different type of engagement."

In connecting creativity to culturally relevant and responsive pedagogy, students expressed appreciation for the opportunity to engage in decolonial and culturally

relevant and responsive approaches for learning and expressing understanding. Creating the opportunities to challenge and disrupt the traditional Eurocentric graduate-level writing and communication, students were given opportunity to incorporate a wide variety of multi-modal forms of communication, particularly those which connect with their own cultural way of knowing and being. As one student noted, having the opportunity "to articulate understanding in ways other than solely through words, encourages and values deep cultural connections, such as the incorporation of Bengali music…very soothing." Students also spoke to the value of being able to engage with guest speakers/presenters from different cultural backgrounds, from both the global north and south, to further contextualize some of the course readings. One of the students said that he enjoyed having the opportunity to have the breakout room groups changed around a couple of times throughout the course, so that he was able to get to know and interact with colleagues from other cultural backgrounds. He felt that "it engages all students further, in their learning, when they have to opportunity to listen to different perspectives on the course readings that arise from the diverse experiences of their colleagues, as the readings are very contextual."

6.3 Faculty Narrative III: Capacity Building and Ongoing Collaborative Online Learning Community

Faculty and instructors involved in the first three CTAP capacity building workshops gave a strong and positive response to indicate they had an increased understanding of the CTAP principles. They also felt that they had had an opportunity to learn and apply the CTAP principles and practice several new online student engagement strategies, including polling, use of whiteboards, and breakout room discussion groups. Participants felt included and engaged in the sessions and felt that the facilitator had provided them the opportunity to ask questions and have their questions addressed. When asked for suggestions for additional resources or support services that would be helpful to them in building a CTAP Collaborative Online Learning Community (COLC) hub, responses included having a *centralized area* to find online teaching resources for OISE instructors; *How-To Guides* for their LMS (Quercus), as well as for online course tools, synchronous platforms (Zoom, Microsoft Teams, and Blackboard Collaborate), and asynchronous platforms (Pepper); more online learning, collaboration and engagement tools (such as polling and whiteboards); and an area for support/troubleshooting and for sharing instructional strategies and assessment strategies.

Professors and instructors involved in the CTAP pilots, who ranged in experience from novice to experienced teachers in the online teaching and learning environment, identified a number of contextual considerations and some challenges that they were having with the integration of CTAP principles in their courses. One faculty member expressed a concern regarding how to create a safe and respectful

culture of collaboration in breakout rooms, particularly in courses with sensitive or controversial topics. Another faculty, teaching a global online asynchronous course where students were coming in from countries in both the global south and north, needed some assistance with video recording software to support short video lectures and small group summaries which could be posted in the online discussion forums. The same faculty member was also seeking assistance on how to create collaborative group assignments without micro-managing the groups. Another faculty member needed some suggestions for how to co-teach a course in which she would be doing synchronous/asynchronous delivery, while her co-teaching colleague was doing a face-to-face classroom delivery. One experienced professor, who was new to the online teaching environment, expressed concerns about not having a TA and feeling overwhelmed. The GA assisting that professor reminded her about the CTAP principles and about the shifting of responsibility and accountability toward a more student-centered and collaborative, engaged learning community model. As the CTAP GAs met with faculty for their pre-pilot orientation meetings, they reviewed their course learning outcomes, explored their entry-level comfort with integrating CTAP principles, and stressed the importance of beginning *simply* and *scaffolding* as they and their students built their own capacity and comfort. Faculty and instructors involved in the CTAP pilots expressed gratitude for the support of the CTAP GAs during their course development and delivery. They also expressed concern about the sustainability of this support.

All participants involved in both the capacity building workshops and follow-up interviews spoke to the value of having the CTAP website and COLC, as support and sharing platforms, for new and experienced faculty. Several participants stressed that the CTAP website and COLC needed to have the support of both the OISE Educational Commons technical staff and have connections to the broader Centre for Teaching Support and Innovation (CTSI) at the University of Toronto. Many expressed concern that the technology seemed to be changing so fast that they were unable to stay on top of emerging trends and felt that the CTAP website and COLC would create locally developed and contextually connected OISE/University of Toronto capacity building and support platforms for OISE faculty. Several participants raised concerns around the maintenance and sustainability of the CTAP website and CTAP COLC. This will be addressed in the following section.

7   Implications and Future Directions

The three threads of understandings emerging from the cross-departmental, faculty-student data analysis are noteworthy, given their emergence across diverse types of graduate programs (curriculum, leadership, policy, equity and social justice, adult education). The findings point to the value of the integration of the CTAP model and principles to enhance student engagement in online teaching and learning environments that transcend disciplinary silos. As this COVID-19 context has illuminated for universities around the world, there are both opportunities and challenges to

expanding online teaching and learning in institutional and cross-institutional settings. With the continual and exponential rise in the creation of devices, platforms, and software, combined with the increased opportunity (or expectation) to move courses in higher education institutions to an online delivery mode, the interim findings from this project speak to the value of having a foundational model and set of principles. These will guide capacity building programs for faculty who will be involved in online teaching and learning. Further, they present strong findings which illuminate the value of the development of a collaborative community of inquiry, focusing on supporting high quality teaching in the online environment.

Issues that will continue to require reflection during the final phase of this project include: a deepening of the understanding of the importance of context (and the balance between synchronous and asynchronous pedagogical approaches) to meet both the learning outcomes of courses and the learning needs and contexts of students, plus a deepening of the dialogue at the institutional level around the role of institutional actors, including Educational Commons and the University of Toronto's Centre for Teaching Support and Innovation (CTSI), which will support the sustainability of both a faculty capacity building program and an ongoing collaborative community of practice for online teaching and learning.

In responding further to the ITIF thematic strategic priorities, a next step for the CTAP project would envision an expansion of the integration of the CTAP model and principles across the University of Toronto. The expansion of the CTAP-COLC across the University, including both undergraduate and graduate faculty across disciplinary boundaries, would encourage and support further innovation, including cross-disciplinary thinking and course creation.

References

Abdi, A. A. (2012). Decolonizing philosophies of education: An introduction. In A. A. Abdi (Ed.), *Decolonizing philosophies of education* (pp. 1–14). Sense.

Bégin-Caouette, O., Khoo, Y., & Afridi, M. (2015). The processes of designing and implementing globally networked learning environments and their implications on college instructors' professional learning: The case of Québec CÉGEPs. *Canadian and International Education, 43*(3), Article 4.

Brugmann, R., Côté, N., Postma, N., Shaw, E. A., Pal, D. & Robinson, J. B. (2019). Expanding student engagement in sustainability: Using SDG- and CEL-focused inventories to transform curriculum at the University of Toronto. *Sustainability, 11*(2):1–20. https://www.mdpi.com/2071-1050/11/2/530

Burgstahler, S. E. (2010). Universal design in higher education. In S. E. Burgstahler & R. C. Cory (Eds.), *Universal design in higher education: From principles to practice* (pp. 3–20). Harvard Education Press.

CAST. (2011). *Universal design for learning guidelines (version 2.0).* Author. Retrieved from http://www.cast.org/index.html

DePietro, P. (2013). The cost of technology. *Counterpoints,* Vol. 435. Transforming education with new media: Participatory pedagogy, interactive learning, and web 2.0 (pp. 105–114). http://www.jstororg/stable/42982128

Drinkwater, M. (2018a, March 16). *CTAP-Connecting Technology and Pedagogy in Higher Education: Access, Collaboration, Engagement.* Conference presentation. COIL Conference 2018-Global Learning for All. The State University of New York. New York, NY.

Drinkwater, M. (2018b). *CTAP-connecting technology and pedagogy in higher education: Access, collaboration, engagement.* https://wordpress.oise.utoronto.ca/ctap/

Drinkwater, M. (2020). Theorizing a new pedagogical model: Transformative arts and cultural praxis circle. In S. R. Steinberg & B. Down (Eds.), *The SAGE handbook of critical pedagogies* (pp. 1279–1293). SAGE.

Freire, P. (1998). *Pedagogy of freedom: Ethics, democracy and civic courage.* Rowman & Littlefield.

Freire, P. (2000). *Pedagogy of the oppressed* (30th anniversary ed.). Continuum (original work published in 1970).

Garrison, D. R. (2011). *E-learning in the 21st century: A framework for research and practice* (2nd ed.). Routledge.

Garrison, D. R., & Arbaugh, J. B. (2007). Researching the community of inquiry framework: Review, issues, and future directions. *Internet and Higher Education, 10*(3), 157–172.

Gilliver, K. (2019). Flipping romans: Experiments in using technology for teaching in higher education. In B. Natoli & S. Hunt (Eds.), *Teaching classics with technology* (pp. 9–17). Bloomsbury.

Giroux, H. A. (1989). *Schooling for democracy: Critical pedagogy in the modern age.* Routledge.

Giroux, H. A. (1997). *Pedagogy and the politics of hope: Theory, culture, and schooling.* Westview.

Ingram, L.-A., & Drinkwater, M. (2015). Across spaces and places: Exploring arts and media for democratic participation. In S. Majhanovich & R. Malet (Eds.), *Building democracy in education on diversity* (pp. 173–195). Rotterdam, NLD.

Johnston, A. N. B., Barton, M. J., Williams-Pritchard, G. A., & Todorovic, M. (2018). Youtube for millennial nursing students; using internet technology to support student engagement with bioscience. *Nurse Education in Practice, 31*, 151–155.

Keddie, A., & Niesche, R. (2012). Productive engagements with student difference: Supporting equity through cultural recognition. *British Educational Research Journal, 38*(2), 333–348.

Kincheloe, J. L. (1999). Critical democracy for education. In J. G. Henderson & K. R. Kesson (Eds.), *Understanding democratic curriculum leadership* (pp. 70–84). Teachers College Press.

Kincheloe, J. L. (2008). *Critical pedagogy: A primer.* Peter Lang.

Koehler, M. J., Mishra, P., & Cain, W. (2013). What is technological pedagogical content knowledge (TPACK)? *The Journal of Education, 193*(3), 13–19.

Kopcha, T. J. (2010). A systems-based approach to technology integration using mentoring and communities of practice. *Educational Technology Research and Development, 58*(2), 175–190.

Maldonado-Torres, N. (2011). Thinking through the decolonial turn: Post-continental interventions in theory, philosophy, and critique – An introduction. *Transmodernity: Journal of Peripheral Cultural Production of the Luso- Hispanic World, 1*(2), 1–15.

McMahon, B. J., & Portelli, J. P. (2012). The challenges of neoliberalism in education: Implications for student engagement. In B. J. McMahon & J. P. Portelli (Eds.), *Student engagement in urban schools: Beyond neoliberal discourses* (pp. 1–10). Information Age Publishing.

McTighe, J. & Wiggins, G. (2012). *Understanding by design® framework* (White Paper). ASCD. Retrieved from https://www.ascd.org/ASCD/pdf/siteA SCD/publi cations/UbD_White Paper 0312.pdf

Mignolo, W. D. (2011). Epistemic disobedience and the decolonial option: A manifesto. *Transmodernity: Journal of Peripheral Cultural Production of the Luso-Hispanic World, 1*(2), 45–66.

Montgomery, A. P., Hayward, D. V., Dunn, W., Carvonaro, M., & Amrhein, C. G. (2015). Blending for student engagement: Lessons learned for MOOCs and beyond. *Australasian Journal of Educational Technology, 31*(6), 657–670.

Mouffe, C. (2002). *Politics and passions: The stakes of democracy.* Centre for the Study of Democracy, University of Westminster.

OISE. (2017). *Leading and learning from within: OISE Academic Plan 2017–2022.* OISE/University of Toronto. https://www.oise.utoronto.ca/oise/UserFiles/File/2017-Academic-Plan.pdf

Smith, L. T. (2006). *Decolonizing methodologies: Research and indigenous peoples.* London: Zed Books (originally published in 1999).

University of Toronto. (2019). *Instructional Technology Innovation Fund (ITIF).* https://www.itif.utoronto.ca/

Wane, N. N., & Todd, K. L. (2018). Introduction: A meeting of decolonial minds. In N. N. Wane & K. L. Todd (Eds.), *Decolonial pedagogy* (pp. 1–8). Palgrave Macmillan.

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Teaching Without PANTS! (Pandemic Accelerated, Novel Technology Symptoms): How Affordable Learning Solutions Enabled Rapid Response Instruction

Alexander Reid, Elaine Correa, Jin Hee Hur, Sandra Bozarth, and Tzu-Fen Chang

> *You can't teach people everything they need to know. The best you can do is position them where they can find what they need to know when they need to know it.*
>
> *Seymour Papert*

1 Background

On May 13, 2020, Chancellor Timothy White announced the fate of California State University's 23 institutions of higher learning for the Fall 2020 academic term, impacting the educational destinies and lives of over 500,000 students, staff and faculty within the largest public institution in North America. The COVID-19 pandemic had created unprecedented changes to the way faculty and students were expected to teach and learn. Faculty and students learned simultaneously how to navigate this "new normal" with limited training and expertise. With the additional constraints of how COVID-19 impacts the health and well-being of the campus, the pervasive sentiment is that everyone is experiencing difficulties in this uncharted terrain of remaining connected, interactive, and compassionate while we all scramble to return to learning and "teaching without PANTS (Pandemic Accelerated, Novel Technology Symptoms)" in response to COVID-19 in Academe. This chapter draws from preliminary data obtained from a university-wide survey of students at a 4-year public university in southern California. The survey was administered at the on-start of the campus shifting from face-to-face instruction to a virtual learning environment. A discussion of best practice teaching strategies and techniques that

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faculty are currently implementing to address the challenges of "teaching without PANTS" is included, with specific attention to the integration of Affordable Learning Solutions that enabled a rapid response to virtual instruction.

1.1   Conceptual Background

Bronfenbrenner's bioecological model (Bronfenbrenner & Morris, 2006) provides a conceptual framework that supports the implementation of pedagogical practices for teaching online during the COVID-19 pandemic. Pedagogical practices should be designed to accommodate the context and needs of students, recognizing the potential disruption of multiple systems that occur and impact students and their learning. Koehler and Mishra's (2009) TPACK Framework emphasizes the value in understanding "technological knowledge" related to the instructors' ability to effectively implement digital pedagogical practices. The TPACK Framework accounts for the unique teaching and learning experiences of faculty and students, focusing on the development of important supportive practices, during the transition to a "virtual university". The intersecting points of Pedagogical Content Knowledge (PCK), Technological Content Knowledge, (TCK), and Technological Pedagogical Knowledge (TPK) are examined in relation to student needs and faculty responses.

1.2   Context and Concerns

The cost of attending a 4-year public university in the United States of America has increased by 31% from 2007 to 2017 (US Department of Education, 2019). With the rising cost of textbooks, course materials, boarding, and university fees, the COVID-19 pandemic has presented additional financial obstacles to current and prospective college students. Industries that are most adversely affected by the COVID-19 pandemic include leisure/hospitality services, and retail businesses (US Bureau of Labor Statistics, 2020). The required closure by government mandated "stay-at-home" orders caused massive layoffs, with students from low-income backgrounds disproportionately affected, as many rely on their jobs to support their education. Low-income students are more likely to be women, members of under-represented ethnic minority groups, and first-generation college students (Carnevale & Smith, 2018). The California State University system has 20 designated Hispanic Serving Institutions that are invested in serving undergraduate student populations where at least half of the institution's degree-seeking students are from low-income backgrounds. As the national unemployment rate skyrockets amidst the COVID-19 pandemic (11.1% as of June 2020, US Bureau of Labor Statistics, 2020), it becomes imperative that individuals earn a college degree to remain competitive in a COVID-19 job market (Adams-Prassl et al., 2020). Despite these new market conditions, many high school seniors are not applying for college. One nationally

representative study of 573 US highschool seniors found that approximately 20% of students were not planning to enroll in college for the Fall 2020 term as a result of the COVID-19 pandemic (SimpsonScarborough, 2020). The same study reported that in a nationally representative sample of 513 university freshman, sophomores, and juniors, 14% of students were unsure or unlikely to return to their current institution for their next term. Students (i.e., 97%) reported that their university transitioned to online instruction, and 63% reported the online instruction to be worse than their in-person classes (SimpsonScarborough, 2020). The long-term financial and professional repercussions of not earning a university degree necessitate universities and colleges to develop affordable and engaging educational pathways for students affected by the COVID-19 pandemic. One possible solution is the implementation of quality open educational resources (OER).

OER consist of openly licensed and distributed learning materials free of charge (United Nations Educational, Scientific, and Cultural Organization, 2019). OER include, but are not limited to open-access textbooks, open-access journal articles, videos, note packets, slideshow presentations, and recorded lectures. As OER are usually digitized, faculty can easily distribute their materials online as well as in-person settings. OER can be shared – fostering collaborative opportunities. Previous research suggests that university students are more likely to use OER when provided the option over traditional textbooks (Delimont et al., 2016). Despite this advantage, several university classrooms still favor traditional textbooks over OER. For example, Seaman and Seaman (2017) explored perceptions of OER in over 2,700 US institutions of higher learning. Findings from their study indicated that 56% of faculty members were "not aware" of OER, or did not know how to implement OER resources in their courses. Participants expressed concerns regarding the availability (50%) and lack of quality (28%) of OER for their courses. As the COVID-19 pandemic challenges academic institutions to create alternative platforms of classroom delivery while sustaining student enrollment and maintaining high quality instruction, the implementation of OER may serve as an effective strategy and an affordable learning solution that can be enabled rapidly to support instructional needs. The convenience and infrastructure of OER is conducive to virtual collaboration as materials can be modified and reused across classes and academic terms. OER collaborations support a system of checks and balances of content quality and encourage multiple perspectives in the presentation of material. Students show a preference and perceive a higher degree of intersection between OER and instructors' lecture and assessment materials over traditional textbooks. For example, one cross-sectional study of 925 college students demonstrates that students assigned OER were almost twice as likely to read the materials compared to students assigned traditional textbooks and over 50% cited costs were too high for how little the textbooks were used (Cuttler, 2019).

One initiative that the Department of Child, Adolescent, and Family Studies (CAFS) at California State University, Bakersfield (CSUB), assumed in response to the Affordable Learning Solutions (AL$) initiative was to transfer all course materials to OER and Zero Cost Course Materials (ZCCM). The impetus for this initiative was to reduce costs while addressing retention to graduation rates of students.

Previous literature demonstrates that students and/or institutions may financially benefit from quality OER/ZCCM, as the chance for student-debt decreases (Farrow et al., 2015; Fischer et al., 2015) and the ease of access to materials may support at-risk learners' efforts to graduate (Winitzky-Stephens & Pickavance, 2017).

Though some students are familiar with the traditional online format, alternative instructional delivery lends itself to vagueness and potential uncharted pedagogical territories. Two modalities of alternative instructional delivery implemented by faculty include providing synchronous (in real time) or asynchronous lectures (online) via videoconference platforms (e.g., Zoom, WebEx, Skype). Synchronous lectures may be advantageous for students who prefer to exchange information and ask questions verbally in real time (Shi & Morrow, 2006). Additionally, instructors may receive real-time feedback from students and make needed adjustments to their curricula. One study comparing college students' preferences in synchronous and asynchronous modalities of online learning indicated approximately 75% of students preferred the synchronous format (Skylar, 2009). The synchronous format does posit some limitations. Synchronous lectures require students to reserve specific meeting times to attend class. As the COVID-19 pandemic has shifted the work and family schedules of students nationwide, reserving multiple set times throughout the academic terms may not be feasible. Asynchronous lectures allow students to view recordings of class lectures at their convenience, but forego the ability to engage with classmates and the instructor during the class session. In both formats, students are required to have a basic understanding of computer literacy as all course materials (e.g., lectures, assignments, readings) are accessed online.

2   Student Voices

A university-wide qualitative student feedback survey was distributed to all students enrolled in the Spring 2020 semester to assess their concerns and gather feedback regarding the transition to an online learning format. The survey indicated that approximately 33% of the students ($N = 1,038$) feel "uncomfortable" or "very uncomfortable" navigating videoconference platforms (CSUB Institutional Research, Planning, & Assessment, 2020). Survey findings indicated that a reliance on technology posed a real concern for many students. Students' discomfort with the modality of instruction may lead to less engagement, poor class performance, and a reduced learning experience. In addition to the analysis of the quantitative responses, qualitative methods were employed to understand the concerns and challenges students have about the transition to the online format. It is imperative to implement pedagogical practices to accommodate the diversity of learning needs and preferences of students taking classes during (and after) the COVID-19 pandemic.

2.1   Explanation

The COVID-19 pandemic has compelled instructors to apply a multitude of digital pedagogical strategies to their teaching practices to accommodate a "virtual university" platform. As student enrollment declines across universities nationwide (SimpsonScarborough, 2020), it is essential that academic programs maintain affordability without compromising quality and integrity. Informed by research, practice, and student feedback, several OER-compliant strategies can foster a supportive classroom environment while being respectful of the diverse learning needs, technological backgrounds, and financial circumstances of students. Strategies include offering synchronous classes with an asynchronous option (i.e., recording and uploading live videoconference lectures), providing computer literacy training, and utilizing interactive classroom management apps. Establishing student-only videoconference rooms and engaging in interactive activities may create alternative platforms for participation and assessment. The variety of modalities in which course material is presented may help maintain student engagement and academic motivation (Dosch & Zidon, 2014). Maintaining an interactive digital class environment enables instructors to establish rapport with students, and regularly check in on students' physical, emotional, and academic well-being. The availability of OER/ZCCM materials in advance ensures that students benefit from not having to spend time searching for course materials with everything posted on the course learning management system. Students can easily download materials at any time at their convenience and maintain access to OER offline. OER provides students with clear expectations for course objectives and student learning outcomes, thus providing students with sufficient time to plan their schedules accordingly. Additionally, instructors can encourage (or assign) students to research and/or create their own OER to share with the instructor/class. After reviewing students' OER submissions, instructors may distribute the OER to the class via the learning management system. Instructors may also provide students with multiple options of assignments/forms of assessment they may complete for course credit, thus enabling students to exercise greater control over their educational online experiences. Students may engage with selected class OER content and complete assignments pertaining to their areas of interest.

Students will be paying full tuition for a different university experience; hence, it is vital for instructors to facilitate an engaging atmosphere to instill the value of feeling committed, motivated, and connected to the class. The TPACK Framework by Koehler & Mishra (2009) calls instructors to appropriately balance the use of technology with supplementary pedagogical techniques that convey content and facilitate learning in an engaging manner. OER compliant assessments where students partake in applied activities can help combat the oversaturation of technology students may encounter in a "virtual university" setting. Additionally, embedding OER materials into courses may help students justify registering for the next academic term, as students can be guaranteed to save money on textbook fees, an invaluable feature during a time of financial uncertainty. Developing OER materials

prior to the COVID-19 pandemic allowed CSUB's CAFS Department to transition to a virtual platform at an accelerated rate, ensuring that faculty did not have to worry about "teaching without PANTS!"

Under normal working conditions, the benefits of the AL$ Initiatives with reliance on OER and ZCCM have significantly assisted students with access to course materials at the beginning of the semester and thus reduced the uneven playing field for students in relation to additional course costs. In times of crisis, while faculty and students scramble to acquaint themselves with different technologies and seek solutions for access to course materials, the benefits of AL$ become increasingly clearer. AL$ enables a scalable and responsive solution that can be used onsite and online with little transition time and effort compared to other ways of upscaling from traditional instruction to hybrid or fully online delivery.

3   Conclusion

A sudden change to the learning environment and modality is a great challenge for both faculty and students. With the switch to an online delivery format, faculty must be prepared to reach out to students and seek ways to transfer in-person relationships to an online world, while attempting to preserve individual differences within their exchanges with students. Despite the challenges, it is important for faculty members to ensure students' learning is well supported, particularly in the virtual learning environment. Different methods to humanize the interactions can be achieved through discussion boards, diverse types of assignments, and connecting students to each other. Additionally, establishing OER for university courses can ensure an efficient transition to alternative learning formats, while also relieving the financial burdens of high-cost textbooks. In this chapter, the concerns and challenges raised by students during the COVID-19 pandemic were described, and strategies that faculty can use to alleviate and respond to these concerns and challenges were identified. Though not every strategy will apply to all courses and circumstances, some practices can be recommended across classes. For example, establishing clear expectations regarding course policies (e.g., class schedule, grading rubrics, assessments) and "virtual university" etiquette (e.g., interacting on a digital platform) should be established at the start of the academic term. Additionally, creating opportunities for exchanging ideas between students and engaging with students to foster a sense of belonging are crucial elements that may help to reduce some of the barriers and challenges that could potentially impede student success with new modalities of instruction. Therefore, we encourage faculty to recognize the unique challenges faced by their students, as well as individualize, differentiate, or modify strategies in accordance with diverse learning needs and situations. Ultimately, "You can't teach people everything they need to know. The best you can do is position them where they can find what they need to know when they need to know it" (Seymour Papert quote as cited in Lancaster et al., 2005).

References

Adams-Prassl, A., Boneva, T., Golin, M., & Rauh, C. (2020). *Work tasks that can be done from home: Evidence on the variation within and across occupations and industries* (unpublished manuscript).

Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In W. Damon & R. M. Lerner (Eds.), Handbook of child psychology (6th edn.). *Volume* One*: Theoretical models of human development* (pp. 793–823). Wiley.

Carnevale, A. P., & Smith, N. (2018). *Balancing work and learning: Implications for low-income students*. Georgetown University Center on Education and the Workforce.

CSUB Institutional Research, Planning, & Assessment. (2020). *Student feedback survey*. California State University.

Cuttler, C. (2019). Students' use and perceptions of the relevance and quality of open textbooks compared to traditional textbooks in online and traditional classroom environments. *Psychology Learning & Teaching, 18*(1), 65–83. https://doi.org/10.1177/1475725718811300

Delimont, N., Turtle, E., Bennett, A., Adhikari, K., & Lindshield, B. (2016). University students and faculty have positive perceptions of open/alternative resources and their utilization in a textbook replacement initiative. *Research in Learning Technology, 24*(1), 13. https://doi.org/10.3402/rlt.v24.29920

Dosch, M., & Zidon, M. (2014). "The course fit us": Differentiated instruction in the college classroom. *International Journal of Teaching and Learning in Higher Education, 26*(3), 343–357.

Farrow, R., Pitt, R., de los Arcos, B., Perryman, L., Weller, M., & McAndrew, P. (2015). Impact of OER use on teaching and learning: Data from OER research hub (2013-2014). *British Journal of Educational Technology, 46*(5), 972–976. https://doi.org/10.1111/bjet.12310

Fischer, L., Hilton, J., Robinson, T. J., & Wiley, D. A. (2015). A multi-institutional study of the impact of open textbook adoption on the learning outcomes of post-secondary students. *Journal of Computing in Higher Education, 27*(3), 159–172. https://doi.org/10.1007/s12528-015-9101-x

Koehler, M., & Mishra, P. (2009). What is technological pedagogical content knowledge (TPACK)? *Contemporary Issues in Technology and Teacher Education, 9*(1), 60–70.

Lancaster, C., Mauldin, M., Gilbertson, B., Darden, P., & Kittredge, D. (2005). How we changed from paper to online education: Teaching immunization delivery and evaluation. *Medical Teacher, 27*(8), 682–685. https://doi.org/10.1080/01421590500271191

Seaman, J. E., & Seaman, J. (2017). *Opening the textbook: Educational resources in U.S. higher education, 2017*. Babson Survey Research Group.

Shi, S., & Morrow, B. (2006). E-conferencing for instruction: What works? *Educause Quarterly, 29*(4), 42–49.

SimpsonScarborough. (2020). *National student survey.* https://cdn2.hubspot.net/hubfs/4254080/SimpsonScarborough%20National%20Student%20Survey%20.pdf

Skylar, A. (2009). A comparison of asynchronous online text-based lectures and synchronous interactive web conferencing lectures. *Issues in Teacher Education, 18*(2), 69–84.

U.S. Department of Education, National Center for Education Statistics. (2019). *Digest of education statistics, 2017*. https://nces.ed.gov/fastfacts/display.asp?id=76

U.S. Department of Labor, Bureau of Labor Statistics. (2020). *State employment and unemployment summary.* https://www.bls.gov/news.release/laus.nr0.htm

United Nations Educational, Scientific and Cultural Organization. (2019). *What are open educational resources (OERs)?* https://en.unesco.org/themes/building-knowledge-societies/oer

Winitzky-Stephens, J. R., & Pickavance, J. (2017). Open educational resources and student course outcomes: A multilevel analysis. *The International Review of Research in Open and Distributed Learning, 18*(4). https://doi.org/10.19173/irrodl.v18i4.3118

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"Not in the Same Boat": Navigating Towards Academic Literacy Teaching During the COVID-19 Crisis

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> *Even when the winds of misfortune blow, amazing things can still happen.*
>
> *Gabriel García Márquez*

1 Introduction

The World Health Organization declared the outbreak of COVID-19 a public health emergency of international concern on 30 January, 2020. On March 11th, it was declared a pandemic. Colombia reported its first case on March 6th. Then, on March 24th, the Colombian government announced the national emergency and quarantine for most of the population. One week before this announcement, our University in Colombia suspended all classes for 2 weeks and asked the academic community to stay home safe. During that time, the faculty and administrative staff of the University focused on transforming face-to-face classes to remote emergency teaching. In January nobody would have imagined such an unprecedented situation.

At the onset of the crisis, we displayed a proactive and positive attitude controlling our fears and questions about the future. How could we transform our courses in such a short time? Did we have all the needed equipment and software? Were faculty and students ready for teaching and learning using digital technology? Did our students have all the necessary tools to connect with this new way of learning? How would we assess students? Could we adapt the pedagogy we used for teaching academic literacy to online teaching? Our chapter shows how we have navigated these questions. We share our experiences as university academic literacy teachers in these remote learning environments.

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2   COVID-19: Widening the Inequality Gap During Remote Teaching

Pope Francis when describing the human experience with COVID-19 stated that "we are in the same boat." We suggest instead that "we are going through the same storm" rather than in the same boat. As educators in Colombia, we navigate various forms of social and economic inequality. This supposes different challenges during that global storm: challenges and responses depend on whether one is traveling by cruise ship or rowing a boat and wearing a life jacket or swimming without equipment to keep afloat. We seemed to be in the same boat when we were on campus. In off-campus teaching, the inequality gap widened – inequalities associated with household assets (availability of computers and tablets), appropriate physical conditions at home (availability of space or overcrowding), quality of the internet connection, and electricity, among others (Toro-González, 2020).

Another challenge is the lack of literacy skills when students enter higher education (HE). A considerable number of students the University receives every semester are not prepared to face the demands posed by the learning tasks they have to do in HE. These demands derive to a great extent from the characteristics of the written language students need to master to have access to the knowledge and social practices of the disciplines they have chosen to study (Carlino, 2003; Christie, 2002; Colombi, 2002). The literacy courses they take during the first year have been designed to help them bridge this gap. However, the change to remote emergency teaching has represented a challenge for academic literacy teachers not used to navigating technology-mediated environments. This could affect students' academic performance in the short term and lessen their success in their pursuit of a university degree and a professional career. Development of literacy along with technological access could either contribute to widening the gap or become a solution to inequality, especially in time of crisis.

3   Reading to Learn: A Pedagogy to Decrease Inequalities

To teach academic literacy courses in our context, we use Systemic Functional Linguistics (SFL) (Halliday, 1994/2004). It is a linguistic perspective which highlights the relationship between language, text and context, and genre-based literacy pedagogy (GBP) of the Sydney school (Christie & Martin 1997; Martin & Rose, 2005; Martin & Rose, 2008). Both SFL and GBP aim to democratize education to overcome inequalities. The genre-based pedagogy visibilizes teaching to facilitate learning or, as White et al. (2015) express: [it] "is explicit about the skills and cultural understandings required for effective literacy and which, accordingly, provides explicit knowledge about the functions, structures and stylistic properties of the modes of communication associated with academic success and social mobility" (p. 258).

GBP is based on the fact that a text follows a recognizable and predictable pattern, so is susceptible to being taught and learned. This pedagogical model considers that language learning relies on a "guidance through interaction in the context of shared experience" (Painter, 1986). Within this model, interaction has a pivotal role since "classroom interaction establishes shared knowledge and work on the co-construction of meanings before asking students to read and write" (Moss, 2016).

Regular instruction is planned and organized to provide face-to-face scaffolding and tutoring to students. Instruction and interaction in our classes seek to strengthen students' academic literacy skills (reading, writing, speaking, and listening). These skills are necessary to rebuild and critically evaluate meanings present in academic texts; recognize their social purpose, structure, and discursive resources; and exercise it autonomously during their academic and professional life (Álvarez et al., 2017). Our pedagogical model highly relies on face-to-face interaction among teachers and students to develop the teaching and learning cycle that walks students towards control of academic genres. The cycle starts with a process of deconstruction of the target genre, moves to joint construction, and finalizes with students' independent construction. The transformation of our classes to remote learning challenged us to keep the foundations of the genre pedagogy model intact in technology-mediated classes.

In the first stage of the cycle, deconstruction, the teacher models how to read a sample text from a specific genre to ensure comprehension of its content, social purpose, schematic structure, and main language features. In the joint construction stage, students are guided to design and write a new text. First, the teacher gives a topic to write about, shows students how and why that topic was chosen, and gives instructions on how to search for information in reliable and academic databases. Scaffolding is provided on how to curate information and organize it for later inclusion in the text according to the structure of the genre. This step is followed by joint writing of the text using the curated information from the search. Texts are worked out in a Google document that is shared with the students for further revision and editing in the following stages. The first part of the text is jointly written by the teacher and student; the second paragraph is done by students working in pairs, and the last part or paragraphs are written independently by every student. In this guided writing exercise, the teacher models how to build and organize the sentences correctly in different stages of the text, making appropriate use of linguistic and discourse resources according to the requirements of the genre. After finishing their texts, the teacher guides an editing exercise. Groups exchange feedback on the texts and make adjustments according to the feedback. This stage is developed step by step in face-to-face classes to reinforce the scaffolding process.

In the independent construction stage during face-to-face classes, students are required to write a new text and participate in workshops to develop oral communicative competence. For the writing, they go through a process of independent reading and note-taking from at least five sources from the library database. They build an outline of the text and write out the stages and phases until the text is completed. They are asked to write it in an online Google document shared with the teacher to facilitate monitoring and guidance. The text is evaluated with a rubric designed for

this purpose. In the oral communicative competence workshops, teachers facilitate different workshops on organization, body language, pitch, and time management.

When the COVID-19 "shutdown" began, we had already developed the deconstruction stage in the cycle, and we were about to start joint construction, and then follow with independent construction. To continue classes in the remote mode, after intensive training offered by the Centro de la Excelencia Docente Universitaria (CEDU), most of us considered the University's video conferencing software with minor changes as the best option to continue our classes. However, we did not consider what Daniel Stanford (2020) mentions on his "bandwidth immediacy matrix", that is, the relationship between teachers and students' connectivity, and the immediacy we wanted to deliver instruction, that is, "choices about the technologies we use can have a big impact on how inclusive and effective our teaching is" (Stanford, 2020, para 10). In a survey sent to registered students to determine their connectivity, we found that out of 12,636 respondents, 901 did not have computers, 511 did not have internet access, and 5360 did not have data plans on their cellphones.

Therefore, as we started teaching remote classes, we needed to rethink and design plans and strategies ranging from almost no use of technology to high use of technology depending on teachers and students' access and familiarity with technology. Keeping the interaction going and providing mediational tools was the main aim. We planned and delivered asynchronous, synchronous, or assisted and independent activities. Asynchronous classes were used to deliver lessons that had been video-recorded by teachers and contained mostly explanations modeling reading and writing processes. Synchronous or assisted classes were used to maximize interaction and to give feedback and follow-up on writing activities. Students were given specific tasks to complete independently; for example, the search and organization of the data for writing or oral tasks. To facilitate ongoing monitoring and guidance, we also created WhatsApp groups and generalized the use of document sharing through Google drive folders to give feedback. In cases in which students reported connectivity issues, we also made phone calls to keep track of students' performance.

In the independent construction stage, we transformed the workshops for oral competence into video lessons to be developed in asynchronous classes and as independent work. For independent writing, students were organized into small groups and asked to attend synchronous or assisted classes via video conferencing. Feedback for written and oral independent products was given using document commentary tools as Kaizena in Google docs and through written and oral messages using WhatsApp or other messaging services.

Faculty navigated these uncharted territories in various ways. When asked about the process at the end of the term, a teacher described it as "complex" (Teacher 1); "very stressing" (T6); "difficult" (T7). Others expressed that the faculty response has been "very consistent with the reality that was unfolding" (T5). Perhaps teacher 9 expressed in his comment the general sentiment we all shared during this crisis: "Fearful and overwhelmed at first; curious and resourceful during the process; and confident and more knowledgeable at the end" (T9).

4   How Students Perceived the Process

As in every term, we conducted a course evaluation process, Evaluación Docente (EvaDoc are its initials in Spanish and its purpose is similar to what in English is commonly known as Students Evaluations of the Course, SEOCs) to collect data about how students experienced remote academic literacy teaching in our courses (N = 1.998). Quantitatively, EvaDoc results are reported in a scale from 1 to 5 (Excellent from 4.55 to 5.00, Good from 3.95 to 4.54, Acceptable from 3.05 to 3.94 and Deficient from 1.00 to 3.04). EvaDoc contains five dimensions. Four refer to what the Center for Teaching Excellence has labeled "Good teaching" with three items each (See Fig. 1). Overall, the results regarding teaching were positive. The highest rating was given for teachers' skill to develop evaluations that focus on learning (4.4); followed by teachers' ability to develop a social climate conducive to learning (4.3); and disciplinary expertise in creating learning environments (4.2). The lowest score was teacher's ability to stimulate the desire to learn throughout life (4.1).

The fifth dimension relates to teachers' fulfillment of responsibilities inherent in their teaching role. It includes six items (see Fig. 2). This term the items were modified to collect detailed data about the COVID-19 teaching and learning experience. Students valued these items very positively. According to these data, teachers "complies with his commitments with the students" (item 3, 4.5) and "uses the technological tools effectively for the development of the course in the remote teaching environment" (item 6, 4.5). Positive as well (4.4) are students' evaluation of items 1, 2, 4, and 5: "Communicates and gives feedback to students using the agreed digital spaces"; "provides clear instructions for the development of the activities in the remote classes"; "delivers assessment results in the time allotted"; and, organizes the academic tasks effectively giving enough time for their development."

Students also made qualitative comments to share other insights about the process. Analysis of students' comments showed that they valued teachers' concerns about them as human beings living through this crisis more than as students or learners. They recognized the help teachers provided to help keep up their
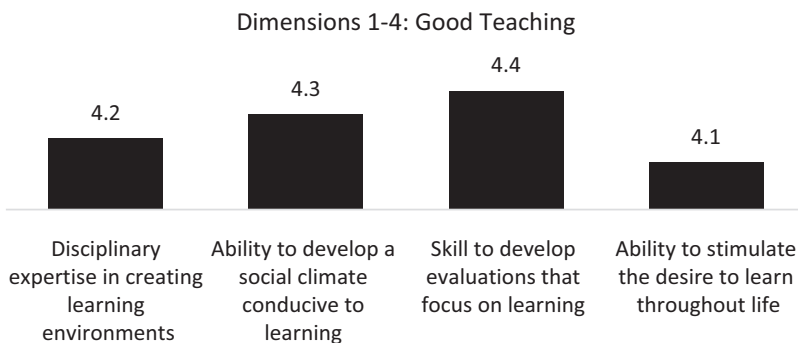
Fig. 1 Dimensions of "Good Teaching" – (EvaDoc Results 2020 first semester)

Dimension 5: fulfilment of responsibilities
inherent to the teaching role
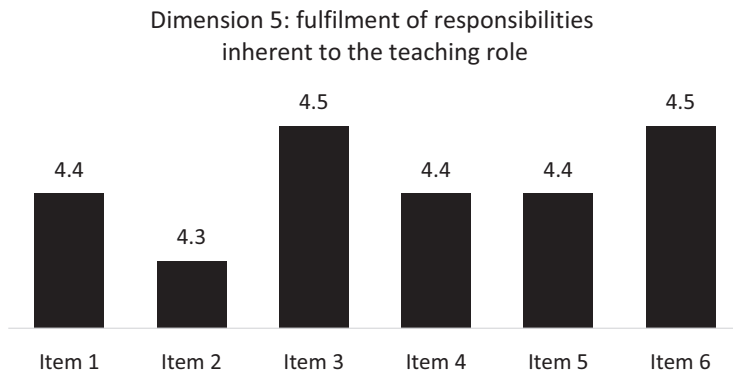
Fig. 2 Dimension 5: Fulfillment of responsibilities inherent to the teaching role – (EvaDoc Results 2020 first semester)

performance during the term and appreciated that teachers offered and maintained open channels of communication during this time. Students particularly valued teachers' *presence* in spite of the change of environment. What a student said summarizes this appreciation: *"there wasn't much difference between how he was in person and now remotely"*; and, s/he*"has been able to adapt more than most to remote classes because his/her way of teaching makes us feel her/his presence even remotely" (SCC1,* Student in Communicative Competence Course*).*

They found particularly helpful teachers' organization of classes and online tasks with the provision of weekly schedules, so they suggested that teachers continue to *"explain in more detail how the activities will be carried out" (SCC2)*, to provide clear instructions that facilitate the process for them. Students highlighted as well the need to keep a balanced workload, demonstrating more consciousness in the time assigned to develop tasks or assigning deadlines for such tasks.

They also suggested that teachers need to *"Try to reinforce their knowledge in the different tools used in the remote classes" (SCC3)*, and increased use of *"dynamic and playful spaces in the classes" (SCC4).*

5   Conclusions and Implications

Teaching academic literacy courses during times of crisis represents a huge challenge for faculty. Having a unified pedagogy seemed to have helped to focus efforts in keeping students on board by providing a combination of instructional technologies according to the learning focus in the Genre Based Pedagogical Cycle, as well as students' access to and use of technological possibilities.

The results of this experience suggest that students and teachers consider the measures taken worked to achieve the goals of the literacy program. Despite the fact that the GBP was mainly thought to work in face-to-face settings, technology

became a great ally in democratizingthe teaching/learning to reach students, especially those who felt overwhelmed in classroom classes.

Even though these measures were taken on a temporary basis to face the pandemic, we have found positive outcomes and potentialities to consider once we are back to normalcy. Being forced by the pandemic to adopt the use of technology in our classes has opened the door to a more flexible curriculum in the short and long term. The adaptation of face-to-face classes into remote learning and teaching has allowed us to implement differentiated communication and delivery strategies to include diverse student needs. The COVID-19 episode provided faculty with the energy needed to take a qualitative leap in terms of pedagogical innovations, which, without a doubt, will add value to the present and future educational processes.

It goes without saying that strengthening teachers and students' technological competence is a need in reducing the digital competence gap. Continued efforts in this area, along with other political and social policies, could narrow the inequality gap, especially in the need for access to the internet and technology. Transcending technology, we gained an important insight related to humanity in any educational process: *the teacher presence* shining through this crisis in these online environments. In times of crisis such as the ones we are experiencing now because of COVID- 19, we recommend therefore that faculty development should emphasize strategies and resources to reinforce the cognitive and social presence of both teachers and students.

Amidst this critical situation brought about by the COVID-19 emergency and the obligatory quarantine we have in Colombia, we have rediscovered the strengths and potential of genre-based pedagogy in helping us map the uncharted waters of remote online teaching, a means to responding to everyday real-life language-related issues in diverse social, professional, and academic contexts. As Mahboob et al. (2010, p. 1) indicates: "As online literacy and language support becomes more prevalent in tertiary education, we need to consider various technical, pedagogic, linguistic and literacy issues that are pertinent to it." In this chapter, we have described the way we have been tackling this issue during the COVID-19 era.

References

Álvarez, S., Barletta, N., Benítez, T., Chamorro, D., Guerra, J. Holgueras, A., & Rosado, N. (2017). *Lineamientos evaluativos del curso de competencias comunicativas* (Internal report). Departamento Español, Universidad del Norte) (Unpublished).

Carlino, P. (2003). Alfabetización académica: Un cambio necesario, algunas alternativas posibles. *Educere, 6*(20), 409–420.

Christie, F. (2002). The development of abstraction in adolescence in subject English. In M. Schleppegrell & M. C. Colombi (Eds.), *Developing advanced literacy in first and second languages: Meaning with power* (pp. 45–66). Lawrence Erlbaum.

Christie, F., & Martin, J. R. (1997). Genres and Institutions: Social Processes in the Workplace and School. Continuum.

Colombi, C. (2002). Academic language development in Latino student writing in Spanish. In M. Schleppegrell & M. C. Colombi (Eds.), *Developing advanced literacy in first and second languages: Meaning with power* (pp. 67–86). Lawrence Erlbaum.

Halliday, M. A. K. (1994/2004). An introduction to functional grammar. Edward Arnold Publisher.

Mahboob, A., Humphrey, S., Webster, J., Wong, E., Wong, C., & Chan, A. (2010). Genre pedagogy meets e-learning: An introduction to the language companion course. In *Proceedings of the 5th international symposium on teaching English at tertiary level*. Polytechnic University of Hong Kong Press.

Martin, J. R., & Rose, D. (2005). Designing literacy pedagogy: Scaffolding asymmetries. In J. Webster, C. Mathiessen, & R. Hassan (Eds.), *Continuing discourse on language* (pp. 251–280). Continuum.

Martin, J. R., & Rose, D. (2008). *Genre relations mapping culture*. Equinox.

Moss, G., (2016). Teoría de Género. En G. Moss, T. Benítez & J. Mizuno (Eds.), Textos que se leen en la universidad una mirada desde los géneros discursivos en la Universidad del Norte. (pp. 15–34)Ediciones Uninorte.

Painter, C. (1986). The role of interaction in learning to speak and learning to write. In C. Painter & J. R. Martin (Eds.) *Writing to mean: Teaching genres across the curriculum* (pp. 62–97). Applied Linguistics Association of Australia (Occasional Papers 9).

Stanford, D. (2020, March 16). *Videoconferencing Alternatives: How low-bandwidth teaching will save us all* [Blog post] https://www.iddblog.org/videoconferencing-alternatives-how-low-bandwidth-teaching-will-save-us-all/

Toro-González, D. (2020). Educación superior en Latinoamérica en una economía post-COVID19. *Revista de Educación Superior en América Latina*, *8* (julio-diciembre 2020), 45–52.

White, P. R., Mammone, G., & Caldwell, D. (2015). Linguistically based inequality, multilingual education and a genre-based literacy development pedagogy: insights from the Australian experience. *Language and education, 29*(3), 256–271.

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Teaching a Tolerance for Ambiguity as a Response to Crisis Learning Contexts

Jennifer Long

*Some stories don't have a clear beginning, middle, and end.
Life is about not knowing, having to change, taking the moment,
and making the best of it, without knowing what's going to
happen next. Delicious ambiguity...*

Gilda Radner (1989, p.268)

1   Teaching About, While Living, Discomfort

Post-secondary institutions in Canada have taken several different approaches when responding to the COVID-19 crisis. While hindsight will provide a better indicator to understand how institutions faired in supporting their students, stress and ambiguity were two constants affecting every student and instructor regardless of educational context (WHO, 2020). Students and faculty have had to respond to last-minute changes, varied communication, and administrators hedging bets on future outbreaks and predictions, not to mention the toll on those who became, or knew someone, infected with the virus. Questions abound as to the impact on learning preferences, allocated time and space for learning, and access to learning technologies that avoid deepening pre-existing inequalities facing women (Wenham et al., 2020), racialized (Laurencin & McClinton, 2020), and disabled (United Nations, 2020) students. Educators and researchers are scrambling to investigate how responses to COVID-19 affect educational practice; to date, however, "very meager research (has been) done in relation to the field of education on how COVID-19 (…) affect(ed/s) the educational system" (Toquero, 2020, p.1). This unprecedented experience demonstrates the need for educators to build their own and their students' tolerance for such contexts, so that they may cope better in future uncertainty.

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In this chapter, I engage with the concept of building students' and faculty's tolerance for ambiguity as an important transferrable skill for future educational practice. More than 20 years ago, Johnson et al. (1995) argued that students needed to learn ambiguity tolerance as a skill to "interface" with unavoidable ambiguities in everyday life and this skill seems to be of greater importance in the new world we face. Defined as "a capacity to entertain uncertainty, to cope with paradox, to allow for the indeterminate," anthropologist Du Bois argued that tolerance for ambiguity is one of the attitudes that anthropologists need to foster among their students (1963, p.37). Huber (2003) advocates for the use of experiential learning and action-based methodologies in problem-solving cases as a means to foster this tolerance and prepare students "for success in the fast-paced and often chaotic business world" (p.52). Huber's model prioritizes students' ability to "take responsibility for their own learning" by discovering methods to operate effectively, gather and analyze data, develop creative ideas and solutions, and apply theoretical insights (2003, p.54). For students, gaining a tolerance for ambiguity has positive possibilities for both short- and long-term uncertainty.

After defining this topic and describing its use in past scholarship on teaching and learning, I will illustrate how I built tolerance for ambiguity using lessons learned from facilitating workshops on design thinking both before and after the onset of the pandemic. Design thinking is a visual problem-solving method that puts the "end-user" at the heart of the design process and which has gained prominence over the last two decades. This method helps designers dig deep into the cause of root problems, uncover explicit and tacit user needs, and build solutions that consider real-world contexts and ideal futures (Kubovsky, 2019). It is a tool to engender tolerance for ambiguity and rethinking one's priorities in teaching and learning in unpredictable times. I argue that one's ability to handle ambiguity should become a staple in professional development among faculty and educational practice among students across institutional context. Aligned with the goal of this volume, our new world requires case studies that shed light on teaching and educational solutions for now and the future.

2   Tolerance for Ambiguity

The tolerance of ambiguity was first coined by Psychologist Else Frenkel-Brunswik in 1948. This term, which ironically has no definitive definition, has engaged scholars ever since, particularly in the fields of medicine, psychology, and organizational behavior (Furnham & Marks, 2013, p. 717). DeRoma et al. (2003) define a tolerance for ambiguity, according to Budner, as "an individual's propensity to view ambiguous situations as either threatening or desirable" (105). The popularity of the term in psychology is also seen in clinical and organizational areas where ambiguity is defined as "a lack of information that is necessary to understand a situation or to

identify all of the possible outcomes" (Ellsberg, 1961 as cited in Furnham & Marks, 2013, p. 718). It is important to note that these cases and definitions locate a tolerance of ambiguity as a personal trait. Where tolerance for ambiguity is low, individuals are typically associated with certain behaviors - i.e., "crude stereotyping, rigid defenses, and a general lack of insight" and high levels of ethnocentrism and authoritarianism (Levine, 1985, p.12).

A related concept in Sociology is "uncertainty avoidance." Uncertainty avoidance is defined as "the extent to which people feel threatened by ambiguous situations, and have created beliefs and institutions that try to avoid these." It has been used most notably by Geert Hofstede (Hofstede 1984: 419 as cited in Furnham & Marks, 2013, p. 718). According to the Hofstede Centre, uncertainty avoidance is defined as "the extent to which the members of a culture feel threatened by ambiguous or unknown situations and have created beliefs and institutions that try to avoid these" (The Hofstede Centre n.d.-a). The Hofstede Centre finds that Canadians are more "uncertainty accepting" according to their Uncertainty Avoidance Index (UAI) and that Canadians tend to be "tolerant of ideas or opinions from anyone and allow the freedom of expression" (The Hofstede Centre n.d.-b). To have a higher tolerance for ambiguity is to result in "a pronounced openness for experiential ambiguities (that) may be functional for and reinforced in specific kinds of social contexts" (Levine, 1985, p. 13).

However, like Wayne et al. (2012), my goal here is not to advocate for developing a "tolerance for ambiguity" as a personal trait. There is much debate about how effective measurements of this trait are and whether this personality variable can be "built" at all (Furnham & Marks, 2013; Liu, 2015). Instead, I want to advocate for an increase in awareness about the role of ambiguity as a contemporary state associated with COVID planning and response and its potential for causing distress (Wayne et al., 2012). My goal is to reshape perceptions of "ambiguity as threatening" to "ambiguity as an opportunity to inspire" using creative, visual, collaborative problem-solving methods. In such educational spaces, participants withhold judgment and build their level of comfort in uncomfortable spaces (Bowen, 2016).

In 2003, Huber described her approach to teaching tolerance of ambiguity through open-ended ("choose any project you want") community-based projects. These action research projects required students to conduct research, plan, theorize, learn, and develop solutions and importantly, flounder in practice under what Huber describes as "the burden of too much freedom" (2003, p. 54). Huber's approach incorporates all four of Boyer's (1990) types of scholarship: discovery (through hands-on research), integration (through self-reflection and activities that ask students to find useful connections among ideas), applied (through trying new activities or methods throughout the term), and teaching (e.g., through experiential learning activities such as problem-solving or practicing interviewing techniques). By the end of the semester, Huber found that her students' relationship with ambiguous contexts had changed, as is evident by their willingness to take responsibility for their own learning (identifying a topic) and their ability to create effective

operating techniques as part of a group. Huber also encouraged her students to reflect on what they have learned in order to apply these lessons to future environments of change and chaos (2003, p. 54). While I have taught similar semester-long community-based research courses in the past, I am interested in exploring opportunities to engage with ambiguous contexts as teaching spaces in an even shorter timeline: the 4-hour workshop and in a virtual space (online). The COVID context produced several online educational opportunities (ranging from virtual tours of museums to limited time offers for free MOOCs) that quickly led to an unprecedented level of online fatigue (Sklar, 2020). The online environment also presents a unique challenge to reimagine experiential learning, hands-on activities, and group dynamics.

In what comes next, I provide an overview of a human-centered design workshop that was originally scheduled before the COVID-19 response and our transition online for a different set of learners. I then discuss how the activities and learning outcomes of this workshop align with my goals of building awareness around tolerance for ambiguity in this uncertain time.

3   Design Thinking and a Human-Centered Design Workshop

In its most simplistic form, design thinking is a visual problem-solving method where designers move through a five-stage framework (not necessarily in a linear fashion) to develop a product or service with the end-user "in mind." These stages involve learning more about that user (building empathy), identifying a problem they have with a product or service (defining a specific problem), brainstorming possible solutions (known as ideation), and then building an initial prototype of a solution. The final stage involves testing the prototype with the end-user or market. Typical design work integrates user feedback in the first and final stages of the design process. Like Huber's action research project above, teaching this process involves collecting data (empathizing), planning (defining problems), theorizing (ideating), learning (prototyping), and developing solutions (test) – similarly, these steps and practices are not mutually exclusive or necessarily follow a linear path.

The workshop was originally scheduled for the second week of March 2020. It incorporated this framework through a design sprint. In this context, the design sprint is a design experience where participants learn the phases of the design thinking framework by designing for a partner. Participants are not introduced to the design thinking framework. Instead, participants learn by doing and in a manner that is often uncomfortable due to the intense time constraints (e.g., "in 2 minutes, write down as many ideas on the post-it notes in front of you, GO!") and various activities. Participants typically struggle in the beginning of the session and eventually "go with the flow" as they become used to quick changes and commotion in the class space. It is only after the session that facilitators describe what happened in the

various stages of the design thinking process and then take participants through a series of debriefing activities (individually, paired, and in a group) to reflect on their experiences. This session, due to its high energy and chaotic environment with minimal direction, lends to Huber's context for developing participants' tolerance for ambiguity.

In addition to design thinking tools, my approach in this workshop incorporated two related design practices: (1) Human-Centered Design (HCD) and (2) Respectful Design. Elisia (2017) defines HCD as using the design thinking framework to consider "human perspectives throughout the design process" (para. 2). While similar, HCD is often touted as a mindset [inspiration (empathy), ideation, and implementation], while design thinking is a process or toolkit. In addition to the design thinking tools and an HCD mindset, I also incorporated a design anthropology perspective.

Design anthropologists, like Dori Tunstall, are shifting this stakeholder engagement through calls to decolonize design practice. Tunstall (2019, as cited by the Jacobs Institute) advocates that designers create on a community level (rather than on a decontextualized individual level) and practice respectful design, where the focus shifts from what a designer produces (is this product respectful?) to how a designer engages with "respectfulness" (how am I approaching this stakeholder?), (see Tunstall, 2013). In my original workshop plan, I incorporated a social identity and location wheel to help participants see how their inferences about their community partner's perspective and context included limitations. I then described Tunstall's (2013) work on decolonizing design and respectful design, and crafted group brainstorming activities around potential methods for inclusive design practices (through design thinking and their everyday practice). This latter portion of the workshop used more typical knowledge translation mechanisms (e.g., the BOPPPS model, ISN, 2020), because there can be discomfort when discussing privilege as a facet of one's social identity and location. When applying this knowledge back to participants' own work environments, I designed opportunities for personal reflection and collaborative activites to brainstorm everyday practices that would facilitate respectful engagement with community partners (like Huber, 2003).

In the originally scheduled session, all participants were supposed to come to the social innovation center at our university for a four-hour workshop. At least, this was the plan.

3.1 Designing in/for Chaos

The university shut down all face-to-face instruction 3 days before the planned workshop. Over the next 2 months, in a discussion with the social innovation institute hosting the session, I decided to move the workshop online. This posed quite a few challenges considering the hands-on nature of the activities (requiring materials like markers, post-it notes, group ideation strategies, etc.) and the almost total

reliance on paired and group work. Like any community-based work, "face-to-face time" in design is thought to be an essential part of collecting viable data and building trust and respectful relationships. Last, design work is high energy work and sustained energy in online meetings is difficult, particularly if individuals – like those who attended my workshop – did not have a camera or preferred not to use video.

The design sprint is a key mechanism to learn design tools and develop one's awareness about how ambiguity can be used to inspire creative and respectful solutions. The learning objectives of the workshop did not change. Originally, participants were going to solve the problem: how to make a better breakfast experience (for one's partner), which is a design sprint exercise available through Stanford's d.school. This sprint requires printing off a series of templates and having various ideation materials available (pens, markers, post-it notes, paper, stickers, decision-making/criteria cards, and prototyping materials). For the online version, participants were instead asked to solve for this problem: how to recreate positive/respectful customer service experiences in the time of COVID. I revised all activities to require only a pen and lined paper.

Where possible, my redesign integrated apps or online group activities to maintain the group dynamic and keep energy up. Instead of writing on post-it notes, for example, participants would use a Google doc made to look like individual post-it notes (using a simple table with square cells, colored yellow) to generate ideas. To replace the dotmocracy activity (a voting mechanism where participants vote by placing a sticker dot on their favorite post-it note idea), I used online programs like PollEV to rank participant choices.

While the first half of the session was completed in pairs in virtual breakout rooms, I transitioned to one large group midway through the session to avoid a drop-off of energy after the first hour of activities. This meant that the group began to solve for an issue identified by one of the participants, who became our key stakeholder. When narrowing our prototypes to begin the testing phase, I asked the stakeholder to use the "wheel of names" app [a webpage with a "wheel of fortune" style spinner (Omander, 2020). Instead of different amounts of money, the wheel includes various design criteria as options] to help them choose the design criteria (e.g., feasibility, quick win, etc.). In planning this session, I created alternative activity options to suit the participants' preferred level of engagement with technology. For example, prototyping involved creating a dream board on MS PowerPoint or using a sketching app to draw a prototype.

Participants were then given the social identity and location wheel as homework and asked to write back to describe what lessons they learned in this process and also how their design work in the workshop could be applied to their own work environment. While not every participant took advantage of this final activity, those that did demonstrated a significant understanding of the design tools and steps and explored their own identity and developed tangible ideas for change to build more respectful relationships with their end-users.

4 Developing Awareness of the Positive Influence of Ambiguity

In her discussion of the concepts that should be found in the undergraduate curriculum of students majoring in Cultural Anthropology, Du Bois argues that tolerance for ambiguity is a required attitude for an anthropology graduate (1963, p. 37). She describes this attitude as "a capacity to entertain uncertainty, to cope with paradox, to allow for the indeterminate" (Du Bois, 1963, p. 37). She argues that this trait is not often taught in secondary education and, once in professional careers, diminishes over time. More recently, Klugman and Beckmann-Mendez (2015) argued that their health professional education students developed more tolerance for ambiguity (in addition to heightened observation and communication skills) when they used fine art instructional strategies, specifically visual thinking strategies.

This design thinking/HCD/Design Anthropology session, due to its high energy and chaotic environment with minimal direction, lends to Huber's context for developing participants' tolerance for ambiguity. The goal of this session was to reshape perceptions of "ambiguity as threatening" toward seeing "ambiguity as an opportunity to inspire." Using creative, visual, collaborative problem-solving methods, I believe participants were able to suspend judgment and build their level of comfort in these uncomfortable spaces.

University responses to COVID across Canada have presented an opportunity for educators to build their own and their students' awareness of ambiguity as a future and potentially normative state. Sessions involving design thinking/HCD/Design Anthropology hold opportunities to practice coping with future uncertainty by thinking about ambiguity as an opportunity for inspired creativity.

References

Bowen, J. A. (2016, December 7). *Helping students embrace discomfort*. Inside Higher Ed. https://www.insidehighered.com/views/2016/12/07/educating-students-ambiguity-and-discomfort-essay

Boyer, E. L. (1990). *Scholarship reconsidered: Priorities of the professoriate*. Jossey-Bass.

DeRoma, V. M., Martin, K. M., & Kessler, M. L. (2003). The relationship between tolerance for ambiguity and need for course structure. *Journal of Instructional Psychology, 30*(2), 104–109.

Du Bois, C. (1963). The curriculum in cultural anthropology. In D. G. Mandelbaum, G. W. Lasker, & E. M. Albert (Eds.), *The Teaching of Anthropology* (pp. 27–39). University of California Press.

Elisia, F. (2017, August 20). What's the difference between human-centred design and user experience design? *Prototypr.io.* https://blog.prototypr.io/whats-the-difference-between-human-centred-design-and-user-experience-design-2f48e5c9be25

Furnham, A., & Marks, J. (2013). Tolerance of ambiguity: A review of the recent literature. *Psychology, 4*, 717–728. https://doi.org/10.4236/psych.2013.49102

Huber, N. (2003). An experiential leadership approach for teaching tolerance for ambiguity. *Journal of Education for Business, 79*(1), 52–55. https://doi.org/10.1080/08832320309599088

Instructional skills network. (2020). *Instructional Skills Workshop (ISW) network description*. https://www.iswnetwork.ca/

Jacobs Institute. (2019, January 13). Respecting our relations: Dori Tunstall on decolonizing design. *Medium.* https://medium.com/@JacobsDesignCal/respecting-our-relations-dori-tunstall-on-decolonizing-design-d894df4c2ed2

Johnson, H. L., Court, K. L., Roersma, M. H., & Kinnaman, D. (1995). Integration as integration: Tolerance of ambiguity and the integrative process at the undergraduate level. *Journal of Psychology & Theology, 23*(4), 271–276. https://doi.org/10.1177/009164719502300407

Klugman, C. M., & Beckmann-Mendez, D. (2015). One thousand words: Evaluating an interdisciplinary art education program. *Journal of Nursing Education, 54*(4), 220–223. https://doi.org/10.3928/01484834-20150318-06

Kubovsky, D. (2019, April 2). *Achieving workplace diversity through design thinking*. Medium. https://medium.com/@DavidKubovsky/achieving-workplace-diversity-through-design-thinking-866015a17e49

Laurencin, C. T., & McClinton, A. (2020). The COVID-19 pandemic: A call to action to identify and address racial and ethnic disparities. *Journal of Racial and Ethnic Health Disparities, 7*(3), 398–402. https://doi.org/10.1007/s40615-020-00756-0

Levine, D. (1985). *The flight from ambiguity: Essays in social and cultural theory*. University of Chicago Press.

Liu, C. (2015). Relevant researches on tolerance of ambiguity. *Theory and Practice in Language Studies, 5*(9), 1874–1882. https://doi.org/10.17507/tpls.0509.15

Omander, M. (2020). *Wheel of names*. https://wheelofnames.com/

Radner, G. (1989). *It's always something*. Simon and Schuster.

Sklar, J. (2020, April 24). *'Zoom fatigue' is taxing the brain. Here's why that happens*. https://www.nationalgeographic.com/science/2020/04/coronavirus-zoom-fatigue-is-taxing-the-brain-here-is-why-that-happens/#close

The Hofstede Centre. (n.d.-a). *National culture: Dimensions*. http://geert-hofstede.com/dimensions.html. Accessed on 26 Apr 2014.

The Hofstede Centre. (n.d.-b). *Cultural tools: Cultural survey*. http://geert-hofstede.com/cultural-survey.html. Accessed on 26 Apr 2014.

Toquero, C. M. (2020). Challenges and opportunities for higher education amid the COVID-19 pandemic: The Philippine context. *Pedagogical Research, 5*(4), 1–4. https://doi.org/10.29333/pr/7947

Tunstall, D. (2013). Decolonizing design innovation: Design anthropology, critical anthropology, and Indigenous knowledge. In W. Gunn, T. Otto, & R. C. Smith (Eds.), *Design anthropology: Theory and practice*. Bloomsbury.

United Nations. (2020, March 19). *Preventing discrimination against people with disabilities in COVID-19 response*. United Nations (UN) News 2020. https://news.un.org/en/story/2020/03/1059762

Wayne, S., Dellmore, D., & Kalishman, S. (2012). Increasing students' tolerance of ambiguity: The need for caution. *Academic Medicine, 87*(7), 835. https://doi.org/10.1097/ACM.0b013e3182586bdd

Wenham, C., Smith, J., Morgan, R., & Gender and COVID-19 Working Group. (2020). COVID-19: The gendered impacts of the outbreak. *Lancet, 395*(10227), 846–848. https://doi.org/10.1016/S0140-6736(20)30526-2

World Health Organization. (2020). *Mental health and psychosocial considerations during the COVID-19 outbreak*. https://apps.who.int/iris/bitstream/handle/10665/331490/WHO-2019-nCoV-MentalHealth-2020.1-eng.pdf

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Information and Communication Technology for African Higher Education Institutions: Challenges and Opportunities

Abdullahi Hussein

> *If the structure does not permit dialogue, the structure must be changed.*
>
> *Paulo Freire*

1 Introduction

The COVID-19 outbreak has led most governments around the world to temporarily close learning institutions, including universities, colleges, and schools. UNESCO has estimated that these nationwide "closures are impacting 60% of the world's student population" (UNESCO, 2020). The pandemic has presented considerable challenges for the global higher education community (Crawford et al., 2020).

To mitigate the impact of COVID-19 on students, teaching and learning have moved from face-to-face to online delivery in almost all countries (Murphy, 2020). Technology is now at the center of education, and its use in "all fields of education is at a historical high" (Kerres, 2020). The transition to online education has been far from smooth, however. For instance, Watermeyer et al. (2020) conducted a study with participants from all universities in the United Kingdom and found that only about half the academics who took part in the study felt "prepared to deliver online learning, teaching and assessment" and that the "online migration is engendering significant dysfunctionality and disturbance to their pedagogical roles and their personal lives" (p. 1).

Like the rest of the world, many African universities had to close as part of their lockdown measures (Mohamedbhai, 2020), and universities had no choice but to

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move their classes online. The Association of African Universities (AAU) developed provisions aimed at supporting African universities with their online teaching (AAU, 2020). However, a recent survey conducted by Mawazo Institute (2010) on the impact of COVID-19 on African's higher education system found that despite 82.6% of the respondents reporting disruption of classes as a result of COVID-19, only 38.5% of institutions are offering e-learning options to mitigate the impact. In Kenya, one university leader was recently quoted in a local newspaper as saying that "while many Kenyan universities tried to teach using the digital platforms, they could not reach all the students" Njeru, (2020). This could be attributed to the lack of staff readiness and not due to poor ICT infrastructure.

The full extent to which COVID-19 has impacted and is continuing to impact African higher education and how universities have responded to the challenges is unknown due to the scarcity of data on the topic. It is a new phenomenon. In the absence of current data on the impact of COVID-19 on African higher education, and, in an effort to understand the continent's higher education institutions' readiness to move online, the author has decided to focus on the broader issue of Africa's experience in integrating ICT into the curricula of its higher education institutions. If higher education's experience of integrating ICT prior to COVID-19 has not been successful, it is safe to assume a low level of readiness to respond to the challenges presented by the current pandemic. This is significant given that technology is central to a successful transition to online education in response to COVID-19. This chapter attempts to answer the following research questions:

1. To what extent are higher education institutions in sub-Saharan Africa, excluding South Africa, being successful in their attempts to integrate ICT into their curricula?
2. What challenges did African higher education institutions face regarding ICT integration prior to the COVID-19 pandemic?

To answer these research questions, the author systematically reviews the available literature in the field. The author, an African researcher himself, also reflects on his own experience and expertise in the field having been closely following this issue for more than the past 15 years; in addition, the author draws on Paulo Freire's critical social theory as a conceptual basis for evaluating and understanding African higher education's journey toward ICT integration (Freire, 1972). Dialogue, a problem-posing model, and a humanizing approach are critical elements of Freire's teaching approach as contrasted with the usual dehumanizing "banking style" of education where students are simply fed "facts" and not encouraged to question. In Freire's view, the former method of education leads to freedom from oppression, whereas the latter perpetuates the power of the oppressors. In other words, access to high-quality education, in this case, via skilled application of ICT integration, is an essential factor in moving individuals and populations toward greater levels of freedom and fulfillment as human beings. Freire's theory has been used in the past in different countries (Kirkwood & Kirkwood, 1989; Mooney & Nolan, 2006; Raja, 2005) and different fields, including ICT staff development, teacher training, health

care, economics, and sociology, to name a few (Baird, 1999; Gadotti, 1994; Malewski et al., 2005; Stigmar & Körnefors, 2005).

In the first section, this chapter provides background information on the expansion of higher education in Africa. It then gives an overview of the benefits successful integration of ICT can offer, particularly to the African higher education sector. This is followed by the identification of significant challenges that sub-Saharan African higher education is facing. The final section draws conclusions and points the way forward for teaching and learning beyond the COVID-19 pandemic.

2   ICT in Education: Challenges and Opportunities

In the last two decades, the higher education sector in sub-Saharan Africa has witnessed rapid growth. Countries that in the mid-1990s had only a few, mainly public universities, now have more than 20 or 30 higher education institutions. Even a country like Somalia, which has not had an effective central government since the early 1990s, has seen an increase in its higher education institutions (Hussein, 2017; Leeson, 2007). This growth has been primarily led by the private sector (Darvas et al., 2017). As reported by the World Bank, the rate of enrolment in higher education in most of sub-Saharan Africa has increased (Darvas, et al., 2017) – in fact, it has been the highest in the world (Ouedraogo, 2017). The expansion in the sector has mainly been driven by Africa's relatively young demographic and because higher education represents "the best way to gain high salaries and better employment" (Elsiddig, 1993, p. 138).

Globally, the last two decades have also witnessed an increased interest in integrating ICT into higher education. El Maroufi (2014, p. 1) observed that "the use of ICT in teaching and learning has become a priority during the last decade in virtually all developed countries." ICT in education has been found to play a significant role in changing the way people think and learn (Elemam, 2016).

Sub-Saharan Africa has also attempted to benefit from ICT and integrate it into its higher education ecosystem. Indeed, the AAU has long called for the development and use of ICT in revitalizing African universities in the twenty-first century. The AAU also urges African universities to study the ICT status of their institutions as well as to study the integration of technology into their curriculum (AAU, 2000).

African higher education policymakers have taken a keen interest in ICT because of the perceived benefits to students, lecturers, and the higher education ecosystem in general. Widening access to higher education is one of the benefits ICT can offer to African higher education institutions (Uys et al., 2004). Despite expansion in that sector, higher education remains a privilege that only a few well-off people enjoy compared to the larger population. Many qualified students in sub-Saharan Africa cannot gain access to universities due to the limited places available (Donat, 2001; Oketch, 2003; Simmons et al., 2011). A related fact is that most African universities are located exclusively in urban cities (Tony, 2005). This issue limits the opportunities of rural-based students to gain access to higher education. ICT has further been

viewed as a tool that can allow students and lecturers to access information anywhere in the world and allow students to access free-to-use course materials (Zulu, 2018). ICT also allows students and lecturers to access a variety of academic journals and papers via the Internet as well as through electronic databases (Ojo, 2005). This is particularly significant given that most universities in sub-Saharan Africa "rarely have modern journals, and students lack access to online databases" (Simmons et al., 2011, p. 78). The flexibility of learning time and location and savings in time and money are additional benefits that ICT can offer to higher education in Africa (Kamel & Ibrahim, 2003; Katz & Yablon, 2003; Kirkwood & Price, 2005; Littlejohn & Pegler, 2007; Madyarov & Taef, 2012; Wright & Reju, 2012).

Because of these perceived benefits of ICT in higher education, universities in sub-Saharan Africa have engaged in the process of expanding and modernizing already existing ICT provisions and establishing new universities that use ICT programs. The African Virtual University (AVU) , funded by the World Bank, was established in the mid-1990s and was the first virtual-based University in Africa. The AVU is an intergovernmental organization, partnering with more than 50 institutions in over 27 countries in Africa, and uses technology to deliver its contents (AVU, 2003). The original aim of AVU was to bring high-quality education to a large number of African students, thereby producing sufficient numbers of well-trained African scientists, technicians, engineers, and business managers, which are required for economic development (Aguti, 1999; Oketch, 2003; Donat, 2001; Hanna & Latchem, 2002; Light, 1999; Moyo, 2003). This was due to the fact that local universities had failed to fulfil this responsibility (Oketch, 2003). Although some recent commentators have pointed out the relative success of AVU in some countries and acknowledged mistakes during the initial years (Nafukho & Muyia, 2013), the failure of the AVU project to achieve its objectives has been reported by researchers in more than one country (Oketch, 2003; Moyo, 2001, 2003; Ondari-Okemwa, 2002; Wolff, 2002).

Arguably, it is not the only AVU that is struggling; the rest of sub-Saharan African higher education's ICT projects are also struggling to achieve their desired objectives of integrating ICT into their pedagogy. Many studies indicate that the continent is facing multiple challenges in its attempts to successfully integrate ICT into higher education. Although the nature of the obstacles may vary from one country to another, there are several common obstacles that most, if not all, sub-Saharan African countries face (excluding South Africa). These common obstacles are discussed next. The challenges can be categorized under two broad themes: infrastructure and pedagogy.

Infrastructure and staff development are key challenges facing sub-Saharan African higher education institutions. The continent's lack of ICT infrastructure is consistently being reported in the literature. For instance, the main hindrances that have been identified as facing African education systems are a lack of infrastructure, a lack of accessibility, a lack of networking, high telephone and Internet costs, limited expertise and skills, and a lack of enabling national policies (Farrell et al., 2007; Ojuloge & Awoleye, 2012; Tarus et al., 2015). Tarus et al. (2015) found the following as the top educational challenges faced by Kenya: inadequate ICT and

e-learning infrastructure, financial constraints, and lack of affordable and adequate Internet bandwidth.

However, several researchers have pointed out that the cause of the failure of ICT in higher education is not due to poor ICT infrastructure, as the continent has "some of the most modern ICT facilities, that have been either donated or sold to its people, or have been assembled with the use of cheap labour" (Ocholla, 2003, p. 182). Britz et al. (2006) also made similar suggestions by arguing that Africa has made progress in terms of ICT development: "Not only is there an exponential growth of ICTs on the African continent, but to a certain extent Africa has leapfrogged into new technology" (p. 32). In fact, in some sectors of society, sub-Saharan Africa leads the rest of the developing countries in the effective utilization of ICT. The finance sector – particular mobile money – is an excellent example of this (Jack & Suri, 2011; Nyaga, 2014).

This suggests that Africa has developed technologically beyond the expectations of many. However, as Ojo (2005) rightly argues, "having technologies is one thing, but whether or not people can use them effectively is another thing entirely" (p. 95). This is what appears to be happening in sub-Saharan Africa. The availability of "modern" technology did not automatically make higher education institutions on the continent use that technology.

Arguably, the obstacles that African higher education institutions are facing are not due to poor ICT infrastructure but rather to the lack of readiness for ICT changes (Ilfinedo, 2005). Readiness for ICT development must start by considering how well prepared the staff members in higher education institutions are for these changes before considering any ICT program that might be implemented. This does not imply that academics are to blame for the lack of progress with ICT development as they are mainly not "anti-technology" (O'Donoghue, 2006). Instead, it reflects the lack of perceived relevance that such technology represents to many educators (Cuban, 2001).

3   ICT Professional Development

Many studies have attributed the lack of staff development as a reason for the failures of ICT projects in sub-Saharan African universities. For instance, Murgor (2015) found a lack of ICT development to be a challenge for African higher education institutions. Donnelly et al. (2011) identified two orders of barriers preventing the successful integration of ICT. They describe the first order as the non-availability or inadequacy of resources, training, and support. A similar observation was made by Ergado (2019, p. 178), who considered the lack of training for "teachers and students" as one of the challenges facing Ethiopian higher education institutions in their attempts to integrate ICT.

The lack of academic and professional development for ICT utilization led some university lecturers in Zimbabwe to hardly use any ICT for instructional purposes due to the lack of requisite ICT skills and knowledge (Chitiyo & Harmon, 2009).

Similar findings were reported among lecturers in Kenyan higher education institutions, where lecturers' computer literacy skills were described as basic (Tarus, 2011; Tarus et al., 2015). Tarus et al. (2015) also found in a study conducted in Kenya that most of the academics in universities "have low ICT and e-learning skills because most of them were trained in the absence of an ICT environment" (p. 133) and, as a result, argued the need for "comprehensive training of lecturers on e-learning skills" (p. 134) as critical for the success of ICT development in Kenyan universities.

Some institutions reported having staff development schemes in place and providing training to all their academics, but this ICT staff training was found to be ineffective and, to some extent, "dehumanizing" as reported by Hussein (2009, p. 123). The training content was developed without the academics' involvement, and the training did not address their needs, yet academics were forced by management to attend (Hussein, 2009; Hussein, 2012). This indicates that even those institutions that happen to have some ICT staff development do not use dialogue and problem-posing approaches. Instead, they were found to be "forcing" academics to take part in training, which did not appear to address their needs. Academics had no choice but to attend training to fear losing their jobs (Hussein, 2009; Hussein, 2012). These are clear examples of what Freire referred to as "dehumanizing" approaches to education (Freire, 1972).

The importance of staff readiness to use ICT cannot be underestimated. The intention to adopt ICT in higher education is not an aim in its own right, but rather a means to achieve pedagogical and instructional objectives (Hussein, 2009). ICT should not be acquired only because it has some special status and is different from traditional approaches but rather because of its usefulness to the teaching and learning processes. Thus, Oliver and Dempster (2003) have argued that the process of integrating ICT curriculum should be pedagogically led rather than technology-driven. Changing practice by academic staff has been considered vital for the successful implementation of ICT projects in higher education; however, such changes do not automatically follow from a flow of information or just by providing the latest technological development (Hussein, 2009). Stensaker et al. (2007) argue the importance of effective linking between "purpose, people, and pedagogy" for the success of ICT in higher education.

4   Conclusion

This chapter aimed to understand the extent to which higher education institutions in sub-Saharan Africa, excluding South Africa, are being successful in their attempts to integrate ICT into their curricula and to understand the challenges African higher education institutions faced regarding ICT integration prior to the COVID-19 pandemic. To answer these questions, the author reviewed the available literature on higher education's experience in integrating ICT into their curricula prior to the COVID-19 pandemic by using Paulo Freire's conceptual background.

The chapter has identified the benefits ICT can offer to resolve a number of challenges the higher education sector is facing, including widening access to higher education, increasing access to resources, saving time and money, and augmenting the flexibility of its teaching and learning processes. The chapter has also identified challenges that are being faced in obtaining these benefits. Some researchers have identified poor ICT infrastructure as a challenge to successful ICT integration. However, this study argues that the cause of the lack of success in ICT integration projects in the continent is not poor infrastructure but rather the dearth of ICT staff development. Admittedly, in some countries, poor ICT infrastructure remains an issue; this is particularly true as Africa does not produce technology locally and instead relies on ICT importation. While the importation of ICT tends to be the focus of higher education policymakers, ICT staff development rarely gets the attention it deserves. ICT staff development in sub-Saharan Africa has been found to be either non-existent or ineffective and, to some extent, dehumanizing. Consequently, this study predicts the likelihood of higher education not being successful in moving their classes online in response to the COVID-19 pandemic. The study further considers ICT staff development as a key to successful ICT projects in the future and stresses the importance of adopting humanizing training approaches (Hussein, 2009). This chapter also acknowledges the need for further studies in the field to shed more light on the topic. In the absence of current data on higher education's experience, the author relied on the available literature in the field to answer the questions instead of fieldwork (which is challenging if not impossible in the midst of a global pandemic). This should be considered a limitation of the current study.

References

Aguti, J. N. (1999). One year of virtual university experience at Makerere University in Uganda. *In Empowerment through Knowledge and Technology (Online).* Proceedings of the 1st Pan-Commonwealth Forum on Open Learning, Brunei Darussalam. Vancouver, Canada: Commonwealth of Learning. Retrieved from http://col.org/forum/PCFpapers/aguti1.pdf

Association of African Universities. (2000). Report on technical experts meeting on the use and application of information and communication technologies in higher education institutions in Africa. Dar es Salaam: University of Dar es Salaam.

Association of African Universities. (2020). COVID-19. Retrieved from https://www.aau.org/covid-19/

AVU (2003), "The African Virtual University: education for the knowledge age", Retrieved from https://www.avu.org

Baird, I. C. (1999). The examined life: Women' s liberator learning within a lockedin Society. International Journal of Lifelong Education, 18(2), 103–109.

Britz, J. J., Lor, P. J., Coetzee, I. E. M., & Bester, B. C. (2006). Africa as a knowledge society: A reality check. *The International Information & Library Review, 38*, 25–40.

Chitiyo, R., & Harmon, S. W. (2009). An analysis of the integration of instructional technology in pre-service teacher education in Zimbabwe. *Educational Technology, Research and Development, 57*(6), 807–830.

Crawford, J., Butler-Henderson, K., Malkawi, B., Glowatz, M., Burton, N., Magni, P. A., & Lam, S. (2020). COVID-19: 20 countries' higher education intra-period digital pedagogy responses. *Journal of Applied Learning & Teaching, 3*(1), 1–20.

Cuban, L. (2001). *Oversold and underused: Computers in the classroom*. Harvard University Press.

Darvas, P., Gao, S., Shen, Y., & Bawany, B. (2017). *Sharing higher Education's promise beyond the few in sub-Saharan Africa*. World Bank Group. Retrieved from http://documents1.worldbank.org/curated/en/862691509089826066/pdf/120693-PUB-PUBLIC-PUBDATE-10-25-17.pdf

Donat, B. N. P. (2001). International initiatives of the virtual university and other forms of distance learning: The case of the African Virtual University. *Journal of Higher Education In Europe, 26*(4), 577–588.

Donnelly, D., McGarr, O., & O'Reilly, J. (2011). A framework for Teachers' integration of ICT into their classroom practice. *Computers & Education, 57*(2), 1469–1483.

El Maroufi, Y. (2014, February 9). *Advantages of using ICT in learning–Teaching processes*. Retrieved from https://edtechreview.in/trends-insights/insights/959-advantages-%20of-using-ict-in-learning-teaching-processes

Elemam, A. E. (2016). Barriers to Implementation of Information and Communication (ICT) in public Sudanese secondary schools: Teacher's prospective. *Journal of Sociological Research, 7*(1), 33–43.

Elsiddig, M. (1993). Planning higher education: Towards an open university for the Sudan. *Distance Education Journal, 14*(1), 138–146.

Ergado, A. A. (2019). Exploring the role of information and communication technology for pedagogical practices in higher education: Case of Ethiopia. *International Journal of Education and Development using Information and Communication Technology (IJEDICT), 15*(2), 171–181.

Farrell, G., Isaacs, S., & Trucano, M. (2007). *Survey of ICT and education in Africa: Survey of ICT and education in Africa (volume 2): 53 country reports*. infoDev/World Bank Group. Retrieved from http://oasis.col.org/bitstream/handle/11599/248/SurveyICTEducationAfrica_Volume2.pdf?sequence=1&isAllowed=y

Freire, P. (1972). Pedagogy of the Oppressed. New York: Continuum Publishing Company.

Gadotti, M. (1994). *Reading Paulo Freire: His life and work* (J. Milton, Trans.). State University of New York Press.

Hanna, D. E., & Latchem, C. (2002). Beyond National Borders: Transforming higher education institutions. *Journal of Studies in International Education, 6*(2), 115–133.

Hussein, A. (2009). Freirian and postcolonial perspectives on E-learning development: A case study of staff development in an African university. Doctoral dissertation. Institute of Education, University of London.

Hussein, A. (2012). Freirian and postcolonial perspectives on E-learning development: A case study of staff development in an African university. *The International Journal of Critical Pedagogy, 4*(1), 135–153.

Hussein, A. (2017). Challenges in curriculum and language of instructions in post-conflict Somalia- a case study. In M. R. Izarali, O. Masakure, & E. Shizha (Eds.), *Security, education and development in contemporary Africa* (pp. 173–185). Routledge.

Ilfinedo, P. (2005). Measuring Africa's e-readiness in the global networked economy: A nine-country data analysis. *International Journal of Education and Development using Information Communication technology, 1*(1), 53–71.

Jack, W., & Suri, T. (2011, January). *Mobile money: The economics of M-PESA* (NBER Working Paper Series, Working Paper 16721). National Bureau of Economic Research. Retrieved from https://www.nber.org/papers/w16721.pdf?new_window=1

Kamel, S., & Ibrahim, M. (2003). Electronic training at the corporate level in Egypt. *Industry & Higher Education, 17*(6), 409–416.

Katz, Y. J., & Yablon, Y. B. (2003). Online university learning: Cognitive and affective perspectives. *Campus-Wide Information Systems Journal, 20*(2), 48–54.

Kerres, M. (2020). Against all odds: Education in Germany coping with Covid-19. *Postdigital Science and Education, 1*(May), 1–5.

Kirkwood, G., & Kirkwood, C. (1989). *Living adult education: Freire in Scotland*. Open University Press in association with the Scottish Institute of Adult and Continuing Education.

Kirkwood, A., & Price, L. (2005). Learners and learning in the twenty-first century: What do we know about students' attitudes towards and experiences of information and communication technologies that will help us design courses? *Studies in Higher Education, 30*(3), 257–274.

Leeson, P. (2007). Better off stateless: Somalia before and after government collapse. *Journal of Comparative Economic, 35*(2007), 689–710.

Light, D. (1999). Pioneering distance education in Africa. *Harvard Business Review of African Political Economy, 77*(5), 26.

Littlejohn, A., & Pegler, C. (2007). *Preparing for blended e-learning*. Routledge.

Madyarov, I., & Taef, A. (2012). Contradictions in a distance course for a marginalized population at a middle eastern university. *International Review of Research in Open and Distance Learning, 13*(2), 77–100.

Malewski, E., Phillion, J., & Lehman, J, D. (2005). A Freirian framework for technology-based virtual field experiences. Contemporary Issues in Technology and Techer Education, 4(4), 410–428.

Mawazo Institute. (2010). *Survey report: The impact of COVID-19 on Africa's higher education systems*. Retrieved from https://static1.squarespace.com/static/57d0650220099eacd505d3fc/t/5eb2ced6d9b0e76c64e29834/1588776690884/6_5_COVID-19+Survey+Report+Final.pdf

Mohamedbhai, G. (2020). *COVID-19: What consequences for higher education?'* Retrieved from https://www.universityworldnews.com/post.php?story=20200407064850279

Mooney, M., & Nolan, L. (2006). A critique of Freire's perspective on critical social theory in nursing education. *Nurse Education Today Journal, 26*(3), 240–244.

Moyo, S. M. (2001). Experiences of running the African Virtual University (AVE) in Zimbabwe. Africa 20th ICDE world Conference on Open Learning and Distance Education, Dusseldorf Germany 01-05 April, 2001.

Moyo, S. (2003). Distance learning and virtual education for higher education in Africa: Evaluation of options and strategies. African and Asian Studies, 2(4), 987–521.

Murgor, T. K. (2015). Challenges facing adoption of information communication Technology in African Universities. *Journal of Education and Practice, 6*(25), 62–68.

Murphy, M. P. A. (2020). COVID-19 and emergency eLearning: Consequences of the securitization of higher education for post-pandemic pedagogy. *Contemporary Security Policy, 41*(3), 1–14.

Nafukho, F. M., & Muyia, M. H. (2013). The World Bank's Africa virtual university project: A revisit. *European Journal of Training and Development, 37*(7), 646–661.

Njeru, A. (2020, July 14). Final-year students to come first when varsities reopen. *Daily Nation Newspaper*. Retrieved from https://www.nation.co.ke/kenya/news/education/final-year-students-to-come-first-when-varsities-reopen-1762062

Nyaga, J. K. (2014). Mobile banking Services in the East African Community (EAC): Challenges to the existing legislative and regulatory frameworks. *Journal of Information Policy, 4*, 270–295.

O'Donoghue, J. (2006). *Technology supported learning and teaching: A staff perspective*. Information Science Pub.

Ocholla, D. N. (2003). An overview of informational and communication technologies (ICT) in the LIS schools of eastern and southern Africa. *Education for Information, 21*(2–3), 181–194.

Ojo, T. (2005). Wiring sub-Saharan Africa for development. *International Journal of Education and Development using Information and Communication technology (IJEDIC), 1*(3), 94–107.

Ojuloge, B., & Awoleye, M. O. (2012). Analysis of internet diffusion and adoption in selected African countries. *International Journal of Internet of Things, 1*(3), 5–11.

Oketch, M. (2003). The growth of privet university education in Kenya: The promise and challenge. *Peabody Journal of Education, 78*(2), 18–40.

Oliver, M., & Dempster, A. J. (2003). Embedding E-learning practices. In R. Blackwell & P. Blackmore (Eds.), *Towards strategic staff development in higher education* (pp. 142–153). SRHE/OU Press.

Ondari-Okemwa, E. (2002). Challenges of harnessing virtual information in Kenya: The case of the African virtual university. *Journal of Information Science, 28*(4), 321–329.

Ouedraogo, B. (2017). Model of information and communication technology (ICT) acceptance and use for teaching staff in sub-Saharan Africa public higher education institutions. *Higher Education Studies, 7*(2), 101–118.

Raja, N. (2005). Humanisation of education in Pakistan through Freire's concepts of literacy. *Asia Pacific Review Journal, 6*(1), 1–6.

Simmons, L. L., Mbarika, A., Mbarika, V. W., Thomas, C. A., Tsuma, C., Wade, T. L., & Wilkerson, D. (2011). TeleEducation initiatives for sub-Saharan Africa: The case of the African Virtual University in Kenya. *Journal of STEM Education, 12*(5), 78–90.

Stensaker, B., Maassen, P., Borgan, M., Oftembro, M., & Karseth, B. (2007). Use, update and integration of ICT in higher education: Linking purpose, people and pedagogy. *Higher Education, 54*(3), 417–433.

Stigmar, M., & Kornefors, R. (2005). Pedagogical challenges in connection to faculty development in web-based education. Proceedings of the LASTED International Conference Education and Technology, July 4-6, 2005. Calgary, Alberta, Canada, pp 34–37.

Tarus, J. (2011). *Adoption of e-learning to support teaching and learning in Moi University*. Thesis presented in partial fulfillment of the requirements for the degree of Master of Philosophy (Information Technology), Moi University, Kenya.

Tarus, J. K., Gichoya, D., & Muumbo, A. (2015). Challenges of implementing E-learning in Kenya: A case of Kenyan public universities. *The International Review of Research in Open and Distance Learning, 16*(1), 120–141.

UNESCO. (2020). '*Education: From disruption to recovery*.' Retrieved from https://en.unesco.org/covid19/educationresponse

Uys, P. M., Nleya, P., & Molelu, G. B. (2004). Technological innovation and management strategies for higher education in Africa: Harmonizing reality and idealism. *Education Media International, 41*(1), 67–80.

Watermeyer, R., Crick, T., Knight, C., & Goodall, J. (2020). COVID-19 and digital disruption in UK universities: Afflictions and affordances of emergency online migration. *Higher Education, 2020.* https://doi.org/10.1007/s10734-020-00561-y

Wolff, L. (2002, April–June). *The African virtual university: The challenge of higher education development in sub-Saharan Africa*. TechKnowLogia, 23–25. Retrieved from: http://www.utsc.utoronto.ca/~chan/istb01/readings/AVU.pdf

Wright, C. R., & Reju, S. A. (2012). Developing and deploying OERs in sub-Saharan Africa: Building on the present. *The International Review of Research in Open and Distance Learning, 13*(2), 181–220.

Zulu, A. (2018). Augmenting face-to-face learning with information and communication Technology at a Resource-Constrained Peri-Urban University Campus in Namibia. *Africa Education Review, 16*(6), 1–12.

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Notes from the Portal: Feminist Educational Practices in/Post- Pandemic Art and Design Classrooms

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> *…in the midst of this terrible despair, (the pandemic) offers us a chance to re-think the doomsday machine we have built for ourselves. Nothing could be worse than a return to normality. Historically, pandemics have forced humans to break with the past and imagine their world anew. (COVID-19) is no different. It is a portal, a gateway between one world and the next. We can choose to walk through it, dragging the carcasses of our prejudice and hatred, our avarice, our data banks and dead ideas, our dead rivers and smoky skies behind us. Or we can walk through lightly…ready to imagine another world. And ready to fight for it.*
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> *Arundhati Roy, The Pandemic is a Portal, April 3, 2020.*

1 Introduction

As I write in late June 2020 in Ontario, Canada, I experience how the pandemic has evolved. All over the world, outbreaks spread through populous and disenfranchised communities drawing the gaze of recovery towards how this virus intersects with gender, race, social class, and age. In this unusual and devastating space, many are ill or have lost their lives, and there is a deeply experienced haunting of what once was. I observe the past lingering within us; however, our current evocation also recognizes that there were serious and damaging problems embedded in our pre-COVID histories that must be abandoned before recovery. Avery Gordon reminds us "if we want to study social life well, and if in addition, we want to contribute … to changing it, we must learn how to identify hauntings…(and) change the way we have been doing things" (1997, p. 23). If this current narrowing of life can be

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considered, as Arundhati Roy suggests, a "portal," then I am currently somewhere in the middle of it: a white, settler (British), educated, heterosexual, cis-gendered artist and educator directing these portal echoes at reflection and educational transformation while moving towards an approaching, illuminated future (2020).

COVID-19 has greatly impacted the way we interact and integrate with the world around us. It has forced many to address and adapt to the chaos and messiness of abruptly shifting into self-isolation/quarantine. We sought means to embrace being flexible in the way we work, socialize, and educate, and reflect on how we have been emotionally affected by all of the change and suffering. Racialized communities have been specifically impacted by the wrath of COVID-19 and have united in protests demanding systemic change and radical transformation by inserting underrepresented and multiple voices into the homogeneous status quo.

The pandemic's impact has also given educators an opportunity to re-think neoliberal educational strategies and the traces of pre-existing inequities within academia. With an event like COVID-19 within our educational systems, students and faculty are all grappling with a heavy emotional toll and a multitude of changes to how and where they learn. This educational fallout illustrates a pressing need for feminist approaches to teaching and learning that leave behind the rigid, colonial, and career-focused objective structures of traditional academia. Intersectional Feminist educational practices can steady educators in this transitory time as it historically values and utilizes unease, flexibility, multiplicity, and self-reflection. Through the lens of my 17-year career in education and experience teaching through the current pandemic post-secondary semesters, I will explore specific approaches on how to integrate feminist educational practice during and post COVID within Art and Design programs.

All students/faculty – regardless of and because of their gender, race, age, sexual orientation, and social class – will benefit from feminist educational strategies as they offer helpful ways into learning and creating. Moreover, these theories and techniques build upon the adaptable, inclusive, and reflexive methods practiced as a necessity within the constraints of the COVID-19 pandemic. Although I advocate for the implementation of feminist educational praxis within and outside of all classrooms, the focus of this chapter is for creative classrooms and comes from the perspective of an interdisciplinary feminist artist, rather than a Women's Studies/ Gender Studies scholar. Sandra Stanford Friedman describes interdisciplinary work within feminism and, in her case, literary studies, as traveling between two "homes" (2001, p. 507). With a deliberate interaction between different disciplines, Stanford Friedman's work exists within a broader interconnected field of study:

> My disciplinary "home" (Literary Studies) has provided an intellectual anchoring – a substantive base of knowledge…My political home in academic feminism has provided an approach to asking questions about gender, power relations, and other systems of stratification along with the ethical commitment to social justice and change. From these two "homes," I have traveled far afield into other people's (inter) disciplinary "homes," bringing back to my base what I have learned and what is most useful to me. (2001, 507)

In my case, my "disciplinary 'home'" is Visual Art, and Art and Design History and Theory, which have been informed by "my political home in academic feminism"

(Friedman, 2001, p. 507). In this way, readers at the margins of a feminist practice can also benefit from interdisciplinary travel between feminist ideologies and their core academic focus. Within my teaching practice, this collaborative border-crossing has also attempted to address sexism within the business and historical retelling of the Arts while simultaneously provoking awareness, and activism, of how my students' practice will be impacted by creative androcentrism.

To engage with feminist praxis within and outside the Arts classroom is to also recognize academia's contribution to the pre-COVID academic state. In other words, to go through the portal is to know how it was constructed. The institutional framework of post-secondary education has become destabilized alongside the unsteady narrowing of pandemic life. As colleges and universities inspect anti-racism and equity within their own institutions, feminism advocates for a critical education that understands that schools, and education, in general, are organized within a field of power (Bourdieu & Passeron, 1977). Moreover, Davies (2006) suggests that "When we make a critique of any discourse, or attempt to dismantle it, we are also inside it" (p.500). In order to address and release what no longer academically serves students and faculty, I too advocate for awareness within the portal by utilizing feminist educational strategies. This transitionary COVID-19 era cannot yet be a total severing from past models of oppression and dominance. Rather, we are still towing our histories and meanings within language and practice such that we can deconstruct all repressive models while being inside the liminal portal itself. The goal, then, of deconstruction from within, is to become aware of and leave behind the harmful aspects of pre-pandemic education.

2   Embracing Messiness

To recognize the ever-changing COVID-19 context is to accept that *portal* life will inevitably be cluttered. Because life outside of academia is already destabilized, we can utilize our new shapeshifting skills within post-secondary Arts education. Oscillating between the past, present, and uncertain academic and global future demands a theoretical stabilizing that feminist pedagogy can provide specifically because it resists binary polarities. Feminist educational pedagogy welcomes that which is in flux rather than static and offers critical insight that embraces relational theory concepts such as both/and in times of transition rather than either/or dualistic thinking (Collins & Bilge, 2016). Indeed, the simultaneous layering of context, experience, reflection, and action all dissolve the binaries of the portal itself and recognize one of the costs of a non-linear order: life, as we know it, is now in shambles. Sarita Srivastava reminds students and faculty to "abandon perfection, purity, and theoretical consistency. The corollary: Do not fear messiness and anxiety" (2019, p. 68). This is a helpful reminder that teaching and learning in a global pandemic is bound to feel messy too. Since so much is changing within our personal lives and our local communities, students are turning to their student peers and

professors to share their stories of experience. Despite the many flaws of COVID academia, this reimagined classroom still serves as a craved form of community.

For Art and Design students, their personal chaos may also be expressed through their studio projects. It is here where educators have a powerful opportunity to soften their pre-COVID rigidity while in the pandemic's madness, and to channel the fear and the sorrow of their students into productive and creative practices. At the beginning of each teaching term during the pandemic, I post a Call to Art/Action message for my students which encourages them to actively remember this moment of time, to embrace that which creatively flows, and to direct their concepts and practices towards social justice and inner healing work. Current students will inherit a post-pandemic world, and their art and design practice must respond to this context. Here is an excerpt from my Call to Art message posted to Online/On-Campus Design students in March 2020:

> This is a Call to Action for students. We are in the midst of (the pandemic) and you have the critical skills to observe, record, engage and transform within in. Write and create right now – document the interconnections between design, space, interaction, and isolation. Let this time be a place for something to emerge that then acts upon and shapes our world …What comes next for art and design after COVID can be manifested by you now.

Instead of shying away from the chaos by being buried in the pre-COVID curriculum, the paradigm must shift in the way we acknowledge the dynamic overlap of experience and learning. In other words, because this virus is already changing their lives, we must encourage the impact of COVID-19 to be processed by our students, as evident and punctuated in their creative assignments. In response to the Call to Art message, students began situating their class discussions and critiques to engage with the current context while describing their anxieties through cathartic, creative work. Within the chaos, the portal is where we find the commonalities of experience and the important differences that make experiences nuanced and deeply personal. Acknowledging the messy layering of understanding for Arts students will require professional agility and a willingness to adapt.

3 Embracing Multiplicity

During the pandemic, racialized people around the world have continued to revolt against the status quo's insistence on one kind of voice (a White voice) dominating the pre/during COVID-19 reality. Postmodernism and Intersectional feminist theories have long encouraged the inclusion of multiple voices into all areas of life, although neither have had lasting success in infiltrating this ideology within academia. With the momentum of Black, Indigenous, and racialized communities illuminating and provoking COVID discourse through their experiences, Arts educational practices can also utilize methods of inclusion and multiplicity to support design and delivery methods and self-reflective activities. In this way,

embracing multiplicity as a strategy within curriculum design and delivery can address some educational challenges during/post-COVID.

Art and Design curriculum writing now requires imaginative and dexterous adaptability that should balance learning outcomes, knowledge/experience-gained assessment, and artistic community building despite this mess in the portal. When asked now to create and teach courses, the task has become threefold: to create asynchronous unit lessons for online (OL) students; to adapt the course work for o-campus (OC) delivery for future terms; and, due to an expected second or third wave of COVID-19, to be prepared for a future synchronous OC courses to have to change to OL and virtual learning via video conferencing. This challenge creates opportunities to consider how feminist theories of multiplicity can support the development of units of study and how courses need to pivot at any given moment to different platforms.

Art and Design teachers can reconsider any static curriculum development and delivery during/post-pandemic to shift towards elasticity and multiplicity in creation and delivery modes that intersect feminist educational pedagogy and the artistic process. Utilizing a political feminist pedagogical "home" is also helpful to negotiate during/post-COVID-19 as straddling multiple fields of study that simulates the current dynamic global experience while in the portal. Feminist educational strategies advocate for valuing multiple points of view – or in terms of curriculum creation – multiple ways into researching/creating content and opportunities for learning. Utilizing the both/and framework again, feminist Arts curriculum can embrace both OL /OC curriculum writing approaches and accept the challenges that emerge from the educational straddling and quick adaptation within each model. Inspired by Reinharz (1992), Rebecca Roper-Huilman and Kelly T. Winters have found "Feminist research could be characterized as valuing multiplicity in methods and disciplines, an openness to critique, human diversity both among researchers and participants, and a belief that research can create social change" (2011, p. 671). Here, the research going into the curriculum development and the continual critique of theory and practice are helpful to course creation both during and post COVID-19. Valuing and practicing varied educational developmental methodologies and deliveries, while simultaneously deconstructing the impact of racial bias and marginalization within these methodologies, may empower racialized experiences within and outside of the classroom. This is a way into a transformational educational revolution.

4   Embracing Reflection

Outside of academia during COVID-19, self-reflective activities are ubiquitous due to a shifting of time and activity, the lifeline of social media, and/or the general desire to share and connect. As student artists unpack the trauma of the pandemic, their mental and physical health as well as their learning process have been significantly impacted. The Art and Design teacher has also been affected by the virus in

a myriad of ways that both overlap and contrast her/their/his students. Engaging in self-reflective practices is another feminist educational strategy that supports community building for all class members during/post-pandemic.

Having to abruptly end OC instruction in the middle of the Winter 2020 term and dramatically shift to OL learning and virtual classes did not allow for simultaneous professional reflection. Entering the portal required an ability to artfully adapt delivery and communication methods and maintain rigorous university standards and learning outcomes – all while supporting stressed out, ill, or grieving students and a variety of technical challenges. It would be fair to assume that simultaneous professional reflection – that is, the educator's ability to work while reflecting on practice and adjusting as necessary – might be a lofty expectation in the midst of a global health pandemic. Nonetheless, this task remains critical to maintaining awareness of how uncertainty and fear can impact learning, and how faculty respond at the time and going forward in future terms. Encouraging self-reflection is a critical educational tool for transformation and social justice for students that can deepen the connection to curriculum, enhance class community and discussion, and begin the work towards understanding inherent bias.

Although artists often use their art as a kind of reflective self-portrait, self-reflexivity in written and all creative forms is not an easy task, especially when deeply embedded within this personal and global crisis. To support educational self-reflection, feminist pedagogy encourages layering the record of past events from multiple standpoints within a current context. This can be done through introductory conversations/forums that resist traditional colonial introductions (such as listing off one's name, job, education) and instead describe the student's context, emotive state, and lived experiences. In these online Introduction and Discussion forums, student stories strengthen both the personal understanding of the situated experience and overlap community-based experiences. These narratives are "always more than telling stories" as they provide a life-long interconnected framework that engages with the "nooks and crannies of experiences, filling cracks and restoring order" (Pedwell, 2008, p.99). In this way, sharing one's self-reflection has the possibility to find communal stability within the re-envisioned COVID classroom and within the portal: we chronicle our lives not just to have these memories and perspectives heard and recorded but because it reminds us that we are not alone. These narratives become lifelines connecting us to each other and remind the academic community that we are all members in the portal sharing simultaneous experiences that intersect with course content and with one another – in other words, these are worthy of being listened to.

Although the classroom community includes both the faculty and students, non-authoritative approaches to teaching in feminist pedagogy collapse the polarity between the instructor and the students. In this way, the teacher becomes open to learning from the students and admits the limits of their own knowledge. By doing this, faculty empowers students to remember their own agency and to positively impact all the members of the classroom and beyond. Author and theorist bell hooks maintains that holistically engaging students – such as through personal reflection – is transformative for all: "When education is the practice of freedom, students are

not the only ones who are asked to share, to confess. Engaged pedagogy does not seek simply to empower students. Any classroom that employs a holistic model of learning will also be a place where teachers grow and are empowered by the process." (1994, p. 21). Indeed, setting the tone for these OL/OC/hybrid conversations through the teacher's own reflective writing can illustrate to students how to work through their standpoint and experiences during/post pandemic. For example, by posting OL messages to my students that expressed my personal framework during COVID-19, along with encouraging my students to communicate their own narratives and situations, we began to deconstruct how these changes impact our personal learning situations, our Art and Design curriculum, and our local/global contexts and classrooms. Self-reflection and its shared expression from the teacher create a record of process while managing the changes of OL/OC/Hybrid learning during/ post COVID-19. It also emphasizes the vulnerability, indeed the mess, of this state of transition. This allows students to be aware of their lived experience and how these conditions impact their academic work. Simply put, by utilizing reflective strategies, we are able to work together to unpack what is happening outside of our academic context while interconnecting ideas to course work. The curriculum becomes lived as students start to acknowledge the related web of place, health, creative expression, and Self.

Reflectivity and dialogue move beyond the often distanced and heavy engagement with critical theory and the abstraction of art practice while in mandatory isolation by maintaining that reflexive exercises are healing and empowering as acts of opposition. Inserting your COVID experience in a documented form into the ether of a classroom evokes the possibility of its value beyond academia. Rebecca Roper-Huilman and Kelly T. Winters remind us that "the very act of telling stories – of constructing one's life in one's own terms – and reclaiming an identity can constitute a form of political resistance" (2011, p. 683). Feminist educational pedagogy already deeply entrenched in the idea that education is "not just about, but for, social change" can be engaged through narrative and creative expression and must be a tool to reflect within while protesting, isolating, learning, and listening, to evoke transformational change (Luhmann et al., 2019, p. 1).

Expanding the boundaries of usual OC discussions during COVID-19 is necessary and can take the form of a creative work, presentation and video, verbal discussion, and writing. As many OC classrooms have moved to virtual delivery, Discussion Board forums offer the potential for a safe dialogical space for students to connect and reflect while engaging with the weekly curriculum and learning outcomes. This is not to say that all Discussion Board posts are thoughtfully constructed and respond well to the emotional labor of self-reflection. Inclusive and reflexive dialogue can be encouraged through the professor's example, thus setting clear parameters of expectation, reminding all participants to respond through compassion and empathy, and utilizing critical thinking skills to dig deeper into the ideas, structures, and experiences presented. While teaching during the pandemic, I have included multiple opportunities for students to participate in assignments and Discussion Board forums that check for content understanding while developing self-reflective written and oral skills. Students practice writing their standpoint of

intersecting experience and begin the long task of recognizing and deconstructing their bias within the ever-evolving context of COVID-19. To know that their instructor and peers are working through this paradigm shift alongside them in Discussion Boards is motivating and feels less risky. Moreover, practicing self-reflection can also inform their assignments, discussions, and outside classes and experiences. Written and creative assignments now address the student author's standpoint, which slowly moves learners away from the authoritative, colonial, empirical, and reductive tendencies of post-secondary institutional values. Reflective and critical, rather than strictly content driven, Discussion Board forums can now be a beginning point for deeper agency and for recognizing the complexity inherent in learning environments, within the home, and within the pandemic. This is especially evident if marks in Discussion Board forums are mildly weighted to encourage reflection for reflection's sake. Discussion Board forums that effectively share student art and design work, and personal COVID experience, give participants an opportunity to create another document, a written memorial of what surfaced, what was lost, and what is still haunting them.

5   Final Thoughts

Despite our social isolation, to embrace the other side of this portal is to leave behind what does not – and has not – served our students and faculty. Because of the massive instability we are now experiencing, it is also a time to draw awareness to all available learning strategies within education. As feminist educational pedagogy welcomes the current state of COVID life, messiness, multiplicity, adaptability, and self-reflection, it can be a very useful tool to navigate through the uncharted tunnels of pandemic educational systems. A feminist consciousness that arises within praxis can develop, in spite of and inspired by this space of educational and global transition.

Perhaps the portal is much longer than anticipated: it is taking a long time to rid our old haunts. Nonetheless, we are finding our way through this narrowing liminality. Feminist educational practices can encourage students and faculty during/post-COVID-19 within and beyond the Arts classroom to potentially transform the "imagined world" at the end of this portal (Roy, 2020). By incorporating the theory and research of feminist analysis and action within Art and Design classrooms, learning opportunities during/post-pandemic can manifest it. It is here, in the trauma of this time, that education serves beyond the insular classroom and will support and motivate students, faculty, and our integrated communities beyond academia. Revolutionary educational paradigm shifts can respond to these extraordinary times.

References

Bourdieu, P., & Passeron, J. C. (1977). *Reproduction in education, society, and culture*. Sage.

Davies, B. (2006). Women and transgression in the halls of academe. *Studies in Higher Education, 4*, 497–505.

Dean, A., Johnson, J. L., & Luhmann, S. (Eds.). (2019). *Feminist praxis revisited: Critical reflections on university-community engagement*. Wilfrid Laurier University Press.

Gordon, A. (1997). *Ghostly matters: Haunting and the sociological imagination*. University of Minnesota Press.

Hill Collins, P., & Bilge, S. (2016). *Intersectionality*. Polity Press.

Hooks, B. (1994). *Teaching to transgress: Education as the practice of freedom*. Routledge.

Luhmann, S., Johnson, J.L., Dean, A. (2019). Learning elsewhere? Critical reflections on university-community engagement as Feminist Praxis. In Dean, A., Johnson, J.L., Luhmann, S. Feminist praxis revisited: Critical reflections on university-community engagement. Wilfrid Laurier University Press, 1–20.

Pedwell, C. (2008). Weaving relational webs: Theorizing cultural difference and embodied practice. *Feminist Theory, 9*(1), 87–107.

Reinharz, S. (1992). *Feminist methods in social research*. Oxford University.

Roper-Huilman, R. & Winters, K. T. (2011). Feminist research in higher education. *The Journal of Higher Education, 82*(6, November/December). Ohio State University.

Roy, A. (2020, April 3). The Pandemic is a Portal. *Financial Times*. Retrieved from: https://www.ft.com/content/10d8f5e8-74eb-11ea-95fe-fcd274e920ca

Srivastava, S. (2019). There's more than one way to save a baby: Navigating activism and anti-racism. In A. Dean, J. L. Johnson, & S. Luhmann (Eds.), *Feminist praxis revisited: Critical reflections on university-community engagement* (pp. 55–72). Wilfrid Laurier University Press.

Stanford Friedman, S. (2001). Academic feminism and Interdisciplinarity. *Feminist Studies*, *27*(2, summer), 504–509.

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Education Under Attack: An Examination of Education in Emergencies and Strategies for Strengthening Education

Patty Zakaria

1 Overview of Education in Emergencies

Since the 1970s, the occurrence of natural disasters, particularly those related to climate change, has been increasing globally. We have also seen an increase in the frequency and duration of conflicts. Consequently, this has triggered the steady rise of education in emergencies. What is education in emergencies? According to Sinclair (2007), "education in emergencies refers to education for populations affected by unforeseen situations such as armed conflict or natural disasters" (p. 52). On the other hand, Pigozzi (1999) has noted the existence of silent emergencies in education, such as extreme poverty, HIV/AIDS, and child homelessness, which, unlike the previous definition, tend to receive less attention. Regardless of the various definitions of education in emergencies, one fact that many can agree on is that education is essential for human development and the human condition. When conflict or natural disasters occur, they can significantly impact society and education. The 2015 earthquake in Nepal, for example, led to the disruption of the education system in the country. Similarly, the violent insurgency in the northern part of Nigeria has negatively impacted the education of many students in the region.

In 2016, UNICEF reported that 535 million children live in conflict and a natural disaster environment. have led to the destruction of the educational systems of impacted countries, denying millions of children and young adults their right to education. UNICEF (2020) has noted a continued increase in the disruption of education due to crises in both low-income and middle-income countries. Globally, UNESCO reports that 264 million children and young adults are out of school (UNESCO, 2019). Additionally, UNSECO estimates that globally there are 100 million children that are illiterate. In Afghanistan, for example, 3.7 million children

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are out of school, and in addition, only 54% of school-aged children are enrolled in primary education in the country (UNICEF, 2020). Since 2015, Yemen has been plagued with an ongoing civil war which has put the primary and secondary education system at risk of a complete collapse in the country. It is estimated that approximately 2 million children are out of school there due to the conflict in the country (UNICEF, 2018a, b). Meritxell Relaño, the UNICEF Representative in Yemen, has stated that "[a]n entire generation of children in Yemen faces a bleak future because of limited or no access to education… [e]ven those who remain in school are not getting the quality education they need" (UNICEF, 2018a, b).

Not only is the right to education directly due to ongoing conflict, but displacement also poses a threat to the right to education rights of children and young adults. In terms of internally displaced people (IDP), unlike refugees, IDPs are on the move within their national territory due to conflict or natural disasters. In such a case, IDPs are under the protection of their national government; however, access to education, in addition to other humanitarian needs, are challenging to attain. Moreover, refugees are individuals that have crossed the border in search of safety. In this case, Article 22 on Public Education of the 1951 Refugee Convention applies to states that are party to the treaty. Article 22, section 1 of the 1951 Refugee Convention states: "The Contracting States shall accord to refugees the same treatment as is accorded to nationals with respect to elementary education." Furthermore, the 1989 Convention on the Right of the Child obligates party states to provide and promote education for young children within their territory regardless of the children's status. In 2016, it was estimated that globally over 12 million children are living in refugee camps or are seeking asylum with their parents or relatives. In light of this, we must ask how many of these children are receiving proper education? This chapter will focus on the primary and secondary educational needs of children and young adults that are IDPs and refugees.

In emergencies, education not only permits children and young adults to continue their education, but it also provides them a sense of normalcy as well as acts as a coping mechanism to deal with the trauma they have experienced. In addition, by ensuring that children and young adults continue their education, this provides them with the necessary skills to enable them to have a brighter future despite their experiences. Sinclair (2007) asserts that education in emergencies can "provide protection for marginalized groups – minorities, girls, children with disability, out-of-school adolescents – often at risk of exploitative or unsafe work such as prostitution or recruitment by militants" (p. 53). In the case of Yemen, for example, 2419 boys have been recruited by militants since 2015 (UNICEF, 2017). Therefore, education in emergencies is important from a micro-perspective in that education helps children and young adults survive the trauma conflict or displacement due to natural disasters. In addition, from a macro-perspective, by ensuring that children and young adults in conflict or displacement situations have access to quality education. This will benefit society because these post-conflict or post-disaster countries will have an educated population which will more likely support the development and reconstruction efforts than an uneducated young population. Subsequently, from these perspectives, providing education in an emergency context is not only a right

but a necessity. Despite the overwhelming benefits of education in emergencies, there are obstacles due to the nature of the crisis, costs, and access to connectivity when technology is applied, language barriers, and pedagogical approaches that prevent children and young adults from acquiring an adequate education. This chapter will seek to explore these barriers to education in an emergency context.

The goal of this chapter is twofold. First, the chapter will address the direct and indirect impacts of conflict and the post-conflict environment as well as a natural disaster on education. Second, the chapter will discuss the application of low-technology or high-technology approaches to education and highlight which approach is most appropriate given the context.

2   Direct and Indirect Impact of Disrupted Education

Education is a human right. When education is disrupted by conflict or natural disaster, this leads to direct and indirect impacts on children and young adults. When conflict erupts, or a natural disaster occurs, these increase the probability of children and young adults dropping out of school. This is evident in the conflicts in Afghanistan and Yemen (UNICEF, 2018a, b). In the case of conflict, parents are more likely to keep their children home from school because of the dangers associated with traveling to school. The destruction of school facilities also contributes to the dropout rates among children and young adults. During the conflict in Yemen, for example, 66% of schools were damaged, and 27% of schools closed (UNICEF, 2018a, b).

Furthermore, the destruction or interruption of education leads to the breakdown of educational management and the quality of education. We must also consider the indirect impact on children and young adults when children and young adults drop out of school. This situation leads them to being illiterate and unskilled, which have long-term consequences on their future. Akinwumi (2008) has noted that improved literacy rates within a country can significantly aid in breaking the cycle of poverty, prevent the spread of HIV/AIDS, and boost economic growth. UNICEF (2018a, b) has asserted that "a one-year deficiency in school leads to an estimated loss of 7–10% of per capita income" (p. 3). In addition, the dropout rates of vulnerable students, such as girls, children living with disabilities, refugees, and ethnic/religious minorities, are particularly high. Concerning refugees, the issue of school dropout is even more problematic for refugees because they are not "…able to access the right to education in host countries for many reasons, such as family poverty, inability to cover school expenses, foreign language education, and a new system" (Duman & Snoubar, 2017, p. 337).

Furthermore, girls' education, for example, is significantly impacted in an emergency context because some families do not see the education of girls as a priority when resources and money are scarce. Therefore, families are more likely to withdraw girls from schools than boys. This can increase the risk of child marriage as well as the risk of being exploited or engaged in unsafe work, particularly sexual

exploitation. In a 2016 survey conducted across six governorates in Yemen, it was found that "…three quarters of all women had been married before the age of 18, while 44.5% were married under the age of 15" (UNICEF, 2018a, b). When girls lack education, this can negatively impact gender equalities within a society as well as reduce their social and economic power in a household. Studies have found that education is a catalyst for girls and women's empowerment, economic power within society, and equality (Mehra, 1997; Ojobo, 2008; Sonowal, 2013). Besides giving children and young adults the necessary and vital life skills, education in emergency contexts such as conflict and natural disaster provides them a sense of normalcy and a safe place to rebuild their confidence and heal from the trauma experienced.

3 Significance of Low-Technology and High-Technology Application to Education

Despite the importance of education to equip individuals with life skills and support economic, social, and emotional growth, there are many barriers to education in an emergency context such as conflict and natural disaster. The remainder of the chapter will discuss the role of low-technology and high-technology in addressing the obstacles to education due to displacement (IDPs or refugees) or the destruction of schools due to conflict or natural disasters. When it comes to the application of technology to education in an emergency context, it is important to note that a "one glove fits all" approach is not feasible because students' needs vary. The nature of the emergency context will require a specific level of technological approach to be applied. Table 1 provides an outline of the core arguments made here about the appropriate use of technology in each emergency context.

We can see from this figure that the learning/education approach appropriate for each situation depends on both the technology available and the environmental context in which the emergency occurs. In an environment where the telecommunications network system has some degree of damage because of emergencies but is still functional, then the most appropriate method of continuing the students' education is through the application of high-level technology via the Internet. Children and young adults in this situation must have access and be somewhat literate in the use of computers, smartphones, or tablets. In this case, when it is not safe for children and young adults to continue learning within the walls of their classroom, then their education could continue through the internet. Schools can either run synchronous online learning, asynchronous online learning, or use a blended approach with various online conferencing platforms and learning management systems available. For example, due to the closure of primary, secondary, and post-secondary education systems in Canada during the COVID-19 pandemic in March 2020, many schools turned to the use of high-level technology. Schools either utilized synchronous or asynchronous online and/or blended online learning via the internet in combination with Zoom, Teams, or Google.

Table 1 Approaches to Education in an Emergency Context

Appropriate technology	High-level technology	Low-level technology
Learning approach	• Synchronous online learning • Asynchronous online learning • Blended learning	• Education programs (TV or Radio) • Self-study • Online or offline study
Technology context	Students have access to internet connectivity, computers, tablets, or smartphone	Students have limited or no access to internet connectivity, computers, tablets, or smartphones Students have access to radio or TV equipment/signal
Environmental context	The electricity and telecommunication network systems have sustained limited damage but are still functional Settlement areas for refugees and IDPs have widespread or affordable internet connectivity	The telecommunication network systems have sustained moderate to severe damage Settlement areas for refugees and IDPs have limited or no internet connectivity. Also, mobile data is either not affordable or limited

In the case of refugees and IDPs, this learning approach can only be feasible when they have been settled in a temporary or permanent shelter that has access to the internet. In Jordan, for example, Syrian refugee children and young adults have access to Edraak provided by an initiative of the Queen Rania Foundation, that is, a massive open online course (MOOC) which provides an online learning platform for grades K to 12, as well as adult learners. Before the Edraak initiative, more than 40% of children and young adults were out of school because of displacements from conflict (BBC News, 2015). However, now this initiative provides education via the use of high-level technology. One crucial factor that makes the Edraak initiative reasonable in an emergency context is that it can be applied elsewhere when the technology infrastructure is available. In an emergency context, the urgent needs of families are to provide food, water, medicine, and safe shelter, which take precedence over educational needs. Thus, when resources and finances are constrained, families are less likely to spend money on internet services or mobile data to be used for education. Nevertheless, with the Edraak online learning platform, students have free access to the internet at computer labs set up by the organization. There they can download the educational content – readings, assignments, or activities for discussion – to their phones or tablets to be used later offline at home (Pereira, 2018).

When high technology is applied in an emergency context, one thing to keep in mind is that the technology is simply a tool for content delivery. Additional factors need to be in place to safeguard that the learning outcomes are achieved. Studies show that technology applied to education, particularly in an emergency context, is not a sufficient factor in ensuring that students learn and that learning outcomes are met (Barrera-Osorio & Linden, 2009, Mouza & Cavalier, 2013; Petko et al., 2017; Steffens, 2014). Thus, in addition to using high-level technology as a tool for providing education in an emergency context, it is also essential to keep in mind that this tool needs to complement and consider what the student has learned before the

emergency context – that is, are they familiar with technology use and what level of literacy have they achieved. Similarly, the curriculum should be culturally, pedagogically, and language appropriate to students. For example, within the Middle East and North Africa, there are a variety of Arabic dialects. When designing a curriculum for refugees, dialect differences in language need to be considered.

In an environment where the telecommunications network system has sustained significant damages because of conflict or natural disaster and, therefore, is not functional, the most appropriate method of continuing the students' education is through the application of low-level technology. In terms of technological context, when children and young adults lack access, as well as knowledge in the use of computers, smartphones, or tablets, then low-level technology or no-technology (traditional face-to-face) classroom is the most suitable. In terms of using radio and television signals, these approaches can reach children and young adults in remote areas of the country. Thus, in this context, low technologies such as interactive radio and television education are practical for families because they are simple, affordable, and reliable tools since they are independent of telecommunications networks and internet infrastructure. For example, during the Ebola outbreak in West African, UNICEF provided Education for over 1 million students through the radio, which is classified as low technology (UNICEF, 2016).

An example of low-level technology use is interactive radio instruction (IRI), which was first used in the 1970s in Central America, and later used in various countries in Africa. According to Carlson (2013), "IRI is an instructional methodology which combines an audio component, delivered by an 'audio teacher' by radio, audio cassette, or MP3 player, with learning activities carried out by students, facilitated by the classroom teacher" (p. 20). According to the World Bank (2005), IRI is a useful learning tool when teachers are non-existent or poorly trained. Second, this method can reach a broader population, particularly in remote areas. In conflict or natural disaster contexts, the availability of teachers or teachers training is inadequate, which acts as a barrier to children and young adults continuing their education. Thus IRI teachers from other areas can be used to supplement the lack of teacher or training issues in the current location of disaster. Also, the major roadblock for refugees' education is the lack of complement with what the student has learned in their home country, language, and culture. When the technological and environmental context prevents the use of high technology, then this approach of IRI or other means of low-level technology is most feasible.

4   Conclusion: Where Do We Go from Here?

Conflict or natural disasters force children and young adults to drop out of school, which has a long-term impact on their lives and future well-being. By using technology as a tool to reconnect students to their studies, it will help address the many issues for children and young adults related to the disruption of education due to emergencies.

An important takeaway from this chapter is that the technological and environmental context plays a critical factor in determining the most appropriate type of technology to be applied in an emergency. Educators, governments, or international and regional organizations need to fully understand the environmental context and technology context to ensure that the most appropriate type of technology is applied. If this issue is not clearly understood, students will not achieve the intended learning outcomes. With the application of high-level or low-level technologies to education in emergencies as appropriate and possible, educators, government, and organizations will contribute significantly to the well-being of the overall society. Through education we can have a positive impact on gender-based violence in society, poverty levels, and overall well-being and prosperity.

References

Akinwumi, F. S. (2008). Millennium development goals: The place of education in Nigeria. In M. Bouucovalas & R. Aderinoye (Eds.), *Education for millennium developments*. Spectrum Book Ltd..

Barrera-Osorio, F., & Linden, L. L. (2009). The use and misuse of computers in education: Evidence from a randomized controlled trial of a language arts program. *Policy Research Working Paper Series – The World Bank,* (March).

BBC News. (2015, September 3). *Middle East wars deprive 13 million children of education – UN*. Retrieved from: https://www.bbc.com/news/world-middle-east-34136074

Carlson, S. (2013). *Using technology to deliver educational services to children and youth in environments affected by crisis and/or conflict*. USAID.

Duman, N., & Snoubar, Y. (2017). Role of social work in the integrating refugee and immigrant children into schools. *European Journal of Social Science Education and Research, 4*(4), 334–344.

Mehra, R. (1997). Women, empowerment, and economic development. *The Annals of the American Academy of Political and Social Science, 554*(1), 136–149.

Mouza, C., & Cavalier, A. (2013). The role of one-to-one computing in the education of at-risk high-school students. In *Emerging technologies for the classroom* (pp. 145–159). Springer.

Ojobo, J. A. (2008). Education: A catalyst for women empowerment in Nigeria. *Ethiopian journal of Education and Sciences, 4*(1).

Petko, D., Cantieni, A., & Prasse, D. (2017). Perceived quality of educational technology matters. *Journal of Educational Computing Research, 54*(8), 1070–1091.

Pereira, K. (2018, August 16). *How refugees are using technology as a tool for education*. Retrieved from: https://medium.com/google-design/how-refugees-are-using-technology-as-a-tool-for-education-4778a2cb501c

Pigozzi, M. J. (1999). *Education in emergencies and reconstruction: A development approach*. UNICEF.

Sinclair, M. (2007). *Education in emergencies. Commonwealth Education Partnership* (pp. 52–56) Retrieved from: https://www.researchgate.net/publication/44827068_Education_in_emergencies

Sonowal, M. K. (2013). Impact of education in women empowerment: A case study of SC and ST women of Sonitpur District, Assam. *International Journal of Computer Applications in Engineering Sciences, 3*, 27.

Steffens, K. (2014). ICT use and achievement in three European Countries: What does PISA tell us? *European Educational Research Journal, 13*(5), 553–562.

UNICEF. (2020). *For Every Child, Reimagine: UNICEF Annual Report 2019*. Retrieved from: https://www.unicef.org/sites/default/files/2020-06/UNICEF-annual-report-2019_2.pdf

UNICEF. (2018a, March 18). *Education in Yemen*. UNICEF Press Release. Retrieved from: https://www.unicef.org/press-releases/yemen-children-education-devastated-three-years-conflict#:~:text=Nearly%202%20million%20children%20now%20out%20of%20school&text=%E2%80%9CAn%20entire%20generation%20of%20children,Rela%C3%B1o%2C%20UNICEF%20Representative%20in%20Yemen.&text=The%20journey%20to%20school%20has,risk%20being%20killed%20en%20route

UNICEF. (2018b). *If not in school: The paths children cross in Yemen*. Retrieved from: https://www.unicef.org/mena/sites/unicef.org.mena/files/2018-03/IF%20NOT%20IN%20SCHOOL_March2018_English_0.pdf

UNICEF. (2016). *Evaluation of UNICEF's response to the Ebola outbreak in West Africa 2014–2015*. Retrieved from: https://reliefweb.int/sites/reliefweb.int/files/resources/2232-UNICEF-Ebola_Eval_report_web.pdf

UNESCO. (2019). New Methodology Shows that 258 Million Children, Adolescents and Youth Are Out of School. Fact Sheet no. 56. Available at: http://uis.unesco.org/sites/default/files/documents/new-methodology-shows-258-million-children-adolescents-and-youth-are-out-school.pdf

World Bank. (2005). *Improving educational quality through interactive radio instruction*. World Bank.

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Power Shifts and Imbalances in Online Teaching Platforms During COVID-19: A Foucauldian Perspective

Zohreh Daeizadeh and Naghmeh Babaee

The balance of power is the scale of peace.

Thomas Paine

The outbreak of COVID-19 has unsettled people's lives on all terms, including education. Rather than pausing to educate the youth in the hope that the situation may change at some point, most institutions did their best to find new ways to adapt. One of the most popular solutions to further teaching is the Zoom app for remote synchronous video conferencing and delivery online. However, like any other platform, it comes with pros and cons. The power relations between the instructor and the students within synchronous video-conferencing environments, among other elements, are affected by this change in the delivery method.

While past studies (Sahu, 2020; Sintema, 2020) have investigated the impact of the COVID-19 pandemic on teaching and learning, few have examined power dynamics between instructors and students in online synchronous classes like those that have replaced face-to-face delivery during the pandemic. This research addresses this gap by analyzing different incivilities in Synchronous Delivery Platforms (SDP), particularly Zoom or similar video conferencing platforms, examining how they can cause power shifts and imbalances, and offering solutions to address them. The authors, teaching General Education courses and English undergraduate courses at a private university in Canada, have offered classes via Zoom

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since Spring 2020. This chapter highlights key data from their classrooms. These were individually gathered via descriptive and reflective field notes in Spring 2020 and compared against each other to develop a deeper and broader understanding of power relations in their classes.

The chapter will first compare Zoom to a face-to-face classroom considering Foucault's ideas and examine the 'disciplinary practices' involved that promote ideologies in universities as social institutions (Mills, 2003, p. 46). Then, it will discuss the effects of such practices on the learning environment and students' reactions to them. Finally, it will offer suggestions to improve the learning process in synchronous online delivery.

1 Literature Review and Theoretical Background

1.1 Power and Violence

Power relations in educational contexts have been extensively investigated. Reid and Kawash (2017) suggest that through self-reflection and student feedback, power awareness and use of prosocial power strategies in teaching practices can enhance the learning environment. Sidky (2017) explains how ideological and student expectations alongside teachers' perceptions of their roles can influence attitudes about power. Sidky suggests that the classroom discourse be shaped by the dominant voice in relation to diversity. Wong (2014) shows cultural factors lead to more power imbalances in classrooms while ideological and institutional frameworks help balance it. Golish and Olson (2009) review the ways students use prosocial and antisocial power strategies with nonverbally immediate and non-immediate teachers.

Foucault maintains that the traditional sense of "power as a mechanism of domination by the propertied classes of the lower orders …exercised by means of violence and ideology, through the apparatus of state such as the police and education" is too simplistic (Gros, 2012, para. 10). For Foucault, the assertion of law in a political society results in peace (para. 11). Therefore, power alters and restricts the free will of subjects. It flows in a network and does not belong to an authority (Foucault, 1982, p. 793). However, the tactics used to redirect the subjects' actions do not equal violence in Foucault's terms. He focuses on resistance more than oppression and believes power is not always "repressive" (Foucault, 1978, p. 36). Power relations, according to Foucault, are so complicated that they can be manipulated and that new identities form as a result (Mills, 2003, pp. 34–37).

Foucault is not a philosopher of violence in the sense that a definition of violence in terms of sociology or psychology is found in his writings (Gros, 2012, para. 1). Considerations of violence can be detected in his ideas, and he "seeks to establish that the assertion of classical reason presupposes a violent rejection of madness. To be reasonable is to reject insanity" (Gros, 2012, para. 7). "Scientific objectification,"

as termed by Gros (2012), "consists of confining individuals, not only by walls but by truths, imposed on them like a new set of chains" in humanities (para. 7). On the other hand, applying disciplinary power does not always give way to the favored results and may have inconsistent outcomes instead (Beheshti & Shafieyan, 2016). Disruptive behavior can lead to negative sentiments among students such as contempt, resistance to taking part in discussions, and completing assignments (Boice, 1996; as cited in Meyers, 2003, p. 94).

According to Meyers (2003), inexperienced and seasoned faculty are likely to ignore classroom conflicts because they are not effectively prepared to deal with such issues (p. 94). Boice (1996), on the other hand, indicates that talking about these issues with instructors is taboo (p. 454). Meyers (2003) suggests that preventing classroom conflict is the best solution to classroom conflict reduction and management (p. 94). This can be done through sensitive interpersonal behavior toward students, clear course structure, and collaborative teaching techniques. Sensitive interpersonal behavior is missing in synchronous online teaching platforms due to lack of physical and emotional immediacy, effective and precise eye contact, and open body posture as a few examples as mentioned by Meyers (2003, p. 95). Students can be estranged and disaffected by derogatory marks, fast paced and dissatisfactory lectures, and their own delayed attendances and absences (Boice, 1996; as cited in Meyers, 2003, p. 95).

1.2   The Archive and Ideology

Foucault (1991) defines the archive as "the set of rules which at a given period and for a given society define … the limits and forms of the sayable" (p. 59). Archive signifies "the unwritten rules which lead to the production of certain types of statements and the sum total of the discursive formations circulating at any one time" (Mills, 2003, p. 64). Foucault's object is "not language but the archive, that is to say the accumulated existence of discourse" (Foucault, 1989, p. 25). Foucault (1981) argues, "[A]ny system of education is a political way of maintaining or modifying the appropriation of discourses, along with the knowledges and powers which they carry" (p. 64). Thus, he believes the university as an institution, which has a certain ideology, determines what type of knowledge should be excluded and what type is academic. As Mills (2003) notes, many disciplinary practices of the university such as "silencing and forcing to talk, commenting on and assessing" are not meant to circulate knowledge; they are "more about the institutionalization of discourse and the mapping out of power relations between lecturers and students" (p. 61). People seeking a position outside of the dominant ideology construct a distorted image of the authority. Therefore, "power is in need of such counterimages in order to secure its own position" (Greenblatt, 1988, p. 37).

1.3   Violence and In-person Classroom Incivilities

The sovereign power is not transmitted through the "legitimate site of the sovereign" but through "a complex system of institutions, regulations, texts, policies, and practices signifying not relations of sovereignty but relations of domination" (Foucault, 1980, p. 105). "This theme of a non-violent sovereign state," according to Gros (2012), "is built at the intersection of historical content on the one hand and philosophical discourse on the other" (para. 15). At the crossroads of this content and this discourse is an obvious fact – political power always requires the imposition of civil peace by a higher authority (Gros, 2012, para. 16).

In Foucault's ideas, power and violence cannot be compared because violence is the result of an asymmetrical power game (Gros, 2012, para. 19). Violence is precisely that moment when, in a particular power game, the asymmetry becomes too great and there is no longer any possibility of reciprocity (Gros, 2012, para. 19). According to O'Farrell (2018), "One could perhaps argue that the difference between power and violence is the issue of choice on both sides of the equation" (para. 5). Most student incivility is a reaction to the teachers' rude behavior (Boice, 1996, as cited in Feldmann, 2001, p. 138). The longer the uncivil action goes on, the higher the level or response is going to be, and this negatively affects the learning environment and the teacher-student relationship (Feldmann, 2001). According to Feldmann (2001), students will value the instructor's character and instruction if the instructor takes a more decisive civil action. The need to express power over another is one factor that leads to classroom incivility. Furthermore, he believes failing to address such uncivil behaviors in the class will call upon even more of them, such violent occurrences can deteriorate the quality of learning. In addition, in the case of ignoring the behavior, the next teacher to deal with the same student may not be so successful (Feldmann, 2001). Student will then increase the degree of incivility to test our authority and at this point we should react more assertively.

1.4   Surveillance and Discipline

As one of the great inventions of the bourgeoisie, disciplinary power is a new form of power which circulates in the absence of the sovereign and through surveillance (Foucault, 1980, p. 105). Foucault's notion of Jeremy Bentham's Panopticon proposes the best means of surveillance in which the prisoner is captivated within the walls of the cell and immobilized by the light and the overseer's gaze (p. 147).

Applying Foucault's ideology and archive, violence and classroom incivilities, and surveillance and discipline to Zoom classrooms uncovers unbalanced power dynamics at play between the instructor and students. This facilitates a deeper understanding of the instructor-student relationship in a virtual educational context.

Given that online synchronous classes present a unique learning environment compared to face-to-face ones, power and aggression needs to be re-examined regarding these contexts. While the reviewed studies shed light on power relations in face-to-face classrooms, none tend to investigate power relations between the instructor and students and the issue of power imbalances from the instructors' and students' perspectives in online synchronous classes. To address this gap, here we investigate power dynamics in Zoom classes considering Foucault's ideology about violence and incivilities and surveillance and discipline.

2   Instructor-Student Power Relations in Zoom Classes: Case Studies

2.1   Ideology and Archive

Archives in a classroom environment refer to class and program policies and the instructor's expectations of students. The policies "define … the limits and forms of the sayable [that is, students' behavior in class]" (Foucault, 1991, p. 59). The students need to operate within a given framework to be considered well-behaved and professional. Otherwise, their behavior can be interpreted as disruptive and unprofessional, and they can be penalized for not following the rules.

In the courses discussed herein, both instructors explained the syllabus, including instructor expectations and university policies, to the class the first session and asked that the students follow them throughout the term. Also, they created class policies and explained them to the class in the first session. These policies included university rules about attendance, academic honesty, and assignment submission, in addition to the instructor's rules about classroom management and netiquette. These policies reflect the instructor's and educational institution's ideology and differ from those set for face-to-face classes. While assignment submission policies in online classes resembled those in face-to-face ones, student behavior and attendance record policies became stricter in Zoom classes. The students were asked to turn on their cameras and sit in front of it the entire class time except during breaks, dress professionally, sit straight rather than lying down, and avoid talking with their roommates and using a cell phone during the class. Although the students were expected to attend class, participate in class activities, avoid chitchat, and use a cell phone in face-to-face classes, the rules and netiquette became more detailed in Zoom classes to control students' behaviors.

2.2 Power Dynamics

The disciplinary practices, including class policies and instructor's expectations, according to Mills (2003), are not meant to transmit knowledge to the students; they, on the other hand, establish power relations between the instructor and students. In the Zoom platform, the instructors can select to mute the students upon arrival or anytime during the lecture to exclude disruptive background noise. Also, they mark students absent if the camera is turned off for most of the class time. This puts the instructor in a position of power vis-a-vis the students. On the other hand, if students feel pressured, they can give excuses about not talking because of microphone problems and thereby remain muted and invisible. This gives them a sense of safety in that they would not be judged by inappropriate comments. Having the option to turn on and off the microphone and camera puts the students in a position of power vis-a-vis the instructor: they can reject the instructor's request to complete a task.

Although the students may resist an instructor's demand to complete a task, the instructor has the ultimate sovereign power in the Zoom class. If a student does an uncivil action, for example, chitchat with a roommate or use a cellphone during the lecture, the instructor can remove them from the classroom, and the student may not return to class once removed. This option perpetuates instructor authority and power in Zoom classes. Like face-to-face classes where the instructor has the ultimate power in the room, in Zoom classes, they determine who may stay in class and who should be removed. The excluded students portray what can happen to the next student who wishes to disobey the enforced rules of the class and strengthens the sovereign power of the instructor. The excluded student, who seeks a position outside of the dominant ideology – that is, the class rules – contributes to securing the instructor's position within the power system in the classroom.

2.3 Violence and Zoom Classroom Incivilities

In synchronous classes, students may be found talking to roommates, watching movies, and using cell phones during the lecture. Similar occurrences are common in face-to-face classes, too. However, the instructors can tackle such issues more easily in face-to-face classes since they and the students are physically accessible. On the other hand, instructors may feel they have little control over the students' behavior in online classes. Although the authors asked that students avoid using a cell phone during lectures, some students did. The instructors asked them to put the phone away; however, they would continue using it next session, and this frustrated the instructors. This fact led to instructors' heightened emotions while dealing with conflicts. Too many conflicts and unsuccessful encounters with disengaged learners can result in chagrin and teaching panic (Boice, 2000, as cited in Meyers, 2003, p. 97).

Incivility is a cultural matter, and different cultures may see incivility differently (Bjorklund & Rehling, 2010). This can cause conflict in classes where the instructor

and students come from different cultural backgrounds. Although the instructors explained the class policies including academic honesty to the students at the beginning of the term, the students who come from countries where citing the source of information was uncommon failed to do so when writing assignments. This led to reporting the plagiarized assignments to the Registrar's Office. Academic dishonesty in the Zoom room occurred when students' roommates quietly told them the answer to a question the instructor had asked. Academic dishonesty, however, could not be determined when the student's camera was off due to "technical problems."

The longer the uncivil action continues, the higher the level or response will be, and this negatively impacts the teacher-student relationship and the learning environment (Feldmann, 2001). Also, failing to address uncivil behaviors in the class will call upon even more of them, which can negatively impact the quality of learning (Feldmann, 2001). Additionally, if the behavior is ignored, other instructors who deal with the same student may not be so successful. Consequently, the student will increase the degree of incivility to test instructors' authority, and the instructors should react more assertively (Feldmann, 2001).

Taking immediate actions by the instructor in online synchronous classes is challenging because the accessible individual medium in Zoom is the chat option. It takes time to type in the individual's chat box when a student is talking with their roommate or using their cellphone while in class. The instructor might prefer to continue the lecture and class activities rather than stop to address the student's misbehavior. If several students show incivility while the instructor is teaching, they could be unable to simultaneously attend to all.

The instructor may wish to address the issue with all the students as they do not intend to embarrass a single student, which leads to confusion for the students because not all of them are at fault. This may be considered by the students as aggressive behavior. If the instructor decided to address the issues individually, they would need to take the class time to handle the problem immediately. This interrupts the instruction and bores the students. If the instructor may prefer to tolerate the uncivil behavior, it would lead to more incivility or violence and a power shift: the asymmetry between the instructor and misbehaving student will increase, there is no longer a possibility of reciprocity, and lack of choice on the instructor's side leads to violent or aggressive behavior on the student's side.

The spaces of online platforms give students what they consider their territories where they can rule their own kingdoms. In a synchronously delivered classroom, the instructor needs to see the students to be able to identify them and feel they can control the class. Zoom classes, however, transfer this power to the students. Students can be heard listening to music, watching movies, or talking to their roommates. If the instructor objects to such behaviors, they could turn their video off giving excusing themselves due to Internet bandwidth and speed. To retrieve their reduced power, the instructor asks questions and calls names more than what they usually do in face-to-face classrooms. They can give low class activity grades to remind students of the class expectations. Engaging the students with questions stimulates their minds; however, this strategy may be excessively employed to the extent that it might consume class time and disturb teaching and learning.

2.4   Surveillance and Discipline

In Zoom, the houses which each student occupies function like as the "dungeon cells" in Bentham's Panopticon with the instructor's gaze upon the students (Foucault, 1980, p. 147). This gaze is a form of disciplinary tool which differs from eye contact since the students are unable to tell at whom the instructor is looking at a given time due to lack of physical closeness. That said, the effect of the gaze is doubled. The students are at the same time the king and the prisoners of their territories and the cells symbolize "confinement within confinement" during the pandemic and time of forced isolation. They can resist to this kind of power by turning off their videos, giving their Internet bandwidth or other distractions as an excuse. The instructors asked the students to turn on their cameras and explained that those whose camera was off would be marked absent. Surveillance and discipline were enforced.

Breakout rooms, on the other hand, are designed to provide the group work in face-to-face classrooms. Instructors asked the students to answer comprehension and discussion questions in the breakout or small group rooms and activities in the Zoom classroom. They regularly joined the rooms to monitor the students, which might have caused them to internalize self-surveillance (Foucault, 1980). This gaze against themselves, however, could have not only disabled them but also made them reluctant to act when the instructor left the room, and it could have formed a mental rather than physical violence against the students by creating a self-imposed fear in them.

3   Recommendations

We have analyzed the power relations in our online synchronous classes and teaching sessions in contrast to face-to-face classes, considering power, violence, and surveillance. The instructor and educational institution determine class policies and set expectations for students. These policies and rules represent Foucault's (1991) archives and ideologies, which should be followed; otherwise, the students will be penalized. Students are partly able to exercise power over the instructor in Zoom classes, however. Having the option to control their camera and microphone puts them in a position of power vis-a-vis the instructor. Also, they may ask their roommates to assist them in completing a task while the instructor may be unaware of this. These options are unavailable in face-to-face classes. However, the instructor has the ultimate power in the Zoom class, like face-to-face ones, and can remove students from the class when they decide.

If students and instructors come from different cultural backgrounds, misunderstandings can occur. Acceptable behavior in one culture can be unacceptable in another. For example, using other people's ideas without citing the source is acceptable in some cultures, while in North America, it is not. The students whose

roommates assist them with answering a question in the Zoom room may receive a zero or reduced grade on the task according to the class policies while, at the same time of the "offence," they may not notice the severe consequence of being "assisted."

Online platforms in the future will need to provide instructors with options to be able to act more freely and innovatively and to assist students more productively. A built-in One-note app inside Zoom would facilitate the teaching process. Instructors need to have the tools and resources they need in one place so that they will not need to worry about shifting between different platforms and resources while teaching.

Also, as this study suggests, online classes present unique educational environments. The instructors find they need to regain lost power in online platforms. Therefore, they may exert micro-level aggression or violence instead of rewarding students and give students low grades due to their disobedience of cultural rules and the classroom archive. Students at the same time feel they have more authority to bully instructors to resist the power imposed on them. Instructors need to be trained to deal with power and aggression experiences in these platforms. They should also think of ways of sharing power with students and including them in the classroom discourse so that students will feel they have a voice in class.

References

Beheshti, R., & Shafieyan, M. (2016, October). Foucauldian Docile Body in Dennis Lehane's Shutter Island. *Theory and Practice in Language Studies, 6*(10), 2052–2059. https://doi.org/10.17507/tpls.0610.23

Bjorklund, W. L., & Rehling, D. L. (2010, January—March). Student perceptions of classroom incivility. *College Teaching, 58*(1), 15–18. http://www.jstor.com/stable/25763408

Boice, B. (1996). Classroom incivilities. *Research in Higher Education, 37*(4), 453–486. https://www.jstor.org/stable/40196219

Feldmann, L. J. (2001). Classroom civility is another of our instructor responsibilities. *College Teaching, 49*(4), 137–140. http://www.jstor.com/stable/27559059

Foucault, M. (1978). *The history of sexuality, Vol. I: An Introduction*, (R. Hurley, trans.). Penguin.

Foucault, M. (1980). *Power/Knowledge: Selected interviews and other writings 1972–1977* (C. Gordon. Ed.) (C. Gordon, L. Marshall, J. Mepham & K. Soper, trans.). Pantheon Books.

Foucault, M. (1981). The order of discourse. In R. Young (Ed.), *Untying the text: A post-structuralist reader* (pp. 48–79). Routledge.

Foucault, M. (1982). The subject and power. *Critical Inquiry, 8*(4), 777–795. http://www.jstor.org/stable/1343197

Foucault, M. (1989). *Foucault live: Interviews, 1966–1984* (S. Lotringer. Ed.)*. Semiotext(e).

Foucault, M. (1991). *Discipline and Punish: The birth of the prison*. Penguin.

Golish, T. D., & Olson, L. N. (2009, May 21). Students' use of power in the classroom: An investigation of student power, teacher power, and teacher immediacy. *Communication Quarterly, 48*(3), 293–310. https://doi.org/10.1080/01463370009385598

Greenblatt, S. (1980). *Renaissance self-fashioning: From more to Shakespeare*. University of Chicago Press.

Greenblatt, S. (1988). *Representing the English renaissance*. University of California Press.

Gros, F. (2012). Foucault – Philosopher of Violence? *Cités, 50*(2), 75–86. https://www.cairn-int.info/article-E_CITE_050_0075%2D%2Dfoucault-philosopher-of-violence.htm?contenu=article

Meyers, S. A. (2003). Strategies to prevent and reduce conflict in college classrooms. *College Teaching, 51*(3), 94–98. http://www.jstor.com/stable/27559142

Mills, S. (2003). *Michel Foucault*. Routledge.

O'Farrell, C. (2018, March 8). *Foucault and violence.* https://clare-ofarrell.com/2018/03/08/foucault-and-violence/

Reid, L. F., & Kawash, J. (2017). Let's talk about power: How teacher use of power shapes relationships and learning. *Papers on Postsecondary Learning and Teaching: Proceedings of the University of Calgary Conference on Learning and Teaching, 2*, 34–41.

Sahu, P. (2020). Closure of Universities due to Coronavirus disease 2019 (COVID-19): Impact on education and Mental health of students and academic staff. *Cureus, 12*(4), e7541. https://doi.org/10.7759/cureus.7541

Sidky, G. (2017, April 27). The power game: Power dynamics between the teacher and the students in a graduate seminar. *English Language Teaching, 10*(5), 179–192. https://doi.org/10.5539/elt.v10n5p179

Sintema, E. J. (2020). Effect of COVID-19 on the performance of grade 12 students: Implications for STEM education. *EURASIA Journal of Mathematics, Science and Technology Education, 16*(7). https://doi.org/10.29333/ejmste/7893

Tai, B. H. K. (1998, Fall). Editor's review – Power dynamics in the classroom. *Harvard Educational Review.* https://www.hepg.org/her-home/issues/harvard-educational-review-volume-68-issue-3/herarticle/_187

Wong, M. (2014, July 4). Teacher–student power relations as a reflection of multileveled intertwined interactions. *British Journal of Sociology of Education, 37*(2), 248–267. https://doi.org/10.1080/01425692.2014.916600

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Surviving the System: Challenging Resilience in Higher Education

Laura Facciolo and Emily Meilleur-Rivers

"Rather than aiming to transform or resist oppression, resilience education encourages students to accept oppression and succeed despite it."

Juliet Hess (2019, p. 491)

1 Introduction

Broadly defined, Learning Management Systems (LMS) provide an online interface for the virtualization of the University. With COVID-19 as the impetus for the swift transition to widespread online learning in 2020, an unquestioned use of an LMS assumes that it is possible to translate face-to-face classroom expectations and social dynamics without issue. A brief literature review indicates that LMS are primarily employed as content repositories (Cabero-Almenara et al., 2019; Costa et al., 2012; Kite et al., 2020), occluding the social potential inherent to digital environments. The design of these systems demands that instructors maintain "normalcy" in their pedagogical practices (Brown, 2010), imposing linear structures such as the prompt-based discussion board. Particularly in times of crises, the excessive pre-determination of online discussion does not adequately attend to unique learner needs and is ultimately devoid of *care*. Our work here insists that care be foundational to crisis-mediated pedagogies and otherwise, calling for the reconfiguration of LMS design in higher education.

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Recent scholarship attends to learner anxiety and stress, mobilizing *resilience* to address these concerns (Brewer et al., 2019; HEQCO, 2016). Our intervention takes issue with this rhetoric as it locates responsibility in the learner to "bounce back" and "adapt" under pressure. We shift responsibility to instructional system designers, who we argue ought to center *learner usability* and *fluidity* in their discussion board design practice. For our purposes, learner usability and fluidity prioritize the end-user—in this case, the learner—at every stage of the design process (Garreta-Domingo & Mor, 2007).

2 Research Question

This work challenges resilience logic employed in traditional instructional design models as they respond to crises like COVID-19, and instead argues for the centrality of care in the development and instructor use of LMS. We are centrally interested in how figuring discussion boards as an objectivist learning tool inhibits learner interactivity, emergent thinking, and community development (Brown et al., 2016; Chen, 2019). Responding to this conception of the aforementioned affordance, our work is guided by this central question: Is the design of discussion boards informed by resilience logics and how might this prevent the formation of caring relations?

3 Resilience

Resilience studies continue to evolve from its roots in ecology (Folke, 2006; Weller & Anderson, 2013) and now interest humanities and education scholars, among others. In most cases, resilience orients itself towards the health and survival of the system, adhering to a framework of adaptation (Folke, 2006). Folke (2006) articulates this as resilience's tendency towards "renewal, regeneration, and re-organization following disturbance" (Folke, 2006, p. 257). Its mobilization in higher education and LMS design is a central concern of this work. Contemporary resilience literature and discourse often celebrate resilience as a response to the stressors, or "risk factors," for learners in the University (Brewer et al., 2019; HEQCO, 2016). Although this work is not the first to challenge the often-lauded institutionalization of resilience (HEQCO, 2016; Weller & Anderson, 2013), it intervenes in this scholarly conversation at the nascent intersection of resilience and *care*.

The Higher Education Quality Council of Ontario (HEQCO) (2016) locates resilience as a measure of success, going so far as to frame it as a desirable educational outcome. By putting forth an understanding of resilience as a transferable skill (HEQCO, 2016) and measure of employability (Brewer et al., 2019), these works demand that learners perceive themselves in relation to future employment and define their educational success according to their marketability. Brewer et al.'s (2019) framing of resilience misguidedly places responsibility on the learner to

simultaneously cope with hardship and meet future employer expectations. This conceptualization of resilience codifies the belief that "solutions" to stress are located in the individual, without acknowledging the potential for a community-care model (Becnel, 2019; Rider, 2019) and ignoring internal structures that perpetuate harm (Hess, 2019; Webster & Rivers, 2019). Drawing on Holling's (1973) sense of resilience, Weller and Anderson (2013) discuss the University's core functionalities as under threat from technological advances. Although they remain open to the evolution of knowledge dissemination, they still find value in retaining the "core functions" (p. 54) of scholarship, implying that the fiscal survival of the institution takes precedence over the radical accessibility possible through digitalization measures (e.g., MOOCs; open-access publishing) that bring the University closer to its publics. Our work instead takes the inherent social potential of the virtual world and its capacity for relationship-building as its central locus.

As other scholars have noted, resilience thinking often fails to name its neoliberal underpinnings (Webster & Rivers, 2019; Hess, 2019). Alongside critique of mindfulness and "grit," (p. 529), Webster and Rivers' (2019) reading of resilience challenges Brewer et al.'s (2019) sense that resilience adequately addresses learner mental health concerns. They contend that resilience logics uphold the meritocratic values of the University, taking issue with the idea that responsibility to succeed despite hardship is in the individual (Brewer et al., 2019; HEQCO, 2016). In concert with Webster and Rivers (2019), Hess (2019) draws explicit links between resilience education and cultivating "docility" in learners (p. 491). Our work aligns itself with Hess' (2019) assertion that the language of adaptation normalizes conditions of continual adversity, attempting to obscure more liberatory possibilities. Hess (2019) names the cathartic potential of song writing in music education, drawing on Freire's (2000/1970) pedagogy of oppression as the access point to the shift in discourse from "adaptation" to "transformation."

4 Conceptual Frameworks

4.1 Ecological Learning Design in a Community of Inquiry (CoI)

This work employs Stephen Quinton's (2010) "Principles of Effective Learning Environment Design" as the conceptual framework. Quinton (2010) figures learning environments as ecosystems, marking interconnection and interdependence as key features, which informs our understanding of community as central to caring Virtual Learning Environments (VLEs). Quinton (2010) names emergence, defined as "interaction among learners who mutually influence one another" (p. 334), as a central tenet of ecological learning design. Our understanding of ecological learning design parallels the Community of Inquiry (CoI) framework, in which the creation of community requires the symbiosis of all components—cognitive, social,

and teaching presence (Garrison et al., 2000; Lafortune & Lakhal, 2019). This work relates learner usability to how cognitive and social presence are facilitated. It is therefore important to provide clear definitions. Cognitive presence is defined as "exploration, construction, resolution, and confirmation of understanding through collaboration and reflection in a community of inquiry" (Garrison, 2007, p. 65). Social presence is considered the development of authentic relationships through affective expression and group communication (Garrison, 2007). Thus, we synthesize Quinton (2010) and Garrison et al. (2000) to argue that caring Virtual Learning Environments are possible when relationality and community are prioritized.

Considering the relationship that both resilience and ecological learning design have to ecology reveals troubling disparity. Where resilience centralizes adaptation as a means of system survival, ecological learning design values the dynamism and fluidity inherent to the system—in this case, the learning environment (Quinton, 2010). From this reading of classrooms as ecosystems, we ask this central question: How can instructional system designers prioritize learner usability and social dynamics in LMS design? When we consider that environments—both in the classroom and the world—need not always preserve the conventions at their core, radical transformation beyond what resilience imagines is possible. This is especially true when chaotic interventions, such as COVID-19, cannot be considered mere "disturbance," (Folke, 2006, p. 257), meaning that principles of adaptation, too, fail to attend to the scale of the crisis and related need for a care-informed critical transformation of LMS.

4.2   Care Ethics

Foundational to this work is a clear understanding of how resilience fails to take up "care ethics." To ground this work, we turn to Noddings' (2002) conception of authentic care as reciprocal and "culminating in caring relationships" (p. 24). Our work is centrally interested in how caring relationships can be fostered in Virtual Learning Environments. In the higher education sector, there is an emphasis on knowledge transfer and mastery learning (Barrow, 2015), devaluing the significance of social mediation and prior knowledge. In the rapid shift to online learning during COVID-19, it is imperative that the educator's role as the "one-caring" (Noddings, as cited in Owens & Ennis, 2005, p. 393) is not diminished in favor of the assumption that technology automatically initiates social interactions and connections (Robinson et al., 2017). Emphasizing the role of the educator as being responsible for cultivating care in Virtual Learning Environments marks the social-constructivist underpinnings of Noddings' (2002) care ethic. The relationship between care and social constructivism, then, offers a "connectivist" alternative (Quinton, 2010) to the individualism inherent in resilience education (Hess, 2019; Webster & Rivers, 2019). Therefore, we argue for the transformation of the design and use of discussion boards. Failure to do so, particularly in times of crisis, inevitably causes learner disconnection, which we figure as antithetical to care. The implications of our work

herein imagine how we might design discussion boards according to Noddings' (2002) care ethic.

5 Literature Review

The data synthesized in this research was collected by a systematic review of English language publications on social dynamics in VLEs, care theory, and resilience discourse. Major online database systems of education and humanities scholarship such as JSTOR and ERIC were searched for theoretical and empirical research. Stephen Quinton's (2010) "Principles of Effective Learning Environment Design" was utilized as the conceptual basis for understanding, analyzing, and making recommendations for the transformation of discussion boards. The data was filtered to focus on research conducted in higher education settings, per the guiding question of the present study. The following keywords were used to refine the search results: *higher education*, *resilience*, *Virtual Learning Environments*, *Learning Management Systems*, *care*, and *learner interaction*s. We isolated common discourses related to resilience and care theory to critique discussion boards.

6 Selection of Discussion Boards

Based on the constraints inherent to scholarly work of this length, we focused on the most commonly used social feature of LMS: discussion boards. We argue that discussion boards fail to transmute in-person discussion by establishing a hierarchical, prompt-based structure that occludes complex co-participation, knowledge sharing, and informal community-building. The shortcomings of discussion boards constrain informal modes of engagement, favoring structure over fluidity, attempting to manage social interactions.

7 Findings

The following section summarizes how discussion boards are defined according to three popular LMS platforms in Canada and the United States: Canvas, Blackboard Learn, and Brightspace/D2L (Menard, 2019).

The descriptions in Table 1 reveal common themes such as instructor-focused language, hierarchical structure, and limited learner control. We note the absence of co-writing and co-participation features, which inherently impedes on authentic community-building. The descriptions align with resilience rhetoric because they prioritize *instructor* usability over learner usability, demanding disjointed and formalized modes of learner engagement, thus failing to embody caring relations. A

Table 1 Comparing descriptions of discussion boards across popular LMS platforms

LMS platforms	Descriptions of discussion boards
Canvas	*Threaded discussions:* hierarchical structure; infinite layers of response nesting; one or more discussion leaders; long-standing conversations *Focused discussions:* one discussion leader; two-level nesting maximum; short-lived interactions; respond to single question/prompt[a]
Blackboard Learn	Instructor-owned discussion boards; instructor-only discussion moderation features; instructor-only editing features; instructor-only forum organization; instructor-view student discussion performance statistics available; integrated discussion grading feature available[b]
Brightspace/ D2L	Prompt-based discussion; infinite layers of response nesting; one discussion leader; option to start new thread vs. reply to existing threads; option to post anonymously[c]

[a]See Canvas Doc Team (2017) for more information on discussion boards
[b]See Blackboard Learn (n.d.) for more information on discussion boards
[c]See Brightspace/D2L (n.d.) for more information on discussion boards

semantic analysis of the descriptions also indicates that individual learner performance and knowledge transmission takes precedence over learner well-being and authentic learner-learner connections. We advocate for transformed Instructional Systems Design (ISD) that eschews the demands of resilience and objectivist learning in favor of social-constructivism and increased learner control. Careful consideration of these descriptions informs the following discussion, where we suggest that discussion boards *do* have social potential but are misguidedly designed to be employed as management tools mobilized for resilience education.

8   Discussion

Results of the description comparison above reveal structural and semantic connections to resilience logics. That is to say that the prescribed use of discussion boards calls for the survival of Socratic pedagogy and objectivist learning models. We argue that the definition of discussion boards as instructor- or leader-owned occludes possibilities for social-constructivist knowledge building, authentic social connections, and care-centered pedagogical praxis. Essentially, the discussion board in its current form embodies resilience rhetoric, placing responsibility on the learner to adapt to pre-determined structures even amidst crisis, ultimately preventing caring relations. An ethic of care, then, prioritizes learner control and social connections in ISD. The following section examines how discussion boards currently embody resilience rhetoric and how they fail to take up the characteristics of Noddings' (1984) care ethic and the principles of ecological learning design (Quinton, 2010).

The findings of a structural and semantic comparison of discussion board descriptions across the selected LMS platforms reveal commonalities such as a focus on instructor usability and a lack of knowledge scaffolding, leading to prescribed objectivist modes of engagement in VLEs. It is significant to note that we are

conflating cognitive and social presence (Garrison et al., 2000) with learner usability. The linear sequencing of the noted discussion board formats presumes that knowledge is produced according to stimulus-response rather than social mediation (Brown et al., 2016; DiPasquale & Hunter, 2018). Prompt-based structures, we argue, are antithetical to Quinton's (2010) definition of emergence, as they devalue and constrain possibilities for interdependence. This prompt-based interaction model is troubling for three central reasons:

1. It assumes that knowledge is static.
2. It privileges individualized content processing over interdependence.
3. It inhibits informal community-building.

The discussion board interface parallels resilience thinking's penchant for hyper-individualism, in that there are no present mechanisms for co-writing and learner replies are visually siloed. In particular, the visual interface of discussion posts privileges formality and/or prose over organic conversational flow. In this way, discussion boards in their current form are interested in managing and structuring learner-learner interaction rather than supporting emergent social relations. We argue that the design of discussion boards is informed by technological determinism—that is, in the absence of face-to-face social interactions, the prompt-based layout fails to translate the spirit of emergent thinking. Instead of foregrounding learner usability in ISD, the rigid structure of the discussion board demands that learners *adapt* their cognitive and social presences (Garrison et al., 2000). It is significant to note how the social negotiation of content may be inhibited by the affordances of the discussion board. The asynchronous format of the discussion board necessitates that learners independently process content rather than simultaneously process content with input, confirmation, and feedback from their peers. This, too, fails to take up Quinton's (2010) sense of the importance of emergence in ISD. Further, the isolated format of learner responses in a discussion board visually implies that knowledge building is an individual process, temporally frozen according to the learner's knowledge and understanding of course content at the time of engagement. The focus on the individual's growth, divorced from community, is antithetical to caring relations in the classroom. The current structure of discussion boards across LMS platforms does not allow for the *social* mobilization and generation of knowledge. Resilient ISD limits not only learner-learner interaction but fails to embody Noddings' (1984) care ethic. Ultimately, prompt-based discussion boards eliminate the possibilities for chaos (Quinton, 2010) as it exists in the environment by imposing management structures that privilege order over emergence (Chen, 2019).

9 Limitations

A limitation of this study is that we have not prescribed concrete alternative tools that sustain the energy of in-person interaction (Quinton, 2010). This owes to the understanding that this work primarily serves as a conceptual framework and

critique, from which Instructional Systems Designers may re-evaluate the peda-gogical and collaborative capabilities of discussion boards. It is significant to note that although this work is oriented towards Instructional Systems Designers, we do not absolve instructors and course developers of their responsibility to re-evaluate their pedagogical practice in the context of online learning (DiPasquale & Hunter, 2018). Further, due to length constraints, this study focuses on discussion boards, although other features also require close examination according to their manage-ment versus social capabilities.

10   Implications and Suggestions for Further Research

To recapitulate, resilience, as it is employed in higher education, falls short of an ethic of care. When we ask students to "adapt"—to crisis, online learning, and rigid structures—we fail to attend to learner well-being and subsequently normalize stress and harm as inevitable conditions of the University (Hess, 2019; Webster & Rivers, 2019). Although there is still much to understand about how discussion boards might prioritize social connections and learner control, this work demonstrates that struc-tural transformation is imperative, as evidenced by our findings that discussion boards currently value organization over authentic social relations. This work, although responsive to COVID-19, calls for the continual evaluation of both face-to-face and online pedagogies to center the learner. The confines of discussion boards as they presently exist make informal interactions nearly impossible. Therefore, we call on instructional systems designers to foreground learner usability in LMS design. We are particularly interested in further research on the integration of social media platforms as the access point to an ecological approach (Quinton, 2010) to LMS design. An ethic of care, we argue, can be realized when we operate from the belief that course content should never take precedence over learner well-being. In effect, asking learners to simply "survive the system" falls short of our call to rede-sign the system itself, this time with care for learners at its core.

References

Barrow, M. (2015). Caring in teaching: A complicated relationship. *The Journal of Effective Teaching, 15*(2), 45–59.

Becnel, K. (2019). *Emerging technologies in virtual learning environments*. IGI Global. https://doi.org/10.4018/978-1-5225-7987-8

Brown, S. (2010). From VLEs to learning webs: The implications of web 2.0 for learn-ing and teaching. *Interactive Learning Environments, 18*(1), 1–10. https://doi.org/10.1080/10494820802158983

Brown, B., Schroeder, M., & Eaton, S. E. (2016, May). Designing Synchronous Online Interactions and Discussions. In M. Takeuchi, A. P. Preciado Babb, & J. Lock (Eds.), *IDEAS 2016: Designing for innovation selected proceedings*. Paper presented at IDEAS 2016: Designing for Innovation, Calgary, Canada (pg 51-60). Calgary, Canada: Werklund School of Education, University of Calgary. http://hdl.handle.net/1880/51209

Brewer, M. L., van Kessel, G., Sanderson, B., Naumann, F., Lane, M., Reubenson, A., & Carter, A. (2019). Resilience in higher education students: A scoping review. *Higher Education Research and Development, 38*(6), 1105–1120. https://doi.org/10.1080/07294360.2019.162681 0

Cabero-Almenara, J., Arancibia, M. L., & Del Prete, A. (2019). Technical and didactic knowledge of the moodle LMS in higher education: beyond functional use. *Journal of New Approaches in Educational Research, 8*(1), 25–33. https://doi.org/10.7821/naer.2019.1.327

Canvas Doc Team. (2017, April 19). *What are discussions?* https://community.canvaslms. com/docs/

Chen, B. (2019). Designing for networked collaborative discourse: An UnLMS approach. *TechTrends, 63*(2), 194–201. https://doi.org/10.1007/s11528-018-0284-7

Costa, C., Alvelos, H., & Teixeira, L. (2012). The use of moodle e-learning platform: A study in a portuguese university. *Procedia Technology, 5*, 334–343. https://doi.org/10.1016/j. protcy.2012.09.037

Create and manage discussion forums. (n.d.). Brightspace Help. Retrieved July 20, 2020, from https://documentation.brightspace.com/EN/le/discussions/learner/discussions_intro_1.htm

DiPasquale, J., & Hunter, W. J. (2018). Critical thinking in asynchronous online discussions: A systematic review. *Canadian Journal of Learning and Technology, 44*(2). https://doi. org/10.21432/cjlt27782

Folke, C. (2006). Resilience: The emergence of a perspective for social-ecological systems analyses. *Global Environmental Change, 16*(3), 253–267. https://doi.org/10.1016/j. gloenvcha.2006.04.002

Freire, P. 2000/1970. *Pedagogy of the oppressed: 30th anniversary edition* (M. Bergman Ramos, trans.). Continuum.

Garreta-Domingo, M., & Mor, E. (2007). *User centered design in e-learning environments: From usability to learner experience.* Retrieved from https://api.semanticscholar.org/ CorpusID:18457191

Garrison, D. R. (2007). Online community of inquiry review: Social, cognitive, and teaching presence issues. *Journal of Asynchronous Learning Networks, 11*(1), 61–72.

Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education model. *The Internet and Higher Education, 2*(2–3), 87–105.

Hess, J. (2019). Moving beyond resilience education: musical counterstorytelling. *Music Education Research, 21*(5), 488–502. https://doi.org/10.1080/14613808.2019.1647153

Higher Education Quality Council of Ontario (HEQCO). (2016). *Measuring resilience as an education outcome*. Retrieved from http://www.heqco.ca/SiteCollectionDocuments/ HEQCOFormatted_Resilience.pdf

Holling, C. S. (1973). Resilience and stability of ecological systems. *Annual Review Ecology Systems, 4*(1), 1–23.

Kite, J., Schlub, T. E., Zhang, Y., Choi, S., Craske, S., & Dickson, M. (2020). Exploring lecturer and student perceptions and use of a learning management system in a postgraduate public health environment. *E-Learning and Digital Media, 17*(3), 183–198. https://doi. org/10.1177/2042753020909217

Lafortune, A. M., & Lakhal, S. (2019). Differences in students' perceptions of the community of inquiry in a blended synchronous delivery mode. *Canadian Journal of Learning and Technology, 45*(3). https://doi.org/10.21432/cjlt27839

Manage Discussions. (n.d.). Blackboard Help. Retrieved July 20, 2020, from https://help.black-board.com/Learn/Instructor/Interact/Discussions/Manage

Menard, J. (2019, May 20). EdTech Companies with the Most Student Data. *ListEdTech.* https:// www.listedtech.com/blog/edtech-companies-with-the-most-student-data

Noddings, N. (1984). *Caring: A feminine approach to ethics & moral education*. University of California Press.

Noddings, N. (2002). *Educating moral people: A caring alternative to character education*. New York.

Owens, L. M., & Ennis, C. D. (2005). The ethic of care in teaching: An overview of supportive literature. *Quest, 57*(4), 392–425. https://doi.org/10.1080/00336297.2005.10491864

Quinton, S. R. (2010). Principles of effective learning environment design. In M. Ebner & M. Schiefner (Eds.), *Looking toward the future of Technology-enhanced education: Ubiquitous learning and the digital native* (pp. 327–352). IGI Global.

Robinson, H. A., Kilgore, W., & Warren, S. J. (2017). Care, communication, learner support: Designing meaningful online collaborative learning. *Online Learning Journal, 21*(4), 29–51. https://doi.org/10.24059/olj.v21i4.1240

Rider, J. (2019). E-Relationships: Using computer-mediated discourse analysis to build ethics of care in digital spaces. In L. Kyei-Blankson, K. Blankson, & E. Ntuli (Eds.), *Care and culturally responsive pedagogy in online settings* (Advances in Educational Technologies and Instructional Design (AETID) Book Series) (pp. 192–212). IGI Global.

Webster, D., & Rivers, N. (2019). Resisting resilience: Disrupting discourses of self-efficacy. *Pedagogy, Culture and Society, 27*(4), 523–535. https://doi.org/10.1080/14681366.2018.1534261

Weller, M., & Anderson, T. (2013). Digital resilience in higher education. *European Journal of Open, Distance & E-Learning, 16*(1), 53–66.

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The Impact of COVID-19 on the Right to Education

Agoro Papaioannou

> *COVID-19 is a test for our societies, and we are all learning and adapting as we respond to the virus. Human dignity and rights need to be front and center in that effort, not an afterthought.*
>
> *Michelle Bachelet (OHCHR, 2020b)*

1 Background

The outbreak of the COVID-19 pandemic and the national measures taken for its containment have raised significant concerns in the international community about the protection of fundamental human rights and freedoms (OHCHR, 2020a); Human Rights Watch, 19 March 2020). Broad quarantines and lockdowns, travel restrictions, and school and university closures have been imposed by governments around the world to mitigate the spread of COVID-19. Even though these measures limit fundamental rights and freedoms such as the freedom of movement, association, assembly, and the right to education (Joseph, 2020), they have been broadly considered as lawful, necessary, and proportionate limitations to tackle the current health emergency (Syracusa Principles, 1985). They may have been legally justified, but their implementation had an undeniable disproportional impact on parts of the population (Spadaro, 2020).

The scope of this chapter is limited only to the impact of COVID-19 on the internationally recognized right to education as a human right. We will argue that school closures and the transition to online learning widely affected millions of students worldwide. Students coming from low-income families or developing countries are

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the ones affected the most by this transition. Online learning, either through synchronous or asynchronous delivery, requires access to technological equipment and Internet connectivity, which are not available to every student. Therefore, the already existing digital divide and educational inequalities have been further deepened during the COVID-19 pandemic putting the right to education at risk.

2 Right to Education as a Fundamental Human Right

The right to education has been recognized as a human right by several international conventions and customary law like the International Covenant on Economic, Social and Cultural Rights (ICESCR) (UN General Assembly, 1966), the Convention on the Rights of the Child (CRC) (UN General Assembly, 1989), and the Universal Declaration of Human Rights (UDHR) (UN General Assembly, 1948). In addition to the ICESCR, CRC, and UDHR, the Convention against Discrimination in Education (CDE) (UNESCO, 1960) and the European Convention on Human Rights (ECHR) (Council of Europe, 1950) have also repeated the importance of the right to education. By ratifying one of these legal documents, countries assume obligations and duties under international law to respect, protect, and fulfill the right to education.

Article 26 of the UDHR, in particular, states that everyone has a right to education while Articles 13 and 14 of the ICESCR take one step further recognizing that the right to education includes, among others, the right to free, compulsory primary education for all. It is an obligation to the countries to develop secondary education accessible to all; as well as an obligation to develop equitable access to higher education. Furthermore, the right to education encompasses the obligation to eliminate discrimination at all levels of the educational system, to set minimum standards, to improve the overall quality of education, and to provide the students with the necessary means to pursue their studies. These means could vary from economic assistance and free meals to equipment such as books, pencils, notebooks, and, in cases where the budget of the national government allows it, electronic devices.

However, the basis of the right to education as a human right is not purely conventional. The right to education as a human right is also based on moral grounds (Lee, 2013). Education is the basis of a just society and the medium that leads the person to a better life (UNESCO, 2020a, b). Through education, the individual acquires social skills and knowledge that could help them to improve their lifestyle. However, depriving students of their right to education by not providing them with the same opportunities or necessary tools to pursue their studies is like depriving them of a better future. Nevertheless, unequal access to education is not a new challenge for the national education systems. It has been pending for a long time before the outbreak of the pandemic.

That was evident in the discussions of the US National Center of Adult Literacy/ OECD Roundtable in December 1999 where the parties stressed out the importance of "bridging" the already noticeable digital divide and laying the foundations for

technological literacy which could enable countries to participate more actively in the modern economy and not feel disconnected (OECD/CERI, 2000).

3   A Deeper Digital Divide Equals a Deeper Learning Crisis

The disruption in education amid the COVID-19 pandemic affected nearly 1.2 billion of students globally (UNESCO, 2020a, b). The most severely affected by this disruption were those students that lacked access to internet connectivity and electronic devices which would allow them to pursue their studies in an online learning environment (Haßler et al., 2020).

In 2018, OECD's Programme for International Student Assessment (PISA) published the results of a survey that demonstrated how ill-prepared countries were for a transition to online learning. Moreover, the survey revealed that access to a quiet place, electronic equipment, and internet connectivity are not granted, especially for the socio-economically disadvantaged students. In more detail, the survey revealed that on average across OECD countries, 9% of 15-year-old students do not have a quiet place to study in their homes, and in Indonesia, the Philippines, and Thailand this number surpasses 30%. In Denmark, Slovenia, Norway, Poland, Lithuania, Iceland, Austria, Switzerland, and the Netherlands, over 95% of students have a computer to use for their schoolwork at home. However, in Indonesia, only 34% of the students have their own computers. In Peru, it is 88% of students in advantaged schools and just 17% in disadvantaged schools who have a computer at home. As for internet connectivity, in Mexico, 94% of 15-year-olds from privileged backgrounds have internet access in their homes compared to only 29% of those from disadvantaged backgrounds (Reimers and Schleicher, 2020). A similar study in 2019 shows that only 39.6% of Africans have internet access compared to 87.7% of Europeans and 95% of North Americans (Internet World Stats, 2020).

In 2020, amid the COVID-19 pandemic, these statistics did not change dramatically. Even though countries used a range of technologies (e.g., internet, radio, TV, cellphones), social networking and instant communication tools to facilitate the online learning (Haßler et al., 2020), many students were left behind without education. In India, a country that suffers from a significant digital divide and educational inequalities, many students did not have access to a computer or laptop at their home. Besides, the daily data package of 1.5Gb was not enough to cover their video-based or simultaneously taught online classes. Similarly, in the Philippines, the limited internet connection, poor network infrastructures, and high cost of digital devices were some of the obstacles that a great number of students had to overcome during the transition to remote learning. Students in Africa were challenged as well. In Uganda, for instance, despite the fact that the majority of individuals owns a mobile device, chargers are not easily available and mobile internet is not always affordable (Bozkurt et al. 2020). However, the digital divide is not an educational problem solely present in developing countries. In countries, like Sweden, France, Spain, and Greece, the digital divide was also visible during the pandemic, albeit to

a more limited extent. The United States also struggled with the changes in education since a significant percentage of students in low-income families and students of color lacked access to technology resources that could facilitate their online learning experience (Bozkurt et al. 2020).

It is true that the COVID-19 pandemic deepened the digital divide and brought to surface old and new educational dilemmas. At the same time, it reminded countries of their obligation to respect, protect, and fulfill the right to education even during a health crisis and called them to prioritize in their national agendas equal access to education and digital equity.

In this respect, the current literature suggests several initiatives which, if implemented properly, could "flatten the curve" of the learning crisis and provide students with equal educational opportunities. Among the most plausible suggestions are the development of a new legislation which would require educational institutions to develop a digital learning framework able to tackle internet accessibility and access to digital infrastructure and methods to evaluate practices for educational and digital equity (Bozkurt et al. 2020). Another suggestion has been for governments to reduce the cost for electronic devices and internet connectivity or explore partnerships with the private sector and the community in securing the resources to provide those devices and connectivity (Reimers and Schleicher, 2020).

There is no doubt that implementing these suggestions could be the first step towards educational equality and digital equity. However, their success will depend upon the joint effort of governments, educational institutions, educators, and students as well.

4   Conclusion

The COVID-19 pandemic has been an unpreceded health crisis that has found countries and education institutions unprepared. The lessons that we will have to learn from this pandemic are: first, to improve our education systems by predicting disruptions like the present one and plan ahead; second, to address old educational dilemmas that perpetuate learning crises and digital inequality; and, last but not least, to protect the fundamental right to education regardless of circumstances. Addressing the digital divide and unequal access to education needs to become a priority for every democratic society. COVID-19 has changed how we view the world, but it should not change how we view human rights.

References

American Association for the International Commission of Jurists (AAICJ). (1985). *Syracusa principles on the limitation and derogation provisions in the International Covenant on Civil and Political Rights*. Retrieved from https://www.icj.org/wp-content/uploads/1984/07/Siracusa-principles-ICCPR-legal-submission-1985-eng.pdf

Council of Europe. (1950). European Convention for the Protection of Human Rights and Fundamental Freedoms, as amended by Protocols Nos. 11 and 14. Retrieved from https://www.refworld.org/docid/3ae6b3b04.html

Bozkurt, A., Jung, I., Xiao, J., Vladimirschi, V., Schuwer, R., Egorov, G., Lambert, S. R., Al-Freih, M., Pete, J., Olcott, D., Jr., Rodes, V., Aranciaga, I., Bali, M., Alvarez, A. V., Jr., Roberts, J., Pazurek, A., Raffaghelli, J. E., Panagiotou, N., de Coëtlogon, P., Shahadu, S., Brown, M., Asino, T. I., Tumwesige, J., Ramírez Reyes, T., Barrios Ipenza, E., Ossiannilsson, E., Bond, M., Belhamel, K., Irvine, V., Sharma, R. C., Adam, T., Janssen, B., Sklyarova, T., Olcott, N., Ambrosino, A., Lazou, C., Mocquet, B., Mano, M., & Paskevicius, M. (2020). A global outlook to the interruption of education due to COVID-19 pandemic: Navigating in a time of uncertainty and crisis. *Asian Journal of Distance Education, 15*(1), 1–126.

Haßler, B., Khalayleh, A., McBurnie, C., Adam, T., & Allier-Gagneur, Z. (2020), *Who has what? Assessing who has access to what devices in the education response to the COVID-19 pandemic*. Open Development & Education. Retrieved from https://opendeved.net/2020/05/11/who-has-what-assessing-who-has-access-to-what-devices/

Human Rights Watch. (2020). *Human Rights Dimensions of COVID-19 Response*. Retrieved from https://www.hrw.org/news/2020/03/19/human-rights-dimensions-covid-19-response

Internet World Stats. (2020). *World Internet Users and 2020 Population Stats.* Retrieved from https://www.internetworldstats.com/stats2.htm

Joseph, S. (2020). COVID-19 and human rights: Past, present and future. *Griffith Law School Research Paper,* N° 20-3.

Lee, S. (2013). Education as a Human Right in the 21st century. *Democracy & Education, 21*(1), 2.

OECD/CERI. (2000). Learning to Bridge the Digital Dividem, Results of a Roundtable in December 1999, organized jointly by OECD/CERI and the US National Center on Adult Literacy. Retrieved from https://www.oecd.org/site/schoolingfortomorrowknowledgebase/themes/ict/bridgingthedigitaldivide.htm

OHCHR. (2020a). *COVID-19: States should not abuse emergency measures to suppress human rights*. Retrieved from https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=2572.

OHCHR. (2020b). *Coronavirus: Human rights need to be front and centre in response- says Bachelet*. Retrieved from https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=25668&LangID=E

Reimers, F., & Schleicher, A. (2020). *A framework to guide an education response to the COVID-19 Pandemic of 2020*. Organization for Economic Co-operation and Development (OECD).

Spadaro, A. (2020). COVID-19: Testing the limits of human rights. *European Journal of Risk Regulation, 11*, 317–325.

UNESCO. (2020a). *Education: From disruption to recovery*. Retrieved from https://en.unesco.org/covid19/educationresponse

UNESCO. (2020b). *Education is the bedrock of a just society in the post-COVID world*. Retrieved from https://en.unesco.org/news/covid-19-education-bedrock-just-society-post-covid-world

UNESCO. (1960). *Convention against discrimination in education*. Retrieved from https://www.refworld.org/docid/3ae6b3880.html

UN General Assembly. (1948). *Universal declaration of human rights*. Retrieved from http://www.un.org/en/documents/udhr/index.shtml

UN General Assembly. (1966). *International covenant on economic, social and cultural rights*. Retrieved from http://www2.ohchr.org/english/law/cescr.htm

UN General Assembly. (1989). *Convention on the rights of the child*. Retrieved from http://www2.ohchr.org/english/law/crc.htm

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Reading (Through) COVID-19: Toward a Posthumanist Strategy in Higher Education

Çağdaş Dedeoğlu

Exposure does not produce; exposure only interrupts.

Gert Biesta

1 Introduction

The 2019 novel coronavirus disease, in short COVID-19, has been placed at the top of the agenda in 2020. Considering its spatial-temporal impact and sense of emergency, COVID-19 quickly became a truly global dilemma. In fact, some scholars have argued that there are lessons from COVID-19 for global climate change (Manzanedo & Manning, 2020). The virus has so far been addressed from politico- or socioeconomic (Bullard, 2020; Butler, 2020), psychological (WHO, 2020), ecological (Shiva, 2020), religious (Rainey, 2020), and ethical-philosophical ("Coronavirus and Philosophers," 2020; Zizek, 2020) angles. Apparently, the virus, and the uncertainty and fear it causes, will continue to dominate discussions.

Within this context, COVID-19 compels us also to seek innovative ways of education. In response to an interview question about his hesitation to write or talk about COVID-19, Graham Harman (2020) recently said that "philosophy deals better with important issues than with urgent ones." I agree with Harman's position, but I also think that this urgent topic is very much related to some important ones. And education is one of these important topics. With this viewpoint, I aim to suggest an alternative reading of the pandemic that opens new possibilities for education and teaching. Here, I consider the future of education and the future of work as correlated domains and make a case for a posthumanist approach to higher education in times of risk and uncertainty. There has already been a growing interest and research

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in posthumanism and education (Bozalek et al., 2018; Chiew, 2018; de Oliveira & Lopes, 2016; Pedersen, 2010; Snaza et al., 2014; Taylor & Hughes, 2016; Taylor & Bayley, 2019). What is needed now is to synchronize higher education with the ethics and philosophy of knowledge inspired by life and vitality (Braidotti, 2019a; Strom & Lupinacci, 2019). In achieving this aim, this chapter seeks to read the word and the world (Freire & Macedo, 1987) through the pandemic.

2   The Posthuman Condition and COVID-19

The scientific image of viruses is closely dependent on the ontology of life that science relies on. This image has profoundly changed over time. In the past hundred years, viruses were considered as poisons, life forms, and biological chemicals. Today, scientists think that viruses are not alive in the sense that neurons are not alive individually, but they have a fundamental role in the complex web of life (Villarreal, 2008). Departing from this view, I will depict COVID-19 within the relational and contextual complexity of the posthuman condition. Consequently, two questions can be asked: first, how can we make sense of COVID-19, and second, what is the historical context in which COVID-19 has upended the world?

Contrary to mainstream views, I do not consider COVID-19 as a crisis moment. The mainstream views are based on a specific epistemology of crisis that promotes unprecedentedness and urgency (Whyte, 2021). In a situation which is perceived as unprecedented, it becomes possible to overlook the previous lessons or up-to-date scientific knowledge about viruses that I briefly mentioned above. Further, the sense of urgency allows ignoring the ethical implications of our actions for different sects of society. Thus, the dominant epistemology of crisis disregards the fact that the pandemic is yet another reflection of the everlasting state of crisis of human-made systems and humans' relationship with their environments. The most extraordinary aspect about the pandemic is not what COVID-19 has caused but what we have caused due to the anthropogenic activities such as industrialization, urbanization, deforestation, land use, and waste generation.

COVID-19 has emerged in a globalized, neoliberalized (and still neoliberalizing) world. That means national and international institutions have long been shaped by globalist, neoliberal discourses, and practices (Slobodian, 2018) that correspond to the increased responsibility of citizens and the decreased role of governments to tackle problems. In a sense, COVID-19 has interrupted this global, neoliberal system that had worked for the benefit of some. On the other side of the coin, however, lies the three aspects of the socioeconomic context in which the global society has encountered the virus. First, globalization aims to profit maximization. Second, capital does not care about humans. Lastly, death is not democratic (Han, 2020). That means the system and the virus discriminate among people. So, any analysis of the COVID-19 situation should pay attention to these aspects.

Considering the broader context in which COVID-19 occurred, we have been witnessing both the Fourth Industrial Revolution and the Sixth Mass Extinction. On

the one hand, we have found ourselves in the Fourth Industrial Revolution through advancements in fields such as artificial intelligence, robotics, neuroscience, genome and stem cell science, nanotechnology, climate, and space sciences. We, on the other hand, have caused the Sixth Mass Destruction of life on Earth (Ceballos et al., 2015). As a reflection of this, 60% of the animal population has disappeared since the 1970s (Carrington, 2018). Oceans have been invaded by plastics. Extreme climate events and outbreaks have become part of everyday life. Many scientists and philosophers prefer to explain this period with the concept of Anthropocene, which refers to substantial human impact on Earth's geology and ecosystems. However, Haraway (2016) conceptualizes our current era as "Chthulucene," derived from the Greek word "khthon," which means Earth. Humans and nonhumans are inseparably connected in tentacular ways in the Chthulucene and sympoiesis or making with sense, instead of autopoiesis or self-making, the key characteristic of this era. Therefore, humans should learn to stay with the trouble of living and dying. In other words, humans should live according to the cartographies of the posthuman condition (Braidotti, 2018).

In the posthuman condition, COVID-19 can be defined as a posthuman agent (Hayles, 2020), an event (Ronchi, 2020), or an exposure (Biesta, 2011). I think COVID-19 is each, and all, of them. The virus is posthuman in the sense that it challenges humanism's depiction of Homo sapiens as a dominant agent. This is an era where the boundaries between physical, digital, and biological layers of life have become increasingly blurred, leaving us with the posthuman convergence (Braidotti, 2019b). That means we have converged to more-than-humans—both technologies and animals, plants, bacteria, and of course, viruses. COVID-19 has shown once more—this time with a heavy death toll—that human life can easily be interrupted by a more-than-human agent, and technology can also act as an agent of radical change. In this sense, the virus and current technoscientific artifacts can be considered as two powerful agents of the posthuman condition. This fact, among others, necessitates both re-addressing old questions and asking new ones regarding human agency and its relation to vitality, such as who are "we" and what is life? I think Braidotti's understanding of multi-scalar relationality may help in this effort: "Embodied and embedded because we are deeply steeped in the material world. Transversal because we connect but also differ from each other. And yet we are structurally related to one another, to the human and non-human world that we live in. We are after all variations on a common matter" (Braidotti, 2019b). Reading COVID-19 within the multi-scalar relationality of the posthuman condition reveals that the virus and we are rooted in the same material conditions of the world, and our vitality, in different forms, is shaped by new technologies such as biotechnological applications.

On the other hand, COVID-19 as an event is causing dramatic transformations (Ronchi, 2020). Some studies have already specified COVID-19-related changes in consumer behavior and business practices, ethical matters, and leadership and employee-related dimensions (Donthu & Gustafsson, 2020). It is also clear that digital technologies are continuing to dominate sectors such as health, security, and education. Data privacy and security issues are more pronounced. While some jobs

are being lost, some others are being generated. The old ways of doing business are being challenged as well.

A special emphasis must be given to public health and social justice issues during and after COVID-19. The pandemic has unveiled the inequalities of racial capitalism in countries such as the USA (Kim & Bostwick, 2020; Laster Pirtle, 2020). A new social class of delivery people is also emerging. Despite the importance, these issues are widely ignored. However, they make the situation more vulnerable.

It is not only COVID-19 that causes the above-mentioned outcomes. It is also us, the humans, who shape and are being shaped by our choices. In this posthuman scenario, making educated choices gains much importance. In this respect, we need to think about how to increase the potential of educated choices. In the following section, I will thus focus on this potential by considering COVID-19 as an exposure that interrupts the humanist, modernist education.

3   Re-reading Education Through COVID-19

COVID-19 can also be read as an exposure that interrupts common-sense notions about our place in this world. So, based on a posthuman understanding of the pandemic, I will here attempt to answer one more question: Why does the posthumanist education matter in the post COVID-19 era?

As can be seen from the discussion in the earlier section, the most pressing topics of higher education in the post COVID-19 era will be business and technology ethics and social justice. This necessitates higher education curriculums to provide students with the knowledge and skills in new areas (e.g., cyber infrastructure). On the flip side, students should be able to access the tools to educate themselves ethically and philosophically and to reflect on their individual vitality and its relationality with others. Posthumanism may help design and implement a posthuman strategy in higher education that enables us to develop such a toolkit.

The post-COVID-19 future can only be embraced by a posthumanist education for at least two reasons. First, posthumanism as post-humanism, post-anthropocentrism, and post-dualism (Ferrando, 2019) can support new educational policies and curriculum development activities that recognize different forms of vitality, modes of being, and ways of knowing. In other words, a posthumanist education strategy cannot only prepare the field of higher education to an open-ended definition of the human (Biesta, 2011; Pedersen, 2010) but also benefits from the richness of "studies" such as animal studies and cyborg studies and focuses on alternative rationalities and non-dualist interpretations of life. This approach can be based on the two principles that I share with Haraway and Braidotti: critical thinking and love for the world (Marce MT, 2017). The posthuman leadership in higher education can use the twenty-first century skills, including critical thinking, creativity, and communication, to create a reverence for the Earth.

The second reason is somewhat more startling. A posthumanist education can prepare students about the risks coupled with transhumanist visions of the

posthuman condition. Our experience with COVID-19 has so far indicated that responses based solely on techno-solutions such as Zoom may cause unforeseen problems. In a more general sense, Haakon Faste (2015) draws attention to the existential risks (Bostrom, 2014) generated mostly by technoscientific developments and proposes the idea of posthuman compassion enabling designers to embrace their posthuman selves and thus reduce future risks related to socio-technological systems. However, this proposal relies on a transhumanist understanding of the posthuman condition that constitutes one path among many and does not provide a comprehensive understanding of Earth systems. As an alternative to the transhumanist vision, Benjamin H. Bratton (2018) makes a case for the Copernican shift in the philosophy of design, which is based on thinking more on the Anthropolysis, that is, the study of how the human becomes something else. I believe that the same is true for the philosophy of education. In both cases, Anthropolysis necessitates an in-depth analysis of the posthuman condition, and Critical Posthumanities. Braidotti (2018) present a great potential to do this. In this way, the posthuman condition can be encapsulated in its richness for sustaining complex educational systems.

Some scholars think that COVID-19 has done more than education could have done to surmount our culturalist and anthropocentric bias (Ronchi, 2020). Although I think that COVID-19 as an event has accelerated the processes of learning, unlearning, and relearning, I am not so sure about their direction. The direction of (un/re) learning is dependent on how education and subjectivity have been linked. Here, one of my concerns is to reverse people's alienation from the space around them. If educational leadership integrates COVID-19 as an exposure into pedagogies through a sense of time-space, the individuals of the future can be singled out and take responsibility through diverse subjectivities (Biesta, 2011). Such a pedagogy will not aim to produce a specific type of individual but only interrupts and demystifies the false beliefs and perceptions about different topics ranging from biology to ethics.

To conclude, the post COVID-19 era must be envisioned based on the four pillars of the posthumanist education strategy: understand, explore, respond, and share. First, we should understand the negative consequences of our hegemonic relationship with the human and nonhuman world. Second, we should explore alternatives to this relationship. Third, we should respond to the event as a reflection of the posthuman condition. Finally, we should share our critical knowledge and expertise with others.

References

Biesta, G. (2011). Philosophy, exposure, and children: How to resist the instrumentalisation of philosophy in education. *Journal of Philosophy of Education, 45*(2), 305–319. https://doi.org/10.1111/j.1467-9752.2011.00792.x

Bostrom, N. (2014). *Superintelligence: Paths, dangers, strategies* (1st ed.). Oxford University Press.

Bozalek, V., Braidotti, R., Shefer, T., & Zembylas, M. (Eds.). (2018). *Socially just pedago-gies: Posthumanist, feminist and materialist perspectives in higher education*. Bloomsbury Academic.

Braidotti, R. (2018). A theoretical framework for the critical posthumanities. *Theory, Culture & Society, 36*(6), 31–61. https://doi.org/10.1177/0263276418771486

Braidotti, R. (2019a). The contemporary posthumanities. In *Higher education in the World 7 – Humanities and Higher Education: Synergies between Science, Technology and Humanities* (pp. 134–147). Global University Network for Innovation (GUNi). www.guninetwork.org

Braidotti, R. (2019b). *Posthuman knowledge*. Polity Press.

Bratton, B. H. (2018). On anthropolysis. In N. Axel, B. Colomina, N. Hirsch, A. Vidokle, & M. Wigley (Eds.), *Superhumanity: Design of the self* (pp. 373–378). University of Minnesota Press.

Bullard, R. (2020, April 17). *The "father of environmental justice" on why he isn't surprised by COVID-19 health disparities.* Texas Monthly. https://www.texasmonthly.com/news/father-environmental-justice-coronavirus/

Butler, J. (2020, March 30). *Capitalism has its limits*. Verso Books. https://www.versobooks.com/blogs/4603-capitalism-has-its-limits

Carrington, D. (2018). *Humanity has wiped out 60% of animal populations since 1970, report finds.* The Guardian. https://www.theguardian.com/environment/2018/oct/30/humanity-wiped-out-animals-since-1970-major-report-finds

Ceballos, G., Ehrlich, P. R., Barnosky, A. D., García, A., Pringle, R. M., & Palmer, T. M. (2015). Accelerated modern human–induced species losses: Entering the sixth mass extinction. *Science Advances, 1*(5), e1400253. https://doi.org/10.1126/sciadv.1400253

Chiew, F. (2018). A posthuman pedagogy with Rancière and Bateson. *Critical Studies in Education, 59*(3), 297–312. https://doi.org/10.1080/17508487.2016.1194301

Coronavirus and philosophers. (2020). *European Journal of Psychoanalysis*. https://www.journal-psychoanalysis.eu/coronavirus-and-philosophers/

de Oliveira, T. R. M., & Lopes, D. B. (2016). On the limits of the human in the curriculum field. *Curriculum Inquiry, 46*(1), 110–125. https://doi.org/10.1080/03626784.2015.1113512

Donthu, N., & Gustafsson, A. (2020). Effects of COVID-19 on business and research. *Journal of Business Research, 117*, 284–289. https://doi.org/10.1016/j.jbusres.2020.06.008

Faste, H. (2015). *Stanford seminar - posthuman-centered design*. YouTube. https://www.youtube.com/watch?v=HYLvVdfNlKk

Ferrando, F. (2019). *Philosophical posthumanism*. Bloomsbury Academic.

Freire, P., & Macedo, D. (1987). *Literacy: Reading the word and the world*. Taylor & Francis Ltd. http://public.ebookcentral.proquest.com/choice/publicfullrecord.aspx?p=254394

Han, B.-C. (2020, May 24). Byung-Chul Han: COVID-19 has reduced us to a "society of sur-vival." *Www.Euractiv.Com*. https://www.euractiv.com/section/global-europe/interview/byung-chul-han-covid-19-has-reduced-us-to-a-society-of-survival/

Haraway, D. (2016). *Staying with the trouble: Making kin in the Chthulucene*. Duke University Press.

Harman, G. (2020, May 6). *Tecrit ve tehdit [lockdown and the sense of threat] – Graham Harman.* Baykus Felsefe Yazilari. https://baykusfelsefe.com/2020/05/06/tecrit-ve-tehdit-lockdown-and-the-sense-of-threat-graham-harman/

Hayles, N. K. (2020, April 17). *Novel corona: Posthuman virus.* In the Moment. https://critinq.wordpress.com/2020/04/17/novel-corona-posthuman-virus/

Kim, S. J., & Bostwick, W. (2020). Social vulnerability and racial inequality in COVID-19 deaths in Chicago. *Health Education & Behavior, 47*(4), 509–513. https://doi.org/10.1177/1090198120929677

Laster Pirtle, W. N. (2020). Racial capitalism: A fundamental cause of novel coronavirus (COVID-19) pandemic inequities in the United States. *Health Education & Behavior, 47*(4), 504–508. https://doi.org/10.1177/1090198120922942

Manzanedo, R. D., & Manning, P. (2020). COVID-19: Lessons for the climate change emergency. *Science of The Total Environment, 742*, 140563. https://doi.org/10.1016/j.scitotenv.2020.140563

Marce MT. (2017, September 20). *Talk Donna Haraway and Rosi Braidotti March 25, 2017*. YouTube. https://www.youtube.com/watch?v=IXQTex0a3dc

Pedersen, H. (2010). Is 'the posthuman' educable? On the convergence of educational philosophy, animal studies, and posthumanist theory. *Discourse: Studies in the Cultural Politics of Education, 31*(2), 237–250. https://doi.org/10.1080/01596301003679750

Rainey, B. (2020, April 1). *In time of crisis Christians must reject charlatans and magical thinking*. Religion Dispatches. https://religiondispatches.org/in-time-of-crisis-christians-must-reject-charlatans-and-magical-thinking/

Ronchi, R. (2020, March 14). The virtues of the virus (Coronavirus and Philosophers). *European Journal of Psychoanalysis*. https://www.journal-psychoanalysis.eu/coronavirus-and-philosophers/

Shiva, V. (2020, April 13). *Ecological reflections on the Coronavirus*. Medium. https://medium.com/post-growth-institute/ecological-reflections-on-the-coronavirus-93d50bbfe9db

Slobodian, Q. (2018). *Globalists: The end of empire and the birth of neoliberalism*. Harvard University Press. https://www.hup.harvard.edu/catalog.php?isbn=9780674979529

Snaza, N., Appelbaum, P., Bayne, S., Carlson, D., & Morris, M. (2014). Toward a posthumanist education. *Journal of Curriculum Theorizing, 30*(2), 17.

Strom, K. J., & Lupinacci, J. (2019). Putting posthuman theories to work in educational leadership programmes. In C. A. Taylor & A. Bayley (Eds.), *Posthumanism and higher education: Reimagining pedagogy, practice and research* (pp. 103–121). Springer. https://doi.org/10.1007/978-3-030-14672-6

Taylor, C. A., & Bayley, A. (Eds.). (2019). *Posthumanism and higher education: Reimagining pedagogy, practice and research*. Springer International Publishing. https://doi.org/10.1007/978-3-030-14672-6

Taylor, C. A., & Hughes, C. (Eds.). (2016). *Posthuman research practices in education*. Palgrave Macmillan UK. https://doi.org/10.1057/9781137453082

Villarreal, L. P. (2008, August 8). *Are viruses alive?* Scientific American. https://www.scientificamerican.com/article/are-viruses-alive-2004/

WHO. (2020, March 18). *Mental health and psychosocial considerations during the COVID-19 outbreak*. World Health Organization. https://www.who.int/publications-detail-redirect/WHO-2019-nCoV-MentalHealth-2020.1

Whyte, K. (2021). Against crisis epistemology. In B. Hokowhitu, A. Moreton-Robinson, L. Tuhiwai-Smith, S. Larkin, & C. Andersen (Eds.), *Routledge handbook of critical indigenous studies*. Routledge. https://www.routledge.com/Routledge-Handbook-of-Critical-Indigenous-Studies/Hokowhitu-Moreton-Robinson-Tuhiwai-Smith-Larkin-Andersen/p/book/9781138341302

Zizek, S. (2020). *Pandemic!: COVID-19 shakes the world*. Wiley. https://www.wiley.com/en-us/Pandemic%21%3A+COVID+19+Shakes+the+World-p-9781509546107

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Values and Ethics in the Teaching Profession

Jack Olszewski

What are the purposes and priorities of teaching?
First, to inspire. Second, to challenge. Third, and only third, to
impart information.

J. Michael Straczynski

1 Introduction

Our scientific and technologically based civilization has tried to fulfill the promise made during the historical period of the Enlightenment where mankind would make the world friendly to all through rational knowledge. It has turned out that although modern civilization did build a world of enormous material wealth full of scientific knowledge and technology, it did not make it safe or understandable for use for all. Globalization has increased the vulnerability of human civilization to threats, including the spread of pandemics from one individual country to the entire planet. Science, by its very nature, copes well with solving technological problems but is not able to deal with the holistic, existential dimension of human life. In matters of life and death, human identity and meaning in life, and other matters fundamental to the existence of societies, science has very little to say. COVID-19 reminds us that although science is necessary, it has its severe limitations, and we cannot place all our hopes on science. Similarly, we have come to realize that technology is not capable of solving every human problem.

Good teaching relies on the principle of well-prepared teachers who have high ethical standards. This is necessary for creating a positive atmosphere in an educational institution and leads to intellectual and moral development in students. It can

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be supported by curricula that focus on teaching and developing knowledge that will be applicable and useful in a wide variety of professional situations.

COVID-19, declared a pandemic by the WHO on March 11, 2020, has drastically impacted the structured teaching order around the world. In addition, it has mostly stopped many of the professional activities associated with the education students are receiving. Ethical values and teaching skills are facing new challenges during this pandemic, and it remains to be seen what the long-term effects of the crisis will be.

2 Values and Professional Competence

Ethical standards determine human behavior and set criteria that determine what to do and how to behave in interpersonal relationships (Maxwell, 2015). This is particularly the case when decisions are made that affect other people. Ethics is a system of values and norms of conduct enforced in a community. In philosophy, it is the science of morality that deals with the clarification and determination of categories such as good and evil, responsibility, conscience, and other principles and norms of moral conduct.

The ethics of a particular profession, such as teaching, are a set of moral norms defining the behavior of the representatives of that profession, often taking the form of a code of ethics. Such moral norms, which are recognized and accepted socially, undergo changes related to the developments within societies and are largely culturally shaped in any given community. Many ethical principles are universal and immutable, and these are usually the foundation of codes of ethics for various professional groups. Among many professional communities, teachers are one of several groups in which direct relationships with people are particularly associated with the implementation of fundamental moral values (Warnick & Silverman, 2011).

An ethical way of life helps in the development of human life, as well as in protecting and supporting it. At present, many people deal with moral issues in their professions and look for ways and methods to resolve them. Society continues to make efforts to integrate moral reasoning into the professional lives of people to achieve happiness and contentment and to minimize negative consequences related to their work activities.

Education enables individuals in society to participate in the development and progress of humanity and gives them the opportunity to improve themselves by gaining knowledge and developing morally. The teacher has a crucial role to play in this as teaching has accompanied and guided mankind since the earliest ages (Meiers, 2007). Values play an integral role in education around the world. The importance of a teacher's personal values is often overlooked and underestimated. Teachers need opportunities to reflect on their own personal and professional values to enable them to accurately model what their students seek. Educators must be encouraged to examine the relationship between their professional role(s) and their

dominant values as this self-awareness will lead to continuous professional development and impact the relationship that they have with their students. The teaching profession is associated with shaping human values. Therefore, teachers have tremendous responsibility entrusted in them by society. As this profession requires special skills, ambitions, and qualifications and abilities, teachers should look at their jobs as not only a profession but as a vocation and passion.

Despite the growing number of issues that teachers face every day, their activities should maintain a conviction and faith in the specifics of the profession. This is of fundamental importance in relationships with students and in building their own authority as a teacher. Each teacher should show an equal level of dignity to individuals they interact with, and this should also be manifested in the way they fulfill their professional responsibilities to ensure the cognitive, intellectual, and moral progress of their students. Certain moral requirements are articulated by parents, school authorities, and/or society. Young people are becoming less exposed to personal interactions and are more willing to stay in impersonal virtual worlds of communication, gatherings, and games. On the other hand, parents realize that education is one of the most important facets of their children's lives and are becoming more demanding, yet often helpless, in imparting educational and moral values. Therefore, teachers must be creative and dynamic in their teaching and in the way they face pedagogical challenges.

In our modern age, there is often a lack of direct contact with the teacher in the educational system. The student does not have an authentic companion to go with through their educational development. We, as a society, bear the consequences of leaving behind the student-master relationship in the educational process. Reflections on the ethics of the teaching profession indicate the need to strive to build and care for authority. Today more than ever before, young people need support and trust in their educational journeys, which relies on the strength of the teaching profession. When we talk about human dignity in the globalized teaching of ethics, the key role of a teacher and the teaching profession is to help students develop an awareness of the way they respect and recognize a person based on their behavior and actions. Because of this, the value of human dignity should be one of the most significant values in the relationship between teacher and student. Education should be oriented toward the full development of human personality and strengthening respect for human rights. Each teacher should show an equal level of dignity to individuals they interact with, and this should also be manifested in the way they fulfill their professional responsibilities to ensure the cognitive, intellectual, and moral progress of their students.

In practice, the professional ethics of educators are challenging to formulate and implement. In the modern era, the teacher simultaneously represents themselves and their personality, as well as the institution of education. Their ethics are created not only by values, norms, and directives but also by the competence to build sound and responsible moral judgments in situations that they encounter in their professional life – including ones of crisis and pandemic.

3   The Education System During the Pandemic

The education system has responded in extraordinary ways to the COVID-19 crisis. The threat to health that we are experiencing, and which has forced the suspension of teaching activities, will be an accelerator of innovations in the profession (Woolliscroft, 2020). Following the initiatives instituted in the first days of the pandemic, educational institutions have begun to organize themselves to ensure a coherent method of distance learning useful for the foreseeable future.

For a long time, online learning had settled in the shadow of learning based on direct contact between teacher and student (Roddy et al., 2017). In our current crisis, however, online education has proven to have many advantages over traditional teaching methods. The use of digital technology to create effective learning paths at a distance has proven to be a boon to students all around the world. However, educators must be prepared to deal with new ethical issues they encounter along with these new adaptations. These include difficulties in replicating the physical teaching environment in a digital format, the difficulty in measuring the efficiency of teaching in an online space, dealing with social differences among students such as disadvantaged living situations, lack of access to technology, as well as technical difficulties that impair content delivery or access. The ongoing crisis has encouraged a transformation for educators, one characterized by the importance of responsibility, collegiality, and skills improvement. It has also presented new ethical challenges that were not present before COVID-19.

Instructors have different levels of competence and capability in technology use, teaching, and learning. The professional development of teachers, cooperation among teachers, the development of proper tools for supporting students, and helping students in the intelligent use of technology are all needed for online education to work. A migration to distance learning requires not only developing content-rich courses but imagining new projects and new ways of working. Content needs to be designed with the view of ensuring that every student has a chance to succeed. Yes, new technologies and tools have helped in this regard. However, we should not forget to strive for the same ethical values that we have always sought, even if our education methods during the COVID-19 pandemic are in transition. There is no doubt that this crisis involves transforming our society into a more connected community as we pave the way for these new virtual educational experiences in the twenty-first century.

4   New Ethical Challenges After the Pandemic

COVID-19 will dramatically test the values and mission of the teaching profession. At the same time, it will be an opportunity for profound innovation and changes in the current school system. During this period, one of the most interesting topics will be the need to redesign the teaching professional profile. Teachers will play a

significant role in supporting colleagues, creating tutorials, and providing various forms of cooperation. These collaborative activities will ensure a smooth transition as we enter a new era of education.

An overwhelming majority of educators are trying to overcome the obstacles created by this crisis to reach their students. They are showing that being a teacher is an ethical and professional commitment, not only a responsibility to their employer(s) but an act of care that does not cease in the face of difficulties. In our new reality, teachers will be required to explore and go deeper into moral and ethical issues with students than ever before.

Among the properties that are also characteristic of the teacher in the present situation, interpersonal skills and competences undoubtedly occupy a leading position. Working with the student, the student's parent, and other teachers is primarily about social interactions and building relationships that are satisfactory for interested parties.

Changes in our education system will result in innovations that will shape the level of the ethical culture of all teachers. For many years, there have been discussions on modifying collegiate bodies in different countries. Critiquing collegiate organizations does not equate to a desire to isolate. Our current experiences are showing us a desire to create new forms of "professional collegiality" that are more agile and effective. Accessibility and collaborative methods that will allow for the integration of skills and teaching innovations will all be welcome consequences of the current crisis. Digital education will also create additional challenges such as issues of copyright and/or access to materials in communication channels. The accelerated digitization of education is a kind of change from which there is no turning back. It may become a new norm, and therefore the revision of ethical principles in this new form of teaching can help in resolving ethical problems and in interpreting conflicting and difficult situations. The crisis we are dealing with today will challenge fundamental ideas that have been globally developed over many decades, and therefore, they must be reconsidered carefully and deliberately. It is no surprise that ethics, understood as a critical approach to behavior in the teaching profession, will soon become an important point of debate in our public forums (UNESCO, 2020).

What is happening in the education field will be the subject of analysis for many years, but we can predict that the consequences of the crisis will forever change how we teach and learn. With new teaching methods, educators will have to collaborate with policymakers, students, and all citizens to help make a more ethical system our long-term educational reality. It is essential that during these times, we strive to create ethical, caring, and learning-oriented education systems that serve all students and their families.

The teacher should be expected to have and be able to activate ethical requirements in all possible educational situations, which will help them find the way to values. Here, the moral aspect of the teaching profession is important, which appears to be particularly important in the face of the ambiguity and inconsistency of the role of teachers. Despite the difficult situation they deal with, teachers should not need to give up high requirements for their professional group, consisting of the need to have specific knowledge and skills in this new reality. It is in this new reality

that there is an urgent need to include elements of professional ethics in the process of teacher education, as well as to try to develop the foundations of this ethics in accordance with current trends and challenges.

J. Michael Straczynski, with his question about the priorities of teaching, has also inspired us with an answer about the essential priorities of teaching. "What are the purposes and priorities of teaching? First, to inspire. Second, to challenge. Third, and only third, to impart information." Regardless of various adversities like the current pandemic and the challenges of technologies and resulting changes in responsibilities, these qualities help a teacher to perform effectively and ethically. The ultimate goals are to inspire, challenge, and provide the needed information for students. Inspiring teaching fires the imagination through a combination of intellectual challenge and knowledge that invites the learner to join the teacher on a journey of discovery.

References

Maxwell, B. (2015). "*Teacher as professional" as metaphor: What it highlights and what it hides*. *Journal of Philosophy of Education, 49*(1), 86–106.

Meiers, M. (2007). *Teacher professional learning, teaching practice and student learning outcomes: Important issues*. https://doi.org/10.1007/1-4020-4773-8_27.

Roddy, C., Amiet, D. L., Chung, J., Holt, C., Shaw, L., McKenzie, S., Garivaldis, F., Lodge, J. M., & Mundy, M. E. (2017). *Applying best practice online Learning, teaching, and support to intensive online envi*ronments: An integrative review. *Frontiers of Education, 2*, 59. https://doi.org/10.3389/feduc.2017.00059

UNESCO. "COVID-19 Educational Disruption and Response." https://en.unesco.org/covid19/educationresponse. Accessed 4 May 2020.

Warnick, B., & Silverman, S. (2011). *A framework for professional ethics course in teacher education*. *Journal of Teacher Education, 62*(3), 273–285.

Woolliscroft, J. O. (2020). *Innovation in response to the COVID-19 pandemic crisis*. *Academic Medicine: Journal of the Association of American Medical Colleges, 95*(8), 1140–1142. https://doi.org/10.1097/ACM.0000000000003402

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A Global Ethics and Values Framework for Remote Learning During Crisis

Mahrous Muhammad Basuny, Zakaryya Abdel-Hady, and Ismail Fayed

> *If you don't have integrity, you have nothing. You can't buy it.*
> *You can have all the money in the world, but if you are not a*
> *moral and ethical person, you really have nothing.*
>
> *Henry Kravis*

1 Background

Knowledge and values represent two essential pillars in positively combating crises. Values also represent a key to building communities and sustainable development in most nations (Holland et al., 2012). Throughout history, most communities have invested in educating individuals about ethics and values to guarantee social development through self-discipline, autonomy, and self-regulation. This is the gateway to future social stability. Hence, nations are keen on sustaining education even during the most challenging circumstances and crises. In emergencies, a set of ethical values needs to be put into practice to ensure the success of the educational process and to maximize its results. Those values cannot be abandoned even in the worst exceptional cases. The need for such values is rather pressing during times of crisis when there is a crucial need for autonomous guided teaching and learning during exceptional delivery circumstances. This will ensure that the quality of learning and assessments are not compromised.

During crises, the civil society willingly provides resources required for the remote education process for marginalized and disadvantaged groups of a

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community as a means of social support and cooperation. These groups are generally unable to secure access to primary education or resources. They also fall back to the most basic needs according to Maslow's hierarchy of needs (McLeod, 2007). The educational process partners, including governments and media, need to show consensus and play their expected neutral roles based on the ethics and values related to the experienced dilemmas and possible risks. Harmonizing those efforts eventually leads to ultimate successes and achievements of learning goals and standards in spite of losses.

2 Theoretical Background

Remote online teaching needs to be widely implemented in order to face global educational challenges caused by political and world conflicts today (Garrison et al., 2003) and to meet the needs of knowledge and technology-based worlds (Toprak et al., 2010). The following section elaborates on the importance of values and ethics as a pillar to successful education and learning.

2.1 Do Values Matter?

An example of this moral responsibility is to consider how to avoid and address related "vulnerabilities" such as academic fraud in online learning and the requirements for new policies for such cases (Garrison et al., 2003). These values usually stem from a local culture or belief (Toprak et al., 2010). Since online teaching is global in structure, its common standards would be more related to internationally respected ethics and values. For example, professors have been confronted with their students' vulnerabilities as face-to-face classes transitioned to entirely online or remote synchronous delivery during the COVID-19 pandemic situation in 2020. Required to complete and submit assignments and tasks, tests, and online exams, students may have been faced with previously inexperienced temptations to share solutions and answers in an online learning zone that typically supports collaboration in learning but guards against it in assessments.

Like the code of ethics developed by the Association for Computing Machinery Gotterbarn et al. (2018), it seems vital today to produce a global educational framework to represent and list ethical values for educators, students, families, and institutions. By doing so, we will help both educational institutions and policymakers identify and adopt those policies and regulations required in remote online learning programs. Due to its online and distant nature, this type of communication/interaction require more planning, emotional support, resilience, and somewhat innovative aspects of interaction. Psychology and other social dynamics are reshaped in that way. Chawdhry et al. (2017) suggest that it is the institution and the educator's own responsibility to identify their ethical responsibilities in e-learning environments.

This process helps to identify clear expectations, guidelines, policies, and disciplinary measures that are clear to all stakeholders early enough at the beginning of an educational program.

Moreover, research shows the significance of ethical values for creativity and innovation. This significant relationship is reflected in preparing individuals with unique and creative talents. Accordingly, ethics only become valuable when used in a practical context and respected, applied, and adapted for individuals' decisions and actions. For that purpose one of the main goals of academic institutions is to show students how to respect academic integrity and personal ethics, which are typically reflected in their social behaviors and actions (Chawdhry et al., 2017). That need for guidelines for ethical practice and learning is maximized when students learn online, participate from a distance, and are assessed remotely.

2.2   *The Construction of Values*

The development of values to be acquired and guide an individual's behavior was introduced in a three-level model by Simon (1977, as cited in Chawdhry et al., 2017). The first is the *cognitive* level, where values are explored and freely adapted without external pressures. The second is the *affective* emotional, where satisfaction occurs upon choosing and practicing specific values. It also includes pride and defending and declaring those values to others. Finally, there is the *attitudinal behavioral* level that interprets those values into actions. Repeating those practices turns them into a permanent guide for the individual's decisions and conscience, not just casual temporary behaviors (Aqel, 2005). With remote emergency teaching, the need for ethics maximizes where several policies and standards might not exist from involved stakeholders, including faculty members and students. In this case, autonomous behaviors and decisions stemming from personal and professional ethics play a vital role in the success and development of learning as anticipated (Gearhart 2001, as cited in Chawdhry, 2017).

3   Proposed Ethical Values Framework for Remote Learning During Crisis

Educational studies carefully highlight the importance of values and their application in teaching in general. These values can be divided into three main domains: individual, social, and pedagogical. We propose the following global ethical values framework in response to the pandemic threat to education and teaching in rushed remote environments (see Fig. 1). Each of the three domains is also divided into some related dimensions. When these dimensions are integrated together, they may create a healthy learning environment with mutual transparency and trust.
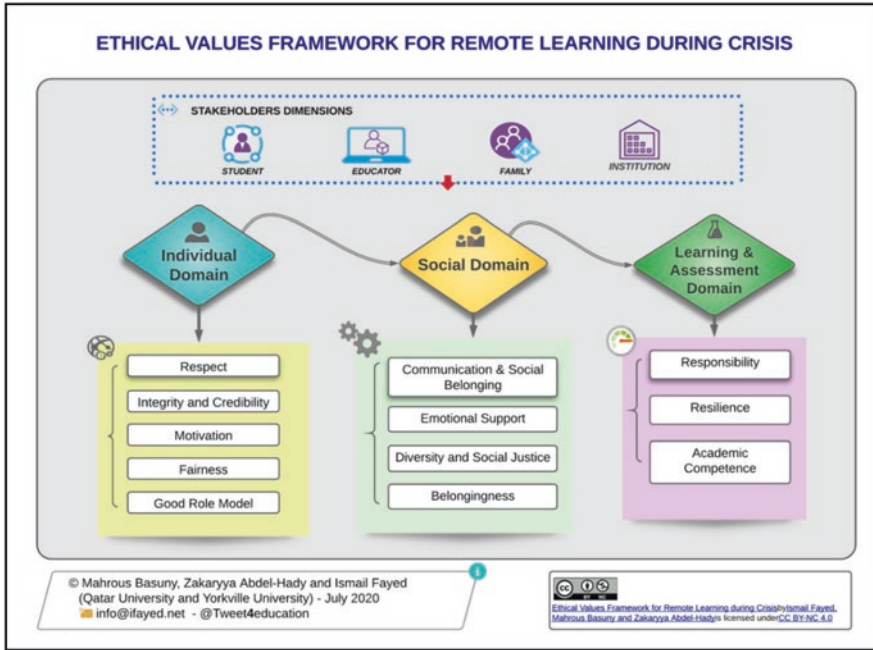
Fig. 1 Ethical values framework for remote learning during crisis

3.1 Individual Values Domain

Individual ethical values are more related to each stakeholder. That role can be played by an educator, a student, a parent, or an administrator. The common aspects of these values include respect, honesty, and integrity, to name a few. They control how an individual maintains a level of ethical autonomy regarding personal decisions, practicing self-control and independent respect towards the entire educational process taking place.

3.1.1 Respect

Respect means appreciating the other in cases of agreement or disagreement. This type of practice is essential and necessary in distance learning due to the expected difference between the educator and their students. For instance, the educator respects the work, regulations, and the social and cultural values of students and societies. Whether there is a cultural, racial, linguistic, or religious difference, the educator's lofty message compels them to be a bridge by which cultures cross without bullying or ridicule. They help communicate ideas without contempt or

disregard. They also need to respect their needs and offer equitable educational opportunities (Remote Learning Recommendations During COVID-19 Emergency, 2020).

Similarly, an institution's success is based on students' respect for their educators and avoiding any inappropriate behavior (AlMazgagy, 2013, p114). Since distance teaching has the advantage of cultural diversity between students and educators (Holland et al., 2012, p49), this also requires students to be characterized by mutual respect for each other and their teachers. That should also be the case for the families of those students. That type of "unconditional" respect and empathy could offer a motivational significance and value to online learning regardless of challenges and restrictions (Zembylas & Vrasidas, 2005). They also need to use netiquette and avoid any inappropriate communication (Holland et al., 2012).

3.1.2   Honesty and Integrit

Academic integrity is a crucial aspect of successful and meaningful learning. Students must maintain high academic integrity standards in all situations and understand that this is the core of true success. However, this can be a major constraint for institutions with students from diverse socioeconomic backgrounds. Academic dishonesty affects learning, regulations, policies, and assessment if not rightfully performed by each individual in that process (Chawdhry et al., 2017). Performing duties according to the standards of honesty and credibility is the essence of ethical behavior that expresses a genuine belief in values. It was even considered in 1880 as "the perfection of virtues" (Al-Rafe'ie, 2018, p.11).

Additionally, educators protect the privacy, time, and rights of all involved in the educational process (Pacansky-Brock, 2012). They do not cause any conflict of interest with their teaching duties in this way. Another challenge facing remote teaching is the extent of students' commitment to the value of trust and honesty. Self-monitoring with what is expressed in "conscience" is the first guarantee for achieving this value where educators, administrators, and monitoring technologies might not exist. Not having this self-regulation among learners could seriously affect the quality of remote teaching. Encouraging students to avoid academic cheating and other forms of misconduct is crucial in developing their personalities, good habits, social responsibilities, and civilized requirements toward developing a knowledge-based community (AlKindri, 2010).

3.1.3   Motivation

The level of human motivation differs from one person to another. Regardless of its actual level, it derives from people's lives and shapes the purpose of their voluntary efforts. Exemplary commitment is not usually compulsory as there is a difference between being a person with personal morals and being bound by enforced laws. For students, intrinsic motivation represents "an internal self-censor" and a

"self-reference that guides a person" (Commission for Developing the Teaching Profession, 2010). In times of emergencies, teaching depends on the motivation of students, families, and institutions to a great extent. As students are often expected to be naturally autonomous and work on with minimal support, they need to manage their time, priorities, and studies and strive to develop their cognitive-behavioral and affective competencies. Both educators and families need to play a role in maximizing students' motivation in spite of existing challenges.

3.1.4 Fairness

Fairness is putting everything in its proper position. It is a cultural value necessary for building up individuals and societies and guaranteeing high-quality professional practice. A just educator is fair with students in treatment, evaluation, support, guidance, and care. It is a vital factor in creating motivation, psychological comfort, satisfaction, and human dignity for students. Teachers' fairness is also essential because administrative control may be the weakest link in this type of remote teaching.

3.1.5 Role Mode

Educators are natural role models for students. Educators' knowledge and behavior attract students' attention and gain their trust and admiration. Therefore, they should do their best to show professional and ethical values. A teacher is a model for his disciples and all learners (AlNadwy, 2017). A teacher cannot show contradictions in actions or decisions. S/he maintains respect in class and is friendly to all learners, so that they can enjoy their learning environment. Likewise, students are required to provide excellent performance of their duties in their discipline and for their peers. Equally, in that unique context, families also need to provide excellent role models and commitment to the educational process. They need to show their children the importance of education, learning, and collaboration regardless of any sacrifices or efforts exerted for that great goal if education is to work.

4   Social Values Domain

This domain covers several social and emotional aspects that are vital for successful learning and development. Social values are more concerned about connecting with others and engaging with them in communications, forms of social support, diversity and social justice, and belonging.

4.1 Communication and Social Belonging

Both constructive communication and engaging interactions help in building good human relationships and experiences. Having a degree of emotional intelligence enables one to feel empathy for others, appreciate their positions, know their strengths and weaknesses, and strengthen cooperation among the educational process stakeholders (Covey & Covey, 2020). It requires familiarity with the purpose of increasing production and effectiveness. A collaborating educator dramatically contributes to the success of the educational process. Because remote teaching may face obstacles for the educator, students, and their families, communication helps to exchange information and experiences and bridge gaps that could lead to harmful and useless conflicts in that process. Educators need to maintain clear communication, survey needs, offer recommendations, and address issues with families to eliminate any risks of burdensome stress or confusion among students or families (Remote Learning Recommendations During COVID-19 Emergency, 2020). AlKhairi (2019) stresses the need for cooperative integration in learning. The lack of social patterns in remote learning makes cooperation and constructive communication an important primary factor for interaction and critical discourse. It establishes relationships among learners that enhance a sense of belonging and create an atmosphere that encourages questioning, critical thinking, and more inquiry of ideas. Additionally, if social media are used in teaching, students need to be aware of social media privacy options and agree to their conditions (Pacansky-Brock, 2013). For Warwick (2020), choosing the right tools for both synchronous and asynchronous delivery is also an essential step. They need to be supplemented with engaging settings and real-life-related tasks using groups, audio/video resources, and conferencing platforms followed by feedback on these tasks.

4.2 Emotional Support

The educator gives confidence to their students' hearts to enable them to take responsibility and perform their assigned tasks. It is known that enhancing hope in success strengthens human relationships and educational effectiveness. "The teacher is the parent's partner in educating, upbringing, assessing, and guiding. Therefore, he is keen on strengthening the bonds of trust between the home and the school" (AlBishri, 2011, p.187). They are also a core toward human agency for intentional self-awareness and self-regulation (Bandura, 2018). Typically, with remote teaching in crises, there is an urgent need for emotional and psychological support due to the suffering and anxiety of families from the consequences of the situation. These ordeal situations significantly influence and determine their fate and future because of wars or natural disasters. Cultivating hope toward families and students by institutions and educators is necessary.

4.3   Diversity and Social Justice

Crises create a harsh reality that is difficult to endure in many aspects of life, including the economic aspect that may hinder student learning or enable them to continue their education. Online education is based on a philosophy that affirms individuals' rights to equal access and just educational opportunities in terms of access, availability, and affordability that meet community expectations (AbdulHai, 2010). In that sense, education is open to all groups of people and not restricted to any individuals in any way. Therefore, institutions and nonprofit communities play a vital role in providing the means and support necessary for education without distinction or preference among the beneficiaries based on race, color, or culture. Because remote learning deals with culturally diverse individuals and societies, this calls for interaction, respect, acceptance of the other, and professionalism to reach creative communities, equity, and excellence as outcomes (Gay, 2013).

4.4   Belongingness

Students realize the meaning of belonging when they feel part of the learning community. This usually leads to a better exchange of meaning and a higher quality of education (Garrison et al., 2003). The importance of belonging in remote teaching is to maintain good citizens who appreciate their cultures and civilizations and positively adapt and contribute to the diverse global communities of today. Zembylas and Vrasidas (2005, p.74) describe this process as "the notions of multiplicity, hybridity, and contingency for crisscrossing various discourses, which in turn provides opportunities to continually redefine one's identity." The educator's feeling of belonging is also essential for encouraging innovation and elevating their performance in that institution.

5   Learning and Assessment Values Domain

Perhaps this domain is the most important as this relates to the actual professional conduct performed in unique learning situations. These may include the following.

5.1   Responsibility

Responsibility is not necessarily entrenched by the force of laws as much of it is rooted in each person voluntarily and without coercion. The responsibility of the educator is not limited to teaching only. It extends to endless other tasks, most notably overseeing and guiding students; preparing them for life; directing them to acceptable social goals; providing them with knowledge, skills, and attitudes; encouraging them to acquire competencies; and developing their mental

capabilities. With that being the case, the educator's role exceeds the standard duties of coaching, supervision, guidance, and educating. Similarly, students need to develop a sense of responsibility and self-regulation that would help them perform duties, learn, and develop their competencies with minimal guidance or support.

5.2   Resilience

Resilience is the progressive process that aims to help individuals with "severe stress or adversity but who have not been harmed by that adverse situation" (Kizilhan and Wenzel, 2020). This has become an increasingly important domain in psychological studies related to teacher education and personalities (Zhang et al., 2020). Unlike regular teaching, in remote online teaching, several challenges might prevent students from participating. It is necessary to develop flexible learning models. This flexibility may include the technology and tools used, connectivity, tasks performed, and even assessment patterns of more formative types (O'Keefe et al., 2020; Remote Learning Recommendations During COVID-19 Emergency, 2020). In this case, we cannot assume that students can easily access learning content because of all these aforementioned factors. While this might be problematic for educators, they need to remember the two main goals – that is, that students continue to learn in critical times and they are offered fruitful learning experiences. These goals may mean survival, emotional support, and giving confidence and safety to those learners. Resilience in the face of adversity is essential.

5.3   Academic Competence

Online teaching requires unique sets of skills for educators, students, and families. They need to learn and get training on using, and even achieving, a high level of their proficiency and efficiency in pedagogy and technology skills because of the challenges of indirect contact with the educator (Martin et al., 2019). Educators and students may need professional training and continuing education to discover and develop their capabilities. The claim to professional competence is not limited to a specific form of technology. It represents a formal and moral right, by both educators and students, to make every effort to develop those competencies for technology use and instruction. The institution is also responsible for fulfilling this role and providing all possible resources, training, and enough time to develop the required skills (Martin et al., 2019).

In that process, faculty members also develop innovative sets of skills to transform teaching online into a more engaging, lively, and interactive experience for learners. For example, they develop new roles as "instructional designer, course developer, content expert, tutor, organizer, facilitator within the pedagogical role" (Albrahim, 2020, p.10). The Chronicle of Higher Education report (2020) indicates that a good remote instructor utilizes every opportunity to engage students

interactively through discussions, illustrations, and tasks – interacting and facilitating, not simply leaving students to their devices and screens. Moreover, assessment needs to focus mainly on "learning not on compliance" and be supported with authentic alternate assessment methods (Remote Learning Recommendations During COVID-19 Emergency, 2020).

These factors involved in building an effective and practical ethical values framework for use in remote learning during crisis situations such the pandemic. Figure 1 facilitates academic learning and the assessment process by providing the highest level of quality that could be created via the human aspects of the educational process along with the learning theories, practices and technology used.

6 Conclusion

The COVID-19 pandemic has created new world challenges that mediate historical opportunities for the change and advancement of education. That change requires reviewing related ethical values that fall under the three main domains introduced: the individual, the social, and learning and assessment as illustrated in Fig. 1. At the same time, stakeholders interchangeably integrate and share many values that address educators, students, families, and institutions' needs and responsibilities. With the transition to new modes and dynamics in program delivery, collaboration, and assessments, it is vital to revisit our different ethical values and provide opportunities for building and raising awareness among learners and stakeholders alike. If this sort of integrity is missing or lacking, we have no education of value in hand.

References

AbdulHai, A. (2010). *Online education in the Arab world and the 21st century challenges*. Anglo-Egyptian.

AlBishri, K. (2011). *Teaching ethical values*. Gulf Publishing. https://rashf.com/book/343195

Albrahim, F. A. (2020). Online teaching skills and competencies. *Turkish Online Journal of Educational Technology-TOJET, 19*(1), 9–20.

AlKhairi, T. A. (2019). *Cooperative education and application*. Um AlKura University.

AlKindri, L. (2010). *Cheating in tests: Forms and causes from the perspectives of the College of Education students in Kuwait*. General Authority for Applied Education and Training in Kuwait.

AlMazgagy, A. D. (2013). *A brief in work ethics* (3rd ed.). Kawarizm Academics.

AlNadwy, M., H. (2017). *Reviewing Ibn Gamaa's book: A reminder of the listener and speaker in values of the learner and educator*. http://archives.umc.edu.dz/handle/123456789/89546

Al-Rafe'ie, M. S. (2018). *Pen inspiration*. AlArkam.

Aqel, M. A (2005). *Professional Values*. rab Bureau of Education for the Gulf State.

Bandura, A. (2018). Toward a psychology of human agency: Pathways and reflections. *Perspectives on Psychological Science, 13*(2), 130–136.

Chawdhry, A., Paullet, K., & Douglas, D. M. (2017). Evaluating ethics in distance education learning from a students point of view. *Issues in Information Systems, 18*(3), 69–77.

Commission for Developing the Teaching Profession. (2010). *Educational ethics and its code of conduct*. UNESCO. http://teachercodes.iiep.unesco.org/teachercodes/codes/Arab/Palestine_Arabic.pdf

Covey, S. R., & Covey, S. (2020). *The 7 habits of highly effective people: 30th anniversary edition*. Simon and Schuster.

DeRosa, R. (2020, May 13). Values-centered instructional planning. Inside Higher Ed. https://www.insidehighered.com/digital-learning/views/2020/05/13/consistent-mission-aligned-instructional-framework-fall-and-beyond

Garrison, D. R., Anderson, T., & Archer, W. (2003). A theory of critical inquiry in online distance education. *Handbook of Distance Education, 1*, 113–127.

Gay, G. (2013). Teaching to and through cultural diversity. *Curriculum Inquiry, 43*(1), 48–70.

Gotterbarn, D. W., Brinkman, B., Flick, C., Kirkpatrick, M. S., Miller, K., Vazansky, K., & Wolf, M. J. (2018). *ACM code of ethics and professional conduct (2018)*.

Holland, C., Mulcahy, C., Besong, F., & Judge, M. (2012). Ethical-values pedagogical model. *Journal of Teacher Education for Sustainability, 14*(2), 41–53.

Kizilhan, J. I., & Wenzel, T. (2020). Positive psychotherapy in the treatment of traumatised Yezidi survivors of sexualised violence and genocide. *International Review of Psychiatry*, 1–12.

Martin, F., Budhrani, K., Kumar, S., & Ritzhaupt, A. (2019). Award-winning faculty online teaching practices: Roles and competencies. *Online Learning, 23*(1), 184–205.

McLeod, S. (2007). Maslow's hierarchy of needs. *Simply Psychology, 1*, 1–8.

Moving Online Now: How to keep teaching during coronavirus. (2020). The Chronicle of Higher Education. https://connect.chronicle.com/CS-WC-2020-CoronavirusFreeReport_LP-SocialTraffic.html

O'Keefe, L., Rafferty, J., Gunder, A., & Vignare, K. (2020). Delivering high-quality instruction online in response to COVID-19: Faculty playbook. *Online Learning Consortium*.

Pacansky-Brock, M. (2012). *Best practices for teaching with emerging technologies* (1st ed.). Routledge.

Pacansky-Brock, M. (2013). *Best practices for teaching with emerging technologies*. Routledge.

Remote Learning Recommendations During COVID-19 Emergency. (2020). Illinois State Board of Education Report. https://www.isbe.net/Documents/RL-Recommendations-3-27-20.pdf

Toprak, E., Ozkanal, B., Aydin, S., & Kaya, S. (2010). Ethics in E-learning. *Turkish Online Journal of Educational Technology-TOJET, 9*(2), 78–86.

Warwick, L. (2020). *Handy guide to teaching online*. Pearson. https://it.pearson.com/content/dam/region-core/italy/pearson-italy/pdf/km0/KM0-INGLESE-PDF-Handy-Guide-Teaching-Online.pdf

Zembylas, M., & Vrasidas, C. (2005). Levinas and the "inter-face": The ethical challenge of online education. *Educational Theory, 55*(1), 61–78. https://doi.org/10.1111/j.1741-5446.2005.0005a.x

Zhang, M., Bai, Y., & Li, Z. (2020). Effect of resilience on the mental health of special education teachers: Moderating effect of teaching barriers. *Psychology Research and Behavior Management, 13*, 537.

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Integrating the United Nations' Sustainable Development Goals into Virtual Exchange

Chesla Ann Lenkaitis

> *The real voyage of discovery … consists not in seeking new landscapes but in having new eyes.*
>
> *Marcel Proust*

1 Introduction

The ways in which students and teachers obtain knowledge has changed because of digital transformation (Adams Becker et al., 2017). Utilizing technology is even more prevalent with the current global crisis. Regardless of one's technology fluency, Prensky (2001), it is evident that the educational landscape has changed due to technology (Laurillard, 2013). Instructors can utilize value-added technology applications, Lenkaitis (2019), and with a click of a button, Bohinski[1] (2014), students can voyage to distant lands.

Preparing students to be twenty-first century learners is needed in our globalized world, Partnership for 21st Century Skills (2011) as it is even more interconnected due to technology. Therefore, today, more than ever, equipping students with language and intercultural skills is essential for today's society (Rubin & Guth, 2015). One way to support students in acquiring these vital twenty-first century tools is through virtual exchange, Lenkaitis (2020d), that is, where parallel learners in geographically different locations are partnered with one another via technology (Dooly, 2017). Virtual exchange can be realized through computer-mediated

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[1] Prior to a name change due to marriage, Chesla used her maiden name, Bohinski, for publications and presentations.

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communication (CMC). In CMC, intercultural skills can develop so that learners can communicate and exchange ideas (Rubin & Guth, 2015). In synchronous communication, learners communicate in real time, while in asynchronous modes communication is complete in non-real time (Bernard et al., 2004). Utilizing the virtual exchange platform can allow participants to focus on the social aspect of language learning (Bohinski & Mulé, 2016; Lenkaitis, 2020b), learner autonomy, Lenkaitis (2020b), and global awareness (Lenkaitis et al., 2019b). It also can provide students with opportunities to enhance their language and culture skills through interactions with an international partner (Lenkaitis, 2020b,c,d; Lenkaitis et al., 2019a).

This chapter focuses on how to integrate asynchronous CMC (SCMC)-based virtual exchange programs into a variety of coursework, including teacher preparation programs in higher education. In addition, it focuses on ways to create activities that coincide with the United Nations' Sustainable Development Goals (SDGs), with the goals to (1) raise awareness about the SDGs so that learners could use a culturally sensitive critical lens to impact their language learning and future classrooms and (2) to internationalize the higher education curriculum through virtual exchange. Not only will the utilization of SCMC-based virtual exchange allow students in teacher preparation programs the opportunity to work with an international partner but also to the opportunity to develop content knowledge via technology, which is even more valuable in the era of digital transformation during the COVID-19 crisis.

2 Literature Review

The following literature review addresses findings related to virtual exchange programs and the United Nations' SDGs.

2.1 Synchronous Computer-Mediated Communication (SCMC)-Based Virtual Exchange

In virtual exchange, teacher candidates can connect with learners of their content area, Lenkaitis (2020a) in geographically different locations by using technological tools (Dooly, 2017). Peer-to-peer interactions via SCMC have been proven to be effective for spontaneous conversation skills (Lin, 2014). With additional technology that is now available, learners can now participate in SCMC with audio and video (Godwin-Jones, 2011). Regardless of the tools used, virtual exchange has proven to deepen participants' understanding of language and culture (Belz, 2003; Helm & Guth, 2010). In Lenkaitis (2020c), virtual exchange proved to develop

learners' "skills to navigate across cultures and explored cultural, societal, and academic topics" (p. 76). However, in none of these studies were SDGs used as topics for discussion.

2.2   *United Nations' Sustainable Development Goals (SDGs)*

The United Nations' Sustainable Development Goals (SDGs) were adopted by its Member States in 2015 as part of the 2030 Agenda for Sustainable Development. This agenda "provides a shared blueprint for peace and prosperity" (United Nations, 2021, January 14), while the SDGs are those objectives that must be met by all countries "in a global partnership" (United Nations, 2021, January 14) in order to improve conditions for all humankind and transform the world. In total, there are 17 SDGs. As indicated by United Nations (2021, January 14), they include (1) no poverty; (2) zero hunger; (3) good health and well-being; (4) quality education; (5) gender equality; (6) clean water and sanitation; (7) affordable and clean energy; (8) decent work and economic growth; (9) industry, innovation, and infrastructure; (10) reduced inequalities; (11) sustainable cities and communities; (12) responsible consumption and production; (13) climate action; (14) life below water; (15) life on land; (16) peace, justice, and strong institutions; and (17) partnerships for the goals.

To the author's knowledge, the only published research utilizing SDGs with virtual exchange is by Bruun (2018). In Bruun (2018), over the course of 7 weeks, a Tanzanian class worked with a Swedish class to complete a project where participants were able to "learn about aspects of a sustainable future while working on their English as a foreign language" (p. 200). In particular, Bruun (2018) focused on SDG #14, life below water. Participants discussed and proposed solutions for how to reduce the amount of plastic pollution.

3   Research Question

Due to the effectiveness of SCMC-based virtual exchange, the significance of the SDGs, and the limited research on utilizing SDGs in virtual exchange, this study aims to find ways in which participants were able to develop a critically sensitive lens when participating and then reflecting on an SDG-focused virtual exchange. Therefore, this study will answer the following research question: How does participating and then reflecting on an SDG-focused virtual exchange provide participants the opportunity to create a critically sensitive lens to impact the classroom?

4 Methodology

4.1 Participants

The focus of this study will be on two second language teacher candidates who were part of one virtual exchange group. Both of these participants whose names are pseudonyms consented to share their recorded sessions for this study. In order to focus on the case of LaVerne and Tony, this study utilized Merriam's (1998) and Ayres et al.'s (2003) case study frameworks. The average age of these two teacher candidates was 22.5 years old (SD = 0.71). Additional information about each of these two participants is listed below:

1. LaVerne was an undergraduate student in a teaching English as a Second Language preparation program in Poland. She was 23 years old.
2. Tony was an undergraduate student in a Master of Arts in Teaching in French Adolescence Education program in the United States. He was 22 years old.

4.2 Procedures

Participants were instructed to video conference with their partner(s) for at least 15 minutes for 6 weeks (Weeks 1–6) through Zoom, a video conferencing tool. Table 1 details the virtual exchange design for these participant-only SCMC sessions. In addition to the Zoom meetings, participants also completed weekly post-Zoom reflection worksheets where they were asked to answer open-ended questions regarding the importance of and what they learned about the SDGs.

5 Results

Over the course of the 6-week SCMC-based virtual exchange, the participants met on Zoom for 2 hours, 1 minute, and 19 seconds and completed weekly worksheets. All activities were reviewed to ensure that participants followed the instructions of

Table 1 Weekly zoom procedures

Week	Instructions
1	Participants used this week to make introductions and also choose their top four SDGs out of the total 17 SDGs.
2–5	Each of the chosen four SDGs was used to be weekly topics (e.g., top SDG was used for week 2, second one for week 3, and so on).
6	Participants used this week to summarize the discussions of previous weeks and talk about the importance of the SDGs.

the exchange. During Week 1, the participants chose the following as their top four SDGs:

1. Quality education
2. Gender equality
3. Clean water and sanitation
4. Climate action

Therefore, participants used each of these SDGs as the topics of discussion for Weeks 2–5. After each of their SCMC sessions via Zoom, participants completed an online reflection worksheet. Table 2 outlines the main points that were noted by the participants. All quotes have been copied verbatim. Therefore, any errors are those of the participants.

6   Discussion

Throughout the 6-week virtual exchange, the two teacher candidates of the case study had met over 2 hours to discuss SDGs. Analysis of the recorded SCMC sessions, as well as the online worksheets, allowed the author to answer this study's research question: How does participating and then reflecting on an SDG-focused virtual exchange provide participants the opportunity to create a critically sensitive lens to impact the classroom?

Table 2 Main highlights of weekly worksheets

Participant	Week	Comment
Tony	1	Education provides the knowledge and actions of the future.
Tony	2	Send teachers from highly educated areas to teach in areas of need. Provide those teachers with an incentive there.
LaVerne	3	Now, I see that there is a problem in every country, but the range differs.
Tony	3	Educators should make the general public aware of the differences in society.
LaVerne	4	How can we help those 10% who don't have clean water?…now I understand more and I can see the scale of the problem. 10% of all the people living on the earth constitutes a lot of people.
Tony	4	SDGs are the future of today.
Laverne	5	What can we do in order to provide better life for the future?…It's an important SDG in every country, because we are a part of the world. We have to do small things in order to achieve a big goal together with all the countries.
LaVerne	6	Is it possible that in a few years' time our planet will be a better place? Yes, it is. But everyone of us should remember about that fact. Everyone can do something to make a difference.
Tony	6	How do we satisfy all of the SDGs? It's too complicated to answer, but we need to convince other governments to take action and prioritize human rights over greed and corruption.…we need to educate and shape the future.

This virtual exchange allowed participants to have a global partnership that allowed them to discuss the SDGs and create a "shared blueprint" (United Nations, 2021, January 14) with their partner and to reflect on the exchange. Upon reflection, participants' "new eyes" allowed them to see how these topics could impact their classroom. Being teacher candidates, it was not surprising that the participants' top SDG was a quality education. Although the teacher candidates discussed other SDGs throughout the exchange, education was a common thread throughout each weekly discussion. For instance, in Week 1, Tony noted that "Education provides the knowledge and actions of the future." In Week 3, while discussing gender equality, he mentioned that "Educators should make the general public aware of the differences in society." Education is key, and Tony realized that not only is quality education crucial for all, but also everyone needs to be educated about what is going on in the world. He also believed that those in his profession had the responsibility to educate others about this. Making connections to his pedagogy showed the impact that the virtual exchange had on his coursework. By making these connections and reflecting on the virtual exchange, he was able to create a critical sensitive lens and realized that "We need to educate and shape the future" (Week 6). This is significant as this virtual exchange experience has undoubtedly shaped Tony's future classroom as he has taken on this responsibility of educating others about the SDGs.

LaVerne also had the opportunity to create a critically sensitive lens upon reflecting about the virtual exchange. She consistently noted the power of one person being able to make a difference. Not only did she realize that "Everyone can do something to make a difference" (Week 6) but also that SDGs affected everyone as "we are a part of the world." Because of this, she wrote that "We have to do small things in order to achieve a big goal together with all the countries" (Week 5). By focusing on the SDGs in this virtual exchange, LaVerne made connections between herself and others, including her partner. She realized that "there is a problem in every country" (Week 3) and that every person is part of the bigger picture and must do something in order "to provide better life for the future" (Week 5). Just like Tony, this experience also impacted LaVerne and had implications for her pedagogy. She noted that it was "possible that in a few years time, our planet will be a better place" (Week 6). The connections she made has also undoubtedly shaped LaVerne's classroom since she has made it her mission to educate her learners that every person can make a difference.

Just as in Bruun (2018), the participants in this study learned about the SDGs while developing their coursework. In this case, they developed their pedagogy. By reflecting on their virtual exchange experience, the two participants of this case study allowed them to develop "skills to navigate across cultures and explored cultural, societal, and academic topics" (Lenkaitis, 2020c, p. 76).

7   Conclusion

"The real voyage of discovery … consists not in seeking new landscapes, but in having new eyes" (Proust, 1923 as quoted in Ratcliffe, 2016). In this virtual exchange, participants did not need to travel to distant lands but by partnering with

an international partner and reflecting on the experience were able to have "new eyes" to discover things about themselves, their partners, their coursework, and the SDGs. By creating a critically sensitive lens, Laverne and Tony's learning was impacted, which also influenced their pedagogy. Therefore, this study suggests that an SDG-focused virtual exchange should be implemented into coursework. Not only will participants be able to their awareness about the SDGs and create a critically sensitive critical lens upon reflecting on their experience, but programs will be able to internationalize the higher education curriculum through virtual exchange. Now in the era of digital transformation, utilizing technology via the virtual exchange and reflecting on it are even more important. Since travel is not as feasible during COVID-19, implementing an SDG-focused virtual exchange and reflecting on it are important during these times so that students can have "new eyes" to seek "new landscapes." As stated so simply by Tony in Week 4, "SDGs are the future of today."

References

Adams Becker, S., Cummins, M., Davis, A., Freeman, A., Hall Giesinger, C., & Ananthanarayanan, V. (2017). NMC horizon report: 2017 higher *education edition*. : The New Media Consortium. http://cdn.nmc.org/media/2017-nmc-horizon-report-he-EN.pdf

Ayres, L., Kavanaugh, K., & Knafl, K. A. (2003). Within-case and across-case approaches to qualitative data analysis. Qualitative Health Research, 13(6), 871–883. https://doi.org/10.1177/1049732303013006008

Belz, J. A. (2003). Linguistic perspectives on the development of intercultural competence in telecollaboration. *Language Learning & Technology, 7*(2), 68–99. http://dx.doi.org/10125/25201

Bernard, R. M., Abrami, P. C., Lou, Y., Borokhovski, E., Wade, A., Wozney, L., & Huang, B. (2004). How does distance education compare with classroom instruction? A meta-analysis of the empirical literature. *Review of Educational Research, 74*(3), 379–439. https://doi.org/10.3102/00346543074003379

Bohinski, C. A. (2014). Click here for L2 learning! In Pixel (Ed.), *Conference proceedings: ICT for language learning* (7th ed., pp. 144–148). Libreriauniversitaria.it.

Bohinski, C. A., & Mulé, N. (2016). Telecollaboration: Participation and negotiation of meaning in synchronous and asynchronous activities. *MEXTESOL Journal, 40*(3), 1–16. http://mextesol.net/journal/

Bruun, S. (2018). Global goals: A virtual project with students from Sweden and Tanzania. In M. Dooly and R. O'Dowd, In This Together: Teachers' Experiences with Transnational, Telecollaborative Language Learning Projects (pp. 199–213). Bern: Peter Lang.

Dooly, M. (2017). Telecollaboration. In C. A. Chapelle & S. Sauro (Eds.), *The handbook of technology and second language teaching and learning* (pp. 169–183). Wiley.

Godwin-Jones, R. (2011). Autonomous language learning. *Language, Learning and Technology, 15*(3), 4–11. https://doi.org/10.10125/44255

Helm, F., & Guth, S. (2010). The multifarious goals of telecollaboration 2.0: Theoretical and practical implications. In S. Guth & F. Helm (Eds.), *Telecollaboration 2.0: Language, literacies, and intercultural learning in the 21st century* (pp. 69–106). Peter Lang.

Laurillard, D. (2013). Forward. In H. Beetham & R. Sharpe (Eds.), *Rethinking pedagogy for a digital age: Designing for 21st century learning*. Taylor & Francis.

Lenkaitis, C. A. (2019). Valuing technology in the L2 classroom: Student and teacher perceptions, preferences, and digital identity. In M. Montebello (Ed.) *Embracing Digital Learners in an Age of Global Educational Change and Rapid Technological Advancements* (pp. 173–189). Hershey, PA: IGI Global https://doi.org/10.4018/978-1-5225-9304-1.ch011

Lenkaitis, C.A. (2020a). Teacher candidate reflection: Benefits of using a synchronous computer-mediated communication-based virtual exchange. *Teaching and Teacher Education, 92*. https://doi.org/10.1016/j.tate.2020.103041

Lenkaitis, C. A. (2020b). Technology as a mediating tool: Videoconferencing, L2 learning, and learner autonomy. *Computer Assisted Language Learning, 33*(5–6), 1–27. https://doi.org/10.1080/09588221.2019.1572018

Lenkaitis, C. A. (2020c). Virtual exchange task design for a globalized classroom. In C-C. Lin & C. Zaccarini (Eds.), *Internationalization in Action: Leveraging Diversity and Inclusion in Globalized Classrooms* (pp. 65–80). Peter Lang. https://doi.org/10.3726/b16815

Lenkaitis, C. A. (2020d). Virtual exchanges for intercultural communication development: Using can-do statements for ICC self-assessment. Manuscript submitted 2020 to *Journal of International and Intercultural Communication*. https://doi.org/10.1080/17513057.2020.1784983

Lenkaitis, C. A., Calo, S., & Venegas Escobar, S. (2019a). Exploring the intersection of language and culture via telecollaboration: Utilizing Zoom for intercultural competence development. *International Multilingual Research Journal, 13*(2), 102–115. https://doi.org/10.1080/19313152.2019.1570772

Lenkaitis, C. A., Loranc-Paszylk, B., & Hilliker, S. (2019b). Global awareness and global identity development among foreign language learners: The impact of virtual exchanges. *MEXTESOL Journal, 43*(4), 1–11. http://mextesol.net/journal/

Lin, H. (2014). Computer-mediated communication (CMC) in L2 oral proficiency development: A meta-analysis. *ReCALL, 27*(3), 261e287. https://doi.org/10.1017/S095834401400041X

Merriam, S. B. (1998). Qualitative research and case study applications in education. San Francisco, CA: Jossey-Bass.

Partnership for 21st Century Skills. (2011). *21st century skills map*. Author.

Prensky, M. (2001). Digital natives, digital immigrants. *On the Horizon, 9*(5), 1–6. Retrieved from http://marcprenskyarchive.com/writings/

Ratcliffe, S. (Ed.). (2016). *Oxford essential quotations* (4th ed.). Oxford University Press. https://doi.org/10.1093/acref/9780191826719.001.0001

Rubin, J., & Guth, S. (2015). Collaborative online international learning: An emerging format for internationalizing curricula. In A. S. Moore & S. Simon (Eds.), *Globally networked teaching in the humanities: Theories and practices* (Vol. 11, pp. 15–27). Routledge.

United Nations. (2021, January 14). *SDG knowledge: Sustainable Development Goals*. https://sdgs.un.org/goals

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The New Realm: Present and Future Visions for Teaching and Education Enticing Teaching in the Blended Learning Environment

Elena G. Korbout

> *It is the supreme art of the teacher to awaken joy in creative expression and knowledge.*
>
> *Albert Einstein*

Insightful and enticing learning-teaching experiences should be multisensory. Based on my experiences in teaching Design and Interior Design, I invite students and instructors to a journey of learning using several tactics such as visual mind maps and infographic models to generate a closer to life-like experience – both in the virtual and physical classroom. I use brainstorming and mind maps to unlock their creativity and show real-life examples to support a creatively constructive critique. This supports a positive environment by accepting mistakes as a learning process. I also develop my teaching presence through different online platforms and e-tools. Before going profoundly into alternative teaching models and patterns, I would like to ask: What makes university education respected and valuable? To answer this question, I am inviting all educators, instructional designers, researchers, and academic administrators back into our classroom at the alma mater: the place where students learn their potential professions.

1   What Is This Ideal Classroom?

Most feasibly, a great model for a successful teaching and learning space is a methodical, engaging, and focused place, at the same time being motivating and encouraging, with spontaneous interaction for interested and participating students.

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This rich and vibrant connection between students and an educator will recognize every effort and risk-taking and will invite both sides to step outside of their comfort zone. Basically, in this ideal classroom, we use sophisticated energy to create more energy and finally transform this energy into radiance – that is, vibrant knowledge. Yes, we teach with a great determination and sense of art, and it does not matter if we explain physics, architecture, or interior design. In a hands-on way to shape the mental state of the learners, we develop a respectful and empowered learning environment in which we as educators raise students' achievements.

1.1 Enticing Teaching

I will call it "enticing teaching," or even *alluring teaching*. In this case, the teaching-learning process is a multifaceted and profound phenomenon that is innovatively relevant now during the pandemic and will be in demand long afterward. From my own experience in teaching design, enticing teaching in our virtual classrooms now at this time of campus closure involves a great adaptation of learning through synchronous and asynchronous techniques in a blended learning-teaching environment. This blended learning uses both synchronous and asynchronous learning and teaching approaches. Now, during the COVID-19 pandemic, this involves online, asynchronous activities set up in an online platform in addition to regular synchronous classes or course meetings with students via Zoom video conferencing or comparable virtual platforms. These innovative and futuristic methods will allow us to maximize interactions and even create more focused hands-on experiences.

2 A Bridge Between Students and Instructors

> People's beliefs about their abilities have a profound effect on those abilities. - Albert Bandura (1977)

The very crucial pathway of enticing teaching is in educators' abilities to create a bridge between two worlds, students and educators, and to eliminate walls that blocked the natural progression of learning by awakening students' multi-intelligences through presentations and open collaborations in these blended teaching-learning environments. Blending asynchronous learning online (without actual face-to-face collaboration) and synchronous teaching-learning (now, during the COVID-19 closures possible via video conferencing) bring students more choices to find their own style on the way to becoming a professional.

2.1 Dynamic Learning

> The test of a first-rate intelligence is the ability to hold two opposed ideas in mind at the same time and still retain the ability to function. – F. Scott Fitzgerald (1936)

I see a great future in this dynamic blended teaching-learning approach. The reason is that our brain thrives on intricate, multidimensional provocation that involves risk-taking – stepping out of our comfort zone into an empowering and supportive and multidimensional environment. Blending two different arrangements gives us an opportunity to choose and excel by learning the technical aspects of design through online asynchronous interactions and activities, as well as in the virtual classroom face-to-face via discussions and round table activities synchronously. The ability to magically create invisible bridges between classroom and online experiences is essentially important now and will continue to be in our physical classes after the pandemic.

2.2 Rapport

However, if students expect emotional involvement and real-life experiences, it is essential for an educator to build rapport. Rapport, or as I prefer to call it "a bond," is the bridge between a student and an educator. Our ability to magically create these invisible bonds among participants during classroom and online experiences is also especially important.

As an educator and forever a student myself, I see that blended learning-teaching models bring more opportunities for international students and give a chance to mature students to get through real-life subject matter related to know-how skills such as in Design and Interior Design. Basically, it is a win-win situation as more students can get in and have the flexibility of time, place, and a variety of modes of experience.

3 Evoking Stimulus = Evoking Unlimited Inspiration for Learning

> The best teacher is very interactive. – Bill Gates (2013)

Now, as we are close to shaping teaching paradigms and systems, I will ask the next question: "How?" How will we create an effective blended teaching/learning environment? What do we need, besides our passion, our determination, and genuine love for students as "newbie learners" who aspire to learn and await educators' help? How should teachers stimulate students' desire to learn and change their perceptions of the learning process and themselves as future professionals?

3.1 Secret Path to Teaching Success: Is It So Secret?

An answer lies in the blended model by employing visual presentations in solid learning platforms while using accessible e-tools and apps. We can simplify and facilitate students' observations and learning of material (without being bored or lacking concentration) by transforming our hybrid classrooms into a learning site and experience where every element has been carefully organized to support their learning. That will increase their ability to comprehend by enhancing interaction, analysis, and discussion by adding visual supports and thus enhancing self-efficacy and reducing stress.

I will discuss here visual presentations, solid learning platforms, and helpful, professional e-tools for use now in our teaching and in post-pandemic education. By creating a blended teaching-learning model, academic environments may effectively be shaped around mixed starts, processes, and completions. For example, students can start in the classroom and quickly move to online delivery for theoretical and technical topics and then switch back to the classroom and experiences for hands-on activities – experiments, teamwork, and exams or midterms.

3.2 Tactics: Visual Presentations and Mind Mapping

"80% of external input processed by the brain is processed by the visual pathway" (Haupt & Huber, 2008) and comes from visual sources. The traditional way of showing only text-based slides on a screen during any presentation is a proven educational disaster – we all have experienced the "death by PowerPoint" phenomenon (Roberts, 2018). Visuals stimulate students' brains, motivating them and helping them to focus on each learning second.

These approaches should be used to make classes more interactive and to ensure students' involvement in new information – to help educators to develop solid rapport with a class. I would highly recommend a scheme of 80/20, that is, 80% visuals/20% text with a strong use of mind maps and Infographics (a visual tool used to present information). I use and recommend the mind map method as a proven way of improving memory and increasing creativity on all levels – as graphic diagrams that students and professionals can use to record and organize the information and unlock the potential of their minds and ideas.

For example, a few years ago, while explaining the history of art and design, I presented a mind map (Fig. 1) with analysis of a Philippe Starck's lemon squeezer. Students were intrigued with this unique perspective on this simple tool; and it exposed them to the opportunity to see beyond the design's form, function, and aesthetics and to discuss and analyze its design development and features.
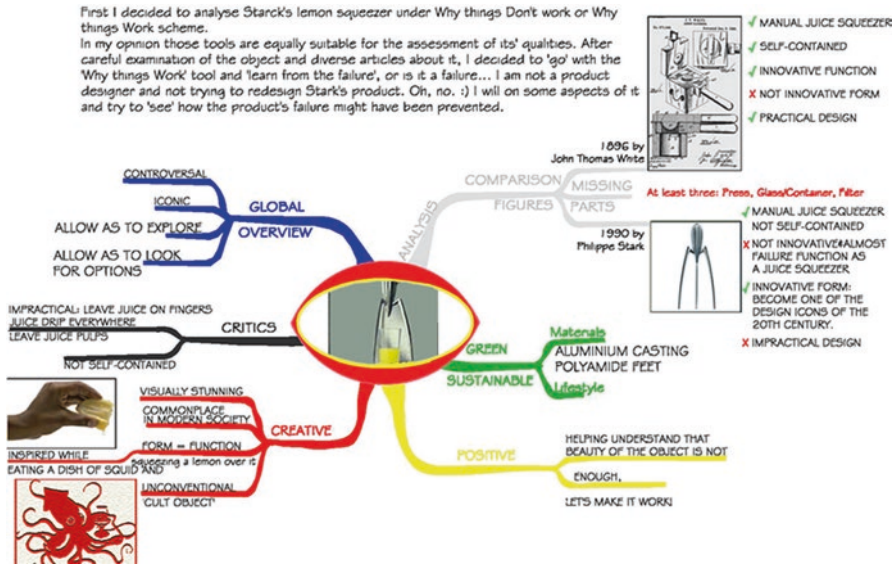
Fig. 1 Mind map of a brief history of the lemon squeezer

3.3 Recommendations

Mind mapping, as illustrated above, is an innovative way to analyze and discuss a task or concept. Mind maps such as the one presented in Fig. 1 may be developed and collaboratively reviewed by small groups of students Korbout, (2020). Evoking creative thinking through mind mapping. Webinar and Presentation for Yorkville University Faculty. Yorkville University: Canada, presented by the educator to the whole class for a discussion, or generated by individual students for their own studies and analysis.

Another very valuable addition is an infographic, which is used as a visual library to enhance any presentation. An infographic provides access to an enticing learning experience in which valuable questions and learner-centered discussion are sure-fire to unfold. See, for example, my infographic about blending learning-teaching practices and e-tools and platforms in Fig. 2.

Both mind mapping and infographics effectively implement the 80–20 guidelines. I know from my teaching of design that visuals such as these support any learning process by promoting engagement, discussion, brainstorming, and critical thinking and analysis.

My university, like many North American universities, has a great online learning platform (we use Moodle) that is well-organized to work well during times of isolation such as the current pandemic. For design courses, I also recommend adding a Citrix-like IT environment where students can find and use necessary visual tools that are required in the curriculum, namely, Adobe Creative Suite and Microsoft
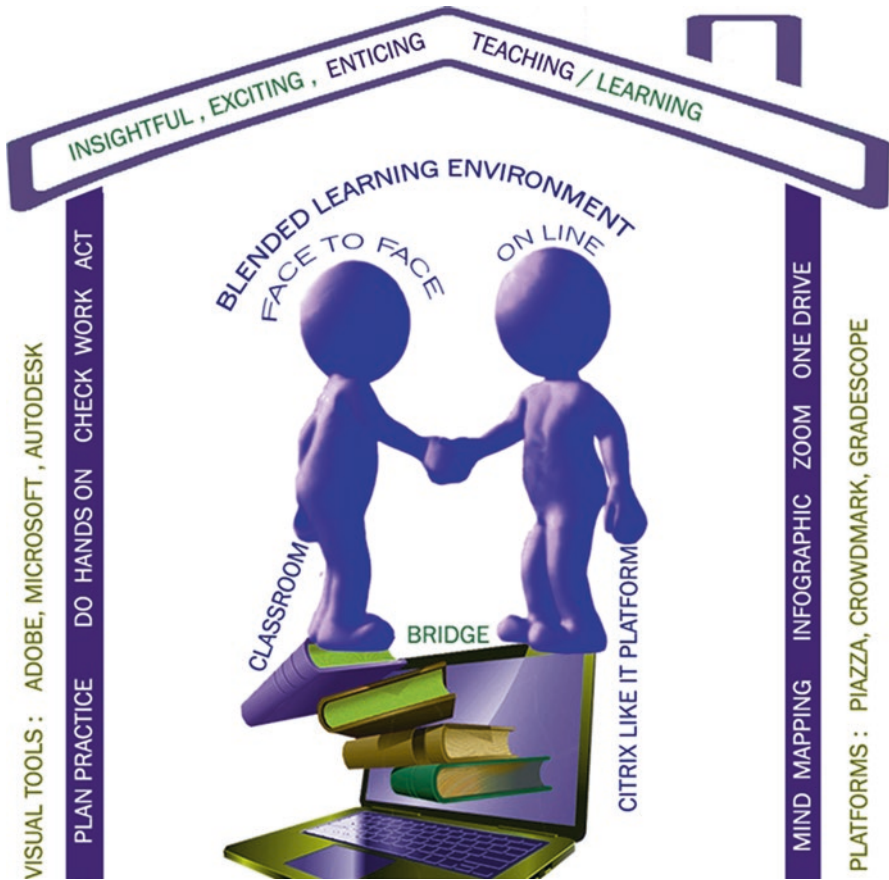
Fig. 2 Enticing teaching via blended learning-teaching

tools including PowerPoint, One Drive, and Autodesk: AutoCAD and Autodesk Sketchbook Pro.

One Drive (or similar cloud storage platforms such as Google Drive) gives us the opportunity to keep and modify large-sized projects in the process. Also, not new but very much a favorite now, Zoom, a popular video conferencing platform, like other video conferencing platforms, offers a great chance to share files, collaborate, and interact synchronously in our virtual classroom.

3.3.1   Additional E-Tools and Platforms

As a final touch, I would recommend integrating additional forum tools such as Piazza into our blended courses and platforms. Using Piazza students have an option to comment and discuss incognito while asking questions. At times students do not

feel confident about their questions and hope to find a forum where they can express their ideas without fear and not sound naïve or incompetent. Let us not underestimate the power of fear. Piazza makes commenting and questioning easy. Further informative aids are Crowdmark and Gradescope, which are valuable analytical tools that save the instructor time in the grading process. Crowdmark is a "mini mind" that could be merged with the university's Moodle system to create analytics, compile grades, and send notifications. Gradescope gives us the flexibility to grade both paper-based and online assignments.

4   Enticing Teaching and Learning

Supporting educators and learners with these intuitive, smart e-tools and platforms that include visuals and analytics will reduce learning and teaching stress long after the pandemic crisis. We need to work smarter and develop ways to include the necessary learning resources within our closest online reach without limitations.

The benefits of using visuals for learning activities and presentations and a variety of interactive e-tools to support synchronous and asynchronous teaching to support "enticing learning" approaches have been explained and recommended here through the lens of my own Design teaching practices. These media and tools entice learners and teachers and build that the necessary bridge of rapport and interaction that inspires learning and student engagement. These blended learning techniques and tools will be rewarding for our universities and society as we develop ways to further help our students and influence their success, not failure.

References

Haupt, C., & Huber, A. B. (2008). How axons see their way–axonal guidance in the visual system. *Frontiers in Bioscience, 13*, 3136–3149.
Korbout, E. (2020). *Evoking creative thinking through mind mapping*. Webinar and Presentation for Yorkville University Faculty. Yorkville University: Canada.
Roberts, D. (2018). The engagement agenda, multimedia learning and the use of images in higher education lecturing: Or, how to end death by PowerPoint. *Journal of Further and Higher Education, 42*(7), 969–985.

Suggested Platforms

MOODLE: www.moodle.com
CITRIX: www.citrix.com
PIAZZA: www.piazza.com
CROWDMARK: www.crowdmark.com
GRADESCOPE: www.gradescope.com
ZOOM: https://zoom.us

Suggested Tools

MIND MAPPING: https://simplemind.eu/
INFOGRAPHIC: Power point (any version after 2016).

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Part II
Alternative Course Delivery Modes

Photo by Allison Shelley for American Education: Images of Teachers and Students in Action: ttps://deeperlearning4all.org/wp-content/uploads/2020/11/AMERICANED_MIDDLEhTOWN_181-1200x800.jpg

Quarantine Cinema: Teaching Film Directing During COVID-19

Alexander Carson

> *Art lives from constraints and dies from freedom.*
>
> *Leonardo da Vinci*

1 Context

I had been regularly teaching a variety of courses at Toronto Film School for several years when the pandemic arrived in the winter of 2020. Like many educators, I shuddered at the thought of transitioning my teaching practice to a synchronous learning format. Some courses were relatively easy to adapt for a Zoom classroom environment during COVID-19, while others were considerably more challenging. The question of how to deliver "advanced directing techniques" in a way that would be meaningful to students was particularly vexing. It is a third term course that provides a detailed look at the work of the film director, focusing primarily on pre-production and production phases of the role in the context of traditional narrative filmmaking. Some aspects of this material, such as script analysis, were fun and engaging to deliver on Zoom with the support of the platform's Breakout Rooms and Whiteboard features. However, other aspects of the curriculum, such as working with actors or blocking a scene (determining the movements of actors in relation to the camera), seemed to have no quick-fix digital solutions. When delivering this course on-campus, many of the weekly activities involve getting students up on their feet to work through the mechanics of a scene. One of the key learning outcomes is for students to develop an understanding of acting as a *physical* craft that communicates meaning through the body. A good script is wasted in the hands of a

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director who cannot mobilize actors to bring a story to life, and the best way for emerging filmmakers to acquire these skills is to practice negotiating bodies in movement. I encourage my students to think of directing as a job that's best done standing up, *feeling* the space alongside the actors instead of coaching from behind a laptop at a desk, removed from an embodied connection to the scene. And so, the challenge of how to translate this material to a Zoom classroom format presented a significant pedagogical dilemma for myself and the other instructors preparing to attempt this work.

2   Challenges

Two weeks before classes began, my colleague Jeffrey St. Jules (the course designer for "advanced directing techniques" and its most senior instructor) proposed an intriguing alternative: he suggested asking students to create a short film using the recording function within the Zoom platform. With an aim to replace the in-class blocking exercises that would normally occupy 2 weeks of activity on campus, the proposed Zoom film assignment would challenge students to apply knowledge learned in the course lectures toward a self-directed project to be recorded outside of class time. After some discussion, St. Jules' proposal was adopted as a safe alternative during COVID-19 that also met some of the important learning outcomes related to blocking scenes and working with actors. Students were encouraged to cast performers for their films according to the individual needs of their stories while also adhering to current social distancing protocols. Some chose to engage the help of acting students at Toronto Film School remotely via Zoom, while others chose to work with family members within the home. Many students were concerned that their films would not be of high "quality" because of the compressed video files produced through Zoom recordings, to which I replied with da Vinci's dependable epigram cited at the opening of this chapter: "Art lives from constraints and dies from freedom."

The short works produced through this pedagogical experiment varied widely in terms of effort and artistic merit, though I found many of the results to be impressively innovative and unexpectedly touching. In the pages that follow, I will provide a brief contextual history of the study of film directing in order to frame a discussion of several recent examples of short films directed by students during the pandemic lockdown of Spring 2020. In conclusion, I will describe some personal reflections from a teaching/learning perspective that point to possible creative adjustments we might make as faculty with an aim to better educate and empower the next generation of film directors in a post-COVID-19 context.

3 History

The formal study of films and filmmaking came to prominence within the academy in Western contexts in the mid-twentieth century, as "film schools" began popping up at many colleges and universities (Grievson & Wasson, 2008). During this era, interest in the work of the film director specifically was amplified by critics at the influential Cahiers du Cinéma magazine, giving rise to the cinematic movement known internationally as the French New Wave. Filmmakers such as Jean-Luc Godard and François Truffaut captured critical attention for their innovative works that rejected many of the medium's long-standing industrial conventions inherited from Hollywood. By employing terminology borrowed from literature to champion the film director as the principal "author" of a film, French New Wave filmmakers propelled the notion of the *auteur* into a broader international conversation about film criticism and its contribution to public discourse. Film critic Andrew Sarris's canonical essay "Notes on the Auteur Theory in 1962" ignited this conversation in North America. He began to adorn the auteur with a certain mystique, creating a neomythological figure who now appears widely in contemporary popular culture (e.g., Martin Scorsese or Quentin Tarantino). The auteur theory has been widely discussed and often critiqued since its rise to prominence in the 1960s (Grant, 2008). But I will argue here that revisiting some of the central tenets of New Wave filmmaking and the genesis of the auteur theory, as well as the powerful charges of the Third Cinema movement which followed, can offer meaningful ways of teaching students about the generative capacities of filmmaking during the politically, culturally, and economically unstable months of COVID-19 and beyond.

4 Cinemas of Resistance

In a series of essays published in French journals throughout the 1950s, Truffaut carved out an ambitious vision for the future of cinema, imploring young filmmakers to reimagine the medium's potential:

> The film of tomorrow appears to me as even more personal than an individual and autobiographical novel, like a confession, or a diary. The young filmmakers will express themselves in the first person and will relate what has happened to them: it may be the story of their first love or their most recent; of their political awakening; the story of a trip, a sickness, their military service, their marriage, their last vacation... The film of tomorrow will be an act of love. (Truffaut, 1957/1999, p. 110)

Truffaut and other New Wave directors favored Marxist narratives that rejected bourgeois aesthetics and resisted commodification. They were comfortable making films with small crews and limited budgets and championed the intimacy of personal storytelling above all else. The revolutionary spirit of the French New Wave was contagious, quickly spreading internationally to inform activist practices in filmmaking communities around the world.

The rise of the *Third Cinema* movement in Latin America during the late 1960s and 1970s proposed an even more radical approach to filmmaking, establishing transnational solidarity across the Global South with filmmakers in Africa and Asia. Third Cinema directors conceptualized film as a political tool for collective action to combat the prejudices and inequities resulting from centuries of capitalism and colonialism (Guneratne & Dissanayake, 2003). In a determined manifesto from 1969 entitled "Towards a Third Cinema," Argentine filmmakers Fernando Solanas and Octavio Getino proclaimed:

> The anti-imperialist struggle of the peoples of the Third World and of their equivalents inside the imperialist countries constitutes today the axis of world revolution. *Third cinema* is, in our opinion, the cinema that *recognizes in that struggle the most gigantic cultural, scientific, and artistic manifestation of our time,* the great possibility of constructing a liberated personality with each people as the starting point—in a word, the *decolonization of culture*. (Solanas & Getino, 1969/1997, p. 37)

The courage, idealism, and rebellious energies of the *New Wave and Third Cinema* movements have resonated with me since my early days as a film student. Now, as a professional filmmaker and educator, I have sought to reflect these values in my work, both on screen and in the classroom. But during the lockdown of COVID-19, and informed by the surging momentum of antiracist activism on an international scale following the killing of George Floyd in Minneapolis, I felt an increased urgency to focus on the importance of personal and political filmmaking practices in my conversations with students. In many cases, students creating films during these months of precarity would turn the lens on themselves, their family, or their immediate community by necessity. Bound by strict social distancing regulations during the first few months of the pandemic in Toronto, most students had to look inward or close to home for inspiration.

5   Case Studies

Pre-COVID-19, students in the Advanced Directing course were asked to supply short scripts as ground for 2 weeks of in-class blocking exercises on campus. These scripts would often feature high-stakes scenarios, such as an interrogation room standoff between a detective and a murderer, or a frenzied argument between lovers trying to escape zombies in a forest—derivative narratives lifted from American B-movies. In small groups, students would stumble through this clunky material with mixed results, often running out of time before completing the exercise in class. Though I often felt that important learning outcomes were being met by this exercise (notably that blocking is difficult, time-consuming work that requires practice!), I was frequently disappointed in the flimsy content being explored. It felt like a missed opportunity to meaningfully emphasize the importance of developing a strong voice and vision as a director, rather than dwelling on the execution of a technical set procedure. The constraints of COVID-19 provided us an opportunity to reimagine the blocking exercise and assert different priorities connected to the

privilege and responsibility of the director. And while some students' Zoom films produced during the pandemic relied on silly or generic content, many revealed a more tender vulnerability, an emotionally resonant look inside their domestic spaces. Many works involved students engaging the unproven acting services of their spouses, children, siblings, and other relatives. And many films dealt thoughtfully with the impacts of the pandemic on the students' lives in ways that felt deeply personal and revealing, even when thinly veiled by a fictional narrative.

One example is *Circumstances* (2020), which is a 4-minute Zoom film directed by Alisa Turchinova, a student from Ukraine who found herself living in a small apartment alone in Toronto during the lockdown. In response to the challenge of making a film within the proposed constraints, Turchinova ambitiously opted to collaborate with her family in Ukraine as actors and camerapersons. With the support of her parents (Nina and Sergey) and two young sisters (Tamila and Marta), Turchinova directed an elaborate moving camera sequence recorded on a mobile device, where the camera was operated at different points by her mother and her sister Tamila (see Fig. 1). To provide feedback between takes, Turchinova would relay directions to her family through a separate WhatsApp call while they made adjustments and prepared to roll again. Because of her rigorous commitment to recording the film in a single moving shot, considerable blocking was required, including several moments when the actors/camerapersons changed the point of view by flipping back and forth between selfie view and the device's forward-facing camera.

Opening with each family member in a different room of the house, Turchinova's film creates a solemn but playful portrait of her family during the quarantine. Rendered entirely without dialogue, *Circumstances* relies on deliberate

Fig. 1 Marta Turchinova (left) and Tamila Turchinova (right) in *Circumstances* (dir: Alisa Turchinova)

camerawork and nuanced physical performances by the actors to convey subtext. The film concludes with Turchinova's two young sisters coaxing their despondent parents to gather at the dining room table to play a board game (Fig. 2). Tamila delivers the camera to its final position (which I later learned was perched upon a music stand) to create a wide shot of the table before rejoining the group, uniting all four characters within the frame for the first time. Turchinova recalls her experience of making the film: "My idea right away was about filming my family. Normally, my father is always at work and we don't spend a lot of time together, so it was really meaningful for me to make this movie to commemorate this moment… My sisters were really excited to be actors, jumping around and changing their clothes… My parents helped me a lot. I had a really good experience connecting with my family" (A. Turchinova, personal communication, July 23, 2020).

Another student, Jamie Norrie, chose to use the "gallery view" layout within Zoom to record her short film, *Cheers to Five Years* (2020), a 7-minute dramatic dialogue between Jessica and Drew: 20-somethings lamenting respective quarantine struggles and reflecting on their breakup and past relationship. The actors, Cecilia Lee and Jephthe Beljour, were directed by Norrie from within the same Zoom meeting where they recorded the film. Norrie employed the "hide self view" function to make herself invisible during the recordings while watching the performances and preparing feedback to discuss with her actors between takes. Although Norrie cast her film with students from the Toronto Film School's acting program, she also parsed intimate personal material by exploring unresolved feelings about a past long-term relationship. Around the 6-minute mark, Jessica notices a familiar t-shirt on the sofa behind Drew's shoulder. This clue hiding in plain sight eventually

Fig. 2 Marta, Sergey, Nina, and Tamila Turchinova (left to right) in *Circumstances* (dir: Alisa Turchinova)

prompts Drew to confess having recently begun a clandestine romance with Jessica's best friend.

The conversation between Jessica (Lee) and Drew (Beljour) is alternately tender and tense, suggesting a rich subtext infused with sadness and longing for a past connection that feels impossibly out of reach (see Fig. 3). Norrie's direction allows for many awkward pauses and moments of introspection as the characters grieve their loss. These moments are made even more striking through the split-screen format, as the "gallery view" layout offers a democratic experience where an active spectator is invited to study both performances side by side and can move their gaze around the frame according to their interest. "Initially, this assignment reminded me of Zoom calls in my personal life. And so the story I came up with was pretty similar to a real life experience… It ended up being a really pleasant process, and it made me realize that there's a lot that you can do with filmmaking online," Norrie recalls (personal communication, July 22, 2020).

Students in my Documentary film class also produced remarkable work during COVID-19. Alex Siles' short film *The Frontliners* (2020) provided an insightful look at the labor of essential service workers during the pandemic. The film was both timely and personal, as Siles recorded his reflections on the pandemic while stocking shelves at a grocery store. Siles also interviewed frontline workers in other industries (including both his parents) about their daily experiences facing the risks of exposure to the virus in the workplace. Chevon Francis's documentary, *Life of an Immigrant* (2020), entwined her mother's personal experiences of anti-Black racism in Canada with the current political actions by Black Lives Matter and other antiracist groups in Toronto. Francis's film is energetic, emotional, and inspiring. *Life of an Immigrant* advances a narrative that is both deeply personal and urgently bound to the current activist uprisings in protest of policing practices and other forms of systemic racism here in Canada and internationally.
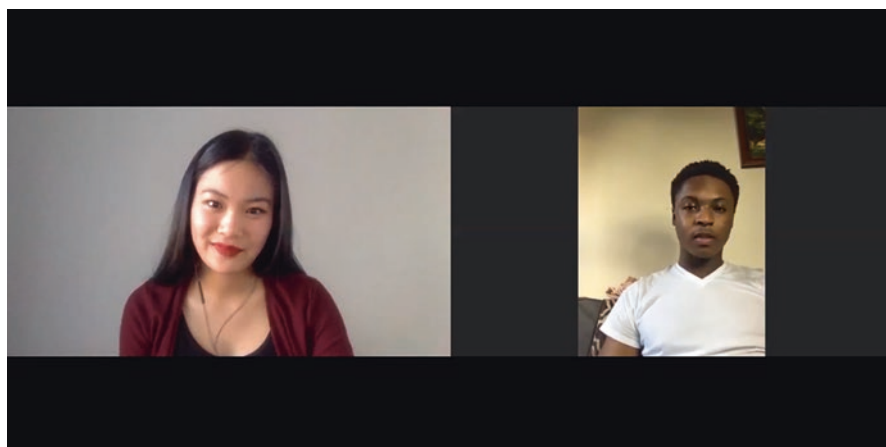

Fig. 3 Cecilia Lee (left) and Jephthe Beljour (right) in *Cheers to Five Years* (dir: Jamie Norrie)

6   Conclusion and Discussion

The results of the student-produced works created within the constraints of the pandemic point toward the power and importance of personal storytelling for emerging directors working to develop their voice and vision as filmmakers. They also highlight the beauty and delight that can be produced through unlikely collaborations. From a teaching perspective, these films point to the necessity for us, as educators, to reconsider our priorities when talking about film directing. Rather than returning to the in-class blocking exercises of the pre-COVID era, we have an opportunity to repurpose 2 weeks of study toward a more generative end. Though I am uncertain whether the novelty of the Zoom film activity will maintain its allure in a post-COVID context, I am glad of its influence in shifting the conversation toward more personal and political cinematic discourses. Some of the learning outcomes related to film directing and working with actors (as embodied practices) were difficult to meet in a digital classroom context. Though when students shared their Zoom films as works-in-progress with the group, there were opportunities to offer critical feedback and learn more about each student's creative process and what adjustments were made to overcome challenges along the way. Overall, this resulted in a more student-centered course of study, enabling increased agency and problem-solving activity from students as they worked individually to create short films with limited technical resources and (mostly) inexperienced or nonprofessional actors.

In my experience, Toronto Film School's production program (an accelerated diploma that can be completed in as few as 18 months) tends to focus on industry-standard models of production—few of which are applicable during COVID-19, and some of which are unlikely to return in the same way after the pandemic. Revisiting the propulsive beginnings of the *New Wave and Third Cinema* movements reminds me of the potential for filmmakers to resist a dominant capitalist ideology and imagine a more equitable and inclusive future through the creation of moving images. These historically influential cinematic movements arose to meet the needs of the moment, fueled by passion, pain, and a burning desire for change. In 2020, we find ourselves in the midst of a global pandemic and an unparalleled social justice movement on an international scale. It feels important to recenter our conversations about how to teach film directing by moving away from the skillful execution of industrial processes, and focusing instead on the historical significance of filmmakers working with the medium as an activist practice and a vehicle for personal expression. It is what the present moment demands.

References

Grant, B. K. (2008). *Auteurs and authorship: A film reader*. Blackwell Pub.
Grievson, L., & Wasson, H. (Eds.). (2008). *Inventing film studies*. Duke University Press.
Guneratne, A. R., & Dissanayake, W. (Eds.). (2003). *Rethinking third cinema*. Routledge.

Sarris, A. (1962). Notes on the auteur theory in 1962. In G. Mast, M. Cohen, & L. Braudy (Eds.), *Film theory and criticism: Introductory readings*. Oxford University Press.

Solanas, F., & Getino, O. (1969). Towards a third cinema. In M. Martin (Ed.). (1997). *New Latin American cinema: 1*. Wayne State University Press.

Truffaut, F. (1957). The French cinema is dying under false legends (Temerson, C., Trans.). In A. Baecque, S. Toubiana, (Eds.). (1999). *Truffaut: [a biography]*. Alfred A. Knopf.

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Remote Synchronous Delivery (RSD): Lessons Learned from Teaching During COVID-19

Angela Antohi-Kominek and Maha Salman

> *COVID-19 will change education philosophy for generations to come.*
>
> *Antohi-Kominek and Salman*

1 Background

The popular image of postsecondary education, for most students and faculty, highlights the traditional face-to-face teaching environment as the foremost criteria for enabling direct interaction between students and professors and among students themselves. However, with technology advancement and accelerating life commitments, several universities in North America and abroad considered online and digital learning as part of their education delivery to reflect changing practices in teaching and education.

Many institutions have been exploring the use of alternative credentials; nevertheless, there appear to be some uncertainty and a lack of agreement on how to define various alternative credential offerings. In addition to online and on-campus (face-to-face) delivery, many Canadian universities and colleges offer blended courses with strategic plans to advance blended/hybrid course offerings with expectations to increase for the coming years (CDLRA, 2019).

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2 Education in Crisis Situations

Education, especially at the post-secondary level, is a collective act that needs to develop students' transferable skills such as self-discipline, time management, and research-based learning processes. Accordingly, the traditional face-to-face learning environment needs to be re-examined and modernized based on the change in life dynamics and the advancement in online technologies and open educational resources (OER) that offer mobility, flexibility, and connectivity. As Midkiff and DaSilva (2000) indicated: "Distance learning, in both synchronous and asynchronous modes, is presently the subject of much attention due to both a market 'pull' and a technology 'push.'" The growth in both fully online and blended/hybrid learning has accelerated in the past few years.

Before the pandemic struck, the Canadian Digital Learning Research Association indicated that approximately 10% of all course enrolments in Canadian credit programs at the university and college level were in fully online courses with growing enrolment toward online (CDLRA, 2019). So, even without COVID-19 as a global crisis, it was expected that this growth will surge in a steady and slow rate over the coming few years (Bates, 2020). However, the COVID-19 crisis has accelerated this process with a need for more urgent alternatives.

COVID-19 and what occurred in conjunction with its implications forced educators worldwide to reassess the teaching methods that have been followed for a long time. Some of these methods became either norms or "taboos" that were thought to be "untouchable" or could not be modified.

During times of unprecedented crisis, such as COVID-19, higher education institutions need to be rapid and adaptive in their response so as not to impede students' rate of progression through the program. This chapter examines such adaptations at the Ontario campus of a private university. The narrative vignette presented here uses an interpretive approach which aims to make sense and learn from a rapidly unfolding situation (Bhattacherjee, 2012). The chapter offers a brief consideration for possible multiple realities that emerged from the found reality.

3 Remote Synchronous Delivery (RSD)

The COVID-19 pandemic has affected the way undergraduate programing impacted delivery at a private for-profit university. The pandemic found the university at the tail end of this winter term, the last week of classes. It was relatively easy to conduct the last session of the term by synchronous delivery via live online sessions. The main challenge was for those courses with high-stakes assessment such as final exam components. An alternate route chosen for these outstanding exams was a take-home assignment.

As time between terms is relatively short, it quickly became evident that a decision needed to be made on how the upcoming term Spring courses would be

delivered. As the university already used the live online sessions platform in a professional capacity, it was decided to extend live online sessions as the teaching platform. Live online sessions became the new classroom. Essentially, a traditional face-to-face class of three hours on campus moved to live online sessions for the same length of time at a regularly scheduled time as if it were a traditional campus course. This was quickly coined "remote synchronous delivery" (RSD). A literal third space of possibility opened up that was not the traditional face-to-face model nor the online, asynchronous model which already existed for some of the programing at University X. With the creation of this third space, a conceptual third space was created where new knowledge, new learning, and new skill development were taking place (Potter & McDougall, 2017).

Thus to address the new realities of the third space both physically and conceptually, the following implications that the RSD model would have on students, faculty, the curriculum, and the live online sessions platform were considered.

One of the main goals of the RSD model was to be as least disruptive to students as possible; hence the aim was to mimic the face-to-face classroom experience on the live online sessions platform. This included maintaining the same scheduling practices, same class length, and classroom activities and participation requirements. In preparation for this delivery, a series of webinars were organized, prior to term start, with both new and continuing students. These webinars aimed to explain the transition to RSD and acclimatize the students to the live online sessions platform.

It was recognized faculty had varied comfort levels with technology. Several faculty experts emerged. These faculty members conducted mock-classroom live online sessions for other faculty members. In these sessions faculty took turns practicing using the live online sessions' whiteboard feature, break-out rooms, as well as security features. Additional training sessions were provided by the faculty development program. Once the term started, the Program Directors "dropped by" into each of the live online sessions classes to make sure the connection and technology were responding well for all.

Adaptations to the curriculum needed to be considered. Moodle, the university learning management system, continued to be critical. Courses whose assignments required field trips or on-site observations needed to be modified. Unique to the curricular structure is the reliance of on-campus, in-class learning activities. Efforts were made to mimic this using the break-out rooms in live online sessions. A challenge remains to make sure students are actively participatory in the break-out sessions. This challenge is augmented by the lack of a consistent approach to requiring the camera to be on despite faculty encouragement. Mid-term and final examinations also required modification. In the absence of a secure proctoring system, some of these assessments have been converted to open-book examinations or "take-home" assignments.

The live online sessions platform for some, faculty and students alike, required adaptation. Some had concerns about the privacy and security of live online sessions. The information technology group assuaged such apprehensions, and faculty were advised to use a password and the waiting room feature for their classes. This

seems to have been effective. Given bandwidth issues some students are not able to connect effectively with the camera-on feature. This makes it challenging for faculty to discern if an actual individual is present.

This section presented a narrative vignette of the RSD model implemented for mimicking the face-to-face classroom in the virtual environment. The next section evaluates the implications of this third space.

4 RSD: Evaluation and Implications

In remote synchronous delivery, physical classroom activities and interactions had to be adapted to be appropriate for this forum. Professors had to modify the structure of the lecture formats designed for the traditional campus model to adhere to the invisible limitations and confinements of the remote model. Significant factors had to be considered and assessed by professors to create a homogenous classroom experience during the COVID 19 period – for example, how to enhance students' engagement and focus level and how to develop the level of interest, productivity, and participation that students used to have in a physical classroom environment.

Upon launching remote synchronous delivery, several challenges were expected and some uncertainty of outcomes remained. The discussion in this section is built upon observations made by the authors on the first term of RSD offering (Spring term) and then on the second term of offering (Summer).

One of the first observations was students' attendance. It was noticed that the attendance average via live online sessions was much higher than the normal on-campus. The attendance level started to decline in the final weeks of term 1 and the start of term 2. However, attendance rates in RSD were still higher than on-campus. This can be related to the fact that students didn't have to commute to attend classes, which saved them a lot of cost, time, and efforts.

Students' engagement with professors, peers, and RSD delivery was much faster than expected. Since students are in their homes, as Stasko (2020) noted, the division between private and public has changed, and they have to transition into their public self in a short time. Some students were more comfortable and relaxed within their home environment where they overcame the interaction barrier within their comfort zone compared to class environment. Students' interaction in-class activities and break-out rooms via live online sessions was highly positive and interactive. This continued through the two terms of observation and got better when some technical barriers were solved.

However, some students said they developed a kind of anxiety as they needed physical social connections to express their ideas and contributions properly through face-to-face discussions and teamwork. It was also noted that technology issues such as lack of access to reliable Wi-Fi, printers, and/or software that were made available to students on campus might be another key challenge that instigates anxiety and deprives students from a stable and constant course stream.

By the end of term 1, it was noticed that students' interaction via virtual environments started to be less than being in a classroom. Some faculty and students could not keep focused via live online sessions compared to face-to-face classes; they reached what we might consider" environmental numbness," or laziness toward the existing environment (Kopec, 2018).

This leads us to set some questions: Is it fatigue or numbness? Why do some people still believe in face-to-face learning? Are people prepared for online learning? Is it realistic to try to mimic the in-class routines? Would RSD be unsustainable as this is not purely online delivery? Would RSD help us develop or modify the online teaching (asynchronous online delivery) we have used in the past? Answering such questions requires more intensive research and observations to evaluate the situation.

In Tables 1 and 2, a comparison of aspects of the courses launched and observed has been provided for the three delivery methods: traditional face-to-face, online asynchronous, and RSD.

Table 1 Class environment and learning process comparison of the three delivery methods

Traditional face-to-face	Online asynchronous	Remote synchronous delivery (RSD)
Class environment		
Students and professors are present in the same space (classroom). Meetings are set in classroom within certain hours/week. Direct physical interaction between professor and students through in class. Professor has focused time for physical in-class activities. Professor and students communicate through emails and/or pre-arranged meeting during office hours.	Students and professors are in different locations. Meetings are done in arranged times upon request. Indirect interaction between professor and students via emails. Professors develop online resources to create interaction methods. Professor and students communicate through emails and/or pre-arranged meeting via live online sessions.	Students and professors meet virtually; they are in different locations. Meetings are set virtually (via live online sessions) within certain hours/week. Direct virtual interaction between professor and students via live online sessions. Professor has focused time for in-class activities virtually. Professor and students communicate through emails and/or pre-arranged meeting during virtual office hours.
Students' learning process		
Direct interaction meetings between professor and students. Students address any issues/questions during class time. Face-to-face students' collaboration to enhance learning process.	Remote interaction between professor and students through online virtual meeting. Students email issues/questions to professor or post via course Moodle. Students communicate through virtual meeting forum and weekly discussion questions .	Remote interaction between professor and students through online virtual meeting. Students address any issues/questions during class time via live online sessions. Students' collaboration to enhance learning process via live online sessions' break-out rooms.

Table 2 Course materials, assessment, and students' participation comparison of the three delivery methods

Traditional face-to-face	Online asynchronous	Remote synchronous delivery (RSD)
Course materials launch		
Course materials handed out and presented in class synchronously. Professor is flexible in making last-minute changes. Materials given to students in class and detailed instructions given by the professor .	Course materials posted online to access anytime. Professor needs to plan any changes ahead of time. Materials given to students for "self-study" to learn by following the instructions .	Course materials presented remotely via live online sessions synchronously. Professor needs to plan changes ahead of time with some flexibility. Materials given to students for "self-study" with detailed instructions via live online sessions.
Evaluation and feedback		
Synchronous evaluation in a physical environment (classroom). Evaluation methods include rubrics and feedback/ comments directly on the assignments/work. Tests/quizzes are done in class using test handout and answering sheets.	Online synchronous and/or asynchronous evaluation. Evaluation methods include posted rubrics, pdf comments, scanned sketches and feedback/comments. Tests are done online. Students are usually given a time frame to do the test – One attempt only.	Online synchronous and/or asynchronous evaluation. Evaluation methods include posted rubrics, pdf comments, scanned sketches and feedback / comments. Tests are done online within the class time with presence of the professors via live online sessions and cameras are on.
Students' in-class participation/engagement		
Students conduct in-class activities and discussion with professor's presence. Activities vary: DQ questions, discussion of chapter/reading, field trip, case study, observation, etc..	Students conduct in-weekly discussion with peers and professor's comments. Activities vary: DQ questions, discussion of chapter/reading, sharing work progress with class, etc..	Students conduct in-class activities and discussion with professors virtually via live online sessions/break-out rooms. Activities vary: DQ questions, discussion of chapter/reading, sharing work progress with class, etc..

5   RSD: Lessons Learned and What Is Next?

This section considers the lessons learned from the third space created by the RSD model as well as the next steps. The interpretive approach, chosen to examine this transition in the midst of a crisis, is important as all participants – faculty, administrators, and students alike – sought to make meaning and learn and thrive in this new and sudden reality. Let's look at the lessons learned for each group and what is next in store for each.

Students: Despite some initial technical difficulties with Internet bandwidth, most students were able to attend and participate in RSD classes. However, the issue of the camera "on" feature continues well into the second term of RSD delivery. It has been ascertained the camera "on" or lack thereof occurs for several reasons. These include Internet connectivity issues, student shyness, students' reluctance to

display their personal space, or students engaged in other simultaneous activities such as work. Students who are engaged participate in the class activities and perform equally well as in a face-to-face equivalent course. Those students who have previously experienced asynchronous online courses have commented that they wished online courses would be more like RSD courses.

Faculty: This group received express training on live online sessions and was supported multidirectionally and as rapidly as possible to minimize any lag to ensure their transitions to live online sessions classes were as smooth as possible. The faculty group continues to find the use or lack of camera use on the part of the student a concern. This is problematic on many fronts especially with the lack of any mandated policy on the use of the camera. The reason for this concern is twofold. When the camera is on, it is easier to gauge engagement or its lack and make immediate adjustments. Likewise, when the camera is not on, it is difficult to authenticate if the enrolled person is present or some proxy. Despite the fact that RSD endeavors to mimic the traditional face-to-face environment as much as possible, the interpersonal connection is stilted.

Administrators: Eager to see the RSD model succeed, this group finds itself seeking input from faculty and listening to students. Two concerns arise when considering this dichotomy, that is, faculty teach the same load of courses as they did previously on campus, but now in live online sessions for the same number of hours where the interface is not the same as a face-to-face classroom experience. This makes the authors wonder if live online session fatigue is taking place, how can it be identified, and how do administrators adjust for this if RSD is to continue for the conceivable future. Do RSD classes need to be the same length as the original face-to-face class? Input from faculty and consideration for the faculty well-being is important to prevent burnout.

Consistent with the interpretive approach, as administrators it is good to learn and reflect on how the RSD reality can inform improvements in other delivery modes, such as the online platform. However, the major concern is if RSD will be a prolonged delivery mode, how numb will students become to RSD. How long will it be before student engagement is so low that, no matter the concerted efforts of administrators and faculty alike, students may become voiceless, faceless icons behind a live online sessions avatar? This concern is real, especially given many reports of students logging on but in fact being engaged with other activities. Such multitasking is ineffectual and we have coined it "procedural numbness." This could be the case if a student logged into the live online sessions and stayed in the session without being participatory in the class.

Overall, the RSD model has helped inform practices that may be beneficial to add to the online asynchronous model as well. For example, the feature of hosting a regularly scheduled drop in room hour to clarify assignment requirements or answer questions can be a practice incorporated into asynchronous online classes. In this case the COVID-19 crisis was the change agent required to mobilize change to be able to experiment with an alternate delivery model and explore opportunity to improve the current delivery models (Kotter, 2012).

The RSD model has been useful to address the crisis COVID-19 has created and ensure uninterrupted delivery of programs to students. However, if it can be a

substitute for the face-to-face learning experience is too soon to tell. Further longitudinal studies will help elucidate if the RSD is a viable third alternative to deliver higher education or if its life span is limited to this time of crisis.

Important to consider is the potential bias of the authors. The authors of this chapter are also academic administrators tasked with the implementation, coordination, monitoring, and evaluation of the initiative. It is important to recognize we have a highly vested interest in the success of the RSD model.

In conclusion, COVID-19 has changed educational philosophy for generations to come. It has forced us to think outside of our traditional boxes; it has created crisis mobilization and made change possible.

References

Bates, T. (2020). Online enrolments after COVID-19: Some predictions for Canada. *University Affairs Journal, 11*, 2020. Available at https://www.universityaffairs.ca/opinion/in-my-opinion/online-enrolments-after-covid-19-some-predictions-for-canada/

Bhattacherjee, A. (2012). *Social science research: Principles, methods, and practices* (2nd edn., p. 103). University of South Florida.

CDLRA. (2019). *Tracking online education in Canadian universities and colleges: National survey of online and digital learning 2019 national report*. Canadian Digital Learning Research Association.

Kopec, D. (2018). *Environmental psychology for design* (3rd ed., pp. 111–128). Bloomsbury Academics.

Kotter, J. P. (2012). *Leading change*. Harvard Business Review Press.

Midkiff, S., & DaSilva, L. (2000). *Leveraging the web for synchronous versus asynchronous distance learning*. Available at: https://www.researchgate.net/publication/228818810_Leveraging_the_web_for_synchronous_versus_asynchronous_distance_learning

Potter, J., & McDougall, J. (2017). *Digital media, culture and education: Theorizing third space literacies*. Palgrave Macmillan. ProQuest Ebook Central. https://ebookcentral-proquest-com.proxy1.lib.uwo.ca/lib/west/detail.action?docID=4853109

Stasko, C. (2020, May 12). Staying human in the zoom boom. *University Affairs Journal*. Available at https://www.universityaffairs.ca/career-advice/career-advice-article/staying-human-in-the-zoom-boom/?utm_source=University+Affairs+e-newsletter&utm_campaign=6f11f919da-EMAIL_CAMPAIGN_2020_05_07&utm_medium=email&utm_term=0_314bc2ee29-6f11f919da-425249369

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Teaching Civics/History and English to Adult Lawful Permanent Residents with Limited English Proficiency at Local Libraries: Challenges and Practices During the COVID-19 Pandemic

Ally Zhou, Miriah Ralston, and Rebecca Barker

> *More public and private resources devoted to English-language instruction would be, in our view, the most efficient means of facilitating successful naturalization for poorly educated, non-English-speaking migrants.*
>
> *Freeman et al., 2002, p. 1023.*

1 Naturalization of Lawful Permanent Residents with Limited English Proficiency

1.1 *Limited English Proficiency: A Leading Barrier to Naturalization*

Recent decades have seen a continual increase in the number of naturalized citizens in the United States (US Department of Homeland Security's Office of Immigration Statistics [DHSOIS], 2019). The number of naturalized US citizens may continue to rise based on the latest available estimates from DHSOIS as reported by Baker

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(2019), who projected that nearly 9.2 million lawful permanent residents (LPRs) were potentially eligible to naturalize in 2019.

However, not all lawful permanent residents (LPRs, also known as "green card" holders) desiring to naturalize will be granted citizenship. In order to become naturalized US citizens, LPRs must meet certain general and legal eligibility requirements as mandated by Congress in the Immigration and Nationality Act (Teke, 2018, 2019). In particular, applicants must demonstrate an understanding of the information in the naturalization forms such as Form N-400, US history, and civics as well as the ability to speak, read, and write basic English as measured by the naturalization interview and English test. These can pose considerable challenges for millions of LPRs with limited English proficiency (LEP; also used to stand for limited English proficient in this chapter) as classified by the US Census Bureau's 2018 American Community Survey (ACS, n.d., i.e., respondents who answered speaking English "well," "not well," or "not at all"). Indeed, research has identified the lack of English proficiency and difficulty of the naturalization test as two of the leading obstacles to certain LPRs' motivation to apply for naturalization (Freeman et al., 2002; Gonzalez-Barrera, 2017; Taylor et al., 2012).

1.2   Number of LEP Lawful Permanent Residents Eligible to Naturalize

According to Le et al. (2019), among the 8,970,000 LPRs eligible to naturalize (p. 13), 56.9% had limited English proficiency (with 14.4% speaking English "not at all," 22.8% "not well," and 19.7% "well"; p. 16), totaling 5,103,930 adult LPRs eligible to naturalize but with limited English proficiency. The magnitude of such needs of the LPR population with limited English proficiency is recognized by the US Citizenship and Immigration Services (USCIS). This is reflected in its implementation of the Citizenship and Assimilation Grant Program since 2009 (USCIS, n.d.-a) to fund programs designed to offer citizenship classes that "integrate instruction in U.S. history and government; civics-based ESL instruction in reading, writing, and speaking; and instruction on the naturalization process and eligibility interview" (U.S. Department of Homeland Security, U.S. Citizenship and Immigration Services, External Affairs Directorate, Office of Citizenship, 2019, p. 3).

1.3   Citizenship Instruction for LEP Lawful Permanent Residents: A Collaborative Effort

Given that over 5.1 million LPRs with limited English proficiency may need citizenship instruction that includes civics-based ESL classes in order to prepare for the naturalization test and interview, simply relying on USCIS funding to support such

needs would be a serious disservice to this population. Therefore, citizenship instruction funded by other public and private resources, particularly those via partnerships with local public libraries, is considered a viable and critical solution to effective naturalization of the LEP population (Chapralis, 2014; Freeman et al., 2002; Koerber, 2016; Larrotta, 2017; Pete, 2016; USCIS, n.d.-b; USCIS & Office of Citizenship & Institute of Museum and Library Services [IMLS], 2006).

As observed by USCIS and IMLS (2006), new immigrants are settling outside of traditional gateway cities where there may be fewer ESL and citizenship preparation classes available. To leverage resources, libraries can provide on-site English language and citizenship classes through partnerships with local universities or community colleges, English language instructional programs, or adult education programs, who may provide resources such as teachers for ESL and citizenship classes.

We present here an example of such collaborative programs and discuss the challenges the program has encountered and the strategies it has used when working with adult LPRs with limited English proficiency during the COVID-19 pandemic. We will also discuss the implications of this experience for future instruction of civics/history and civics-based ESL to the LPR population and the professionalization of ESL/civics instructors.

2 Integrated Civics/History and ESL Classes Offered by the Oklahoma City University TESOL Program at Local Libraries

2.1 Overview of the Program

To prepare adult LPRs in the Oklahoma City metro area for their upcoming application for naturalization, the naturalization interview, and the English test, the Oklahoma City University Teaching English to Speakers of Other Languages (TESOL) program has been offering integrated civics/history and ESL classes at select local libraries in the Oklahoma City metro area since 2016. Currently, the TESOL program offers this instruction in collaboration with the Edmond Library and the Southern Oaks Library of the Metropolitan Library System of Oklahoma City. Classes are mainly taught by graduate teacher candidates in the TESOL program under the supervision of a TESOL faculty member. Funding for the program is provided through grants from the Institute of Museum and Library Services and the Oklahoma Department of Libraries. Oklahoma City University (OCU) has provided partial funding to support the program.

Oklahoma City has fewer integrated civics/history and ESL classes for LPRs with limited English proficiency as compared to larger gateway cities. However, the need for such classes may be no less. Gambino et al. (2014) pointed out that in

2012, "the proportion of the foreign-born population who spoke English less than 'very well' was significantly higher than the national average [i.e., 50%] in seven states" (p. 5), one of which was Oklahoma. Therefore, collaboration between the libraries and OCU TESOL is critical to the naturalization of LPRs with limited English proficiency in this area.

Gambino et al.'s research findings suggest a potential high demand for integrated civics/history and ESL classes in the Oklahoma City metro area. Le et al. (2019) concurred, estimating that out of 44,819 LPRs in Oklahoma eligible to naturalize, 53.5% and 33.1% had a low and medium probability of naturalization, respectively, indicating a total of 86.6% of the 44,819 LPRs, or 38,813 LPRs, eligible to naturalize in the state as potentially in need of citizenship instruction. The low and medium probability groups were projected to have a higher percentage of LEP green card holders (75% for the low and 51% for the medium probability groups, respectively) as compared to the high probability group (35%). LPRs with lower English proficiency and educational attainment are expected to have lower probabilities of naturalization, and therefore they may need substantial assistance with preparing for naturalization. For this reason, the citizenship education program provided by OCU TESOL in collaboration with local libraries is a timely, meaningful response to the urgent need of the LPR population in this area.

2.2 Instruction Prior to the Pandemic

Face-to-face instruction was held at two separate libraries in the Oklahoma City metro area prior to COVID-19. Class sizes ranged from 6 to 25 learners with mixed English proficiency levels (mainly beginning to low intermediate). Learners varied at each location, with one having predominately Spanish-speaking learners and the other learners from a wide range of linguistic backgrounds. Due to limited space and other resources, we were unable to offer separate classes for learners with the same English proficiency level, so classes were multi-level.

The curriculum followed the guidelines recommended by USCIS, focusing on civics and US history for the naturalization interview, Form N-400 Application for Naturalization, and civics-based ESL learning that emphasizes English reading, speaking, and writing skills as applicable to the naturalization interview and the English test. Instruction was conducted entirely in English, with PowerPoint visuals and presentations, YouTube videos, dry-erase boards, and worksheets being used in every class. This curriculum was usually completed within 12–15 weeks during regular academic semesters and 8–9 weeks during summer, with a 90-minute class at each location every week.

2.3   Challenges of Working with Adult Literacy Learners During the Pandemic

With the transition to a strictly online platform via Zoom during COVID-19, there have been several challenges that instructors need to address to create an effective curriculum and classroom setting. How do we adapt our curriculum to compensate for a lack of physical presence in the classroom? What limitations do learners have to overcome to successfully engage with the materials and achieve success based on the goals of the program? We discuss some of the challenges and obstacles faced in a COVID-19 classroom setting and offer solutions to instructors to increase the efficacy of future classroom teaching, whether online or face-to-face.

2.3.1   Instructional Changes

A major challenge for the instructors during COVID-19 has been finding ways to quickly adapt the existing curriculum to meet the needs of students while still fulfilling the goals of the course to assist learners with passing the naturalization test and promote linguistic and civic assimilation. Due to the pandemic, the government shutdown procedures were enacted within a short period of time, so subsequently the program made a swift decision to transition instruction to a strictly online platform. Hence, any adaptation during the rapid transition period posed unique challenges to our instructors and learners.

Communicating with students regarding changes to the delivery mode of the program has presented another major challenge. Communication about the program needs to be brief and easy to understand while remaining effective at conveying important information about the new methods of instruction. Teachers are also tasked with maintaining student communication through a variety of methods such as emails, texting, and phone calls, which requires additional planning on the part of the teacher.

2.3.2   Challenges of the Learners

Learners also experienced challenges due to the transition to an online platform.

Limited Literacy Skills for Effective Communication   We started to observe that many of the higher-level speakers did not continue with the class, whereas many of the students with only basic level skills continued. They were usually aided by a bilingual translator, often a younger family member capable of navigating the new technology for the learner. These bilingual assistants also acted as a liaison between the learner and the teacher regarding more complex questions essential to the naturalization process but difficult for the student to articulate in English.

Lack of Digital Literacy When contacting learners from the classes about the transition to an online format, we discovered their lack of technological resources and digital literacy. Many of these adult learners do not have the required Internet or video conferencing technology, and neither do they have the means to acquire or skills to learn new technologies within a short period of time without assistance. Although many learners do not have laptops or access to a stable Internet connection in their home, several do have smartphones, but they lack the understanding of how to download applications, such as Zoom, to take the class online. A related issue we have faced is that even though emails are sent out weekly to learners detailing the login process, many learners are not in the habit of checking their emails. Texts are also sent to learners to encourage participation but are largely ineffective, so we have to call students on their phone, which has slightly improved participation. Students' lack of digital literacy and literacy skills in general may have contributed to this communication behavior.

Learners' Unwillingness to Speak During Class A major challenge that has presented itself is the learners' lack of willingness to speak during online classes. In the face-to-face classroom setting, students speak regularly in response to the questions posed, but they seem to have difficulty speaking during online classes. Whether this is due to issues with the technology or hesitation on their part to speak as an individual instead of as part of a group is uncertain. Some success has been shown when the instructor calls on students directly as opposed to posing a question to the class as a whole. Given that improving English proficiency skills is a cornerstone of the program's curriculum, the teacher has paid special attention to helping students develop their listening and speaking capabilities during online instruction.

Lack of Dedicated Space for Learning at Home One challenge for students that was not immediately apparent is the lack of space within their home to take classes where they can effectively engage with the material without interference. Many of the learners have been quarantined with members of their family and have many other outside distractions that make it difficult for them to focus on the lesson materials. This lack of designated study space could be a potential cause for low retention rates of students when we transitioned from a face-to-face to an online format.

Lack of Access to Resources in Print While face-to-face classes have the advantage of teacher-printed materials, students taking classes online face obstacles such as access to resources, including printers, paper, and writing instruments, to name just a few. While access to these resources is not an insurmountable obstacle, instructors need to compensate in order to help their learners benefit from an online learning platform.

2.3.3   Solutions in Response to Challenges

Solutions we have used during COVID-19 may help other citizenship teaching with instruction after COVID-19.

Changes to the Curriculum in Response to the Pandemic   Students' limited literacy skills make it difficult for teachers to effectively communicate with them about the transition to online classes. We have worked on addressing this issue within our curriculum. A portion of class time will now be spent working with students on helping them navigate the online platforms commonly used by instructors. This may prove to be beneficial for future students who are not able to attend face-to-face classes due to a variety of factors but who are still interested in attending citizenship lessons.

Additionally, coursework has been augmented to compensate for the lack of physical presence of instructors and learners. The program has acquired supplementary teaching resources from various locations such as the USCIS website and YouTube to aid with comprehension of materials. Many of these resources have the additional benefit of being available with closed captions or bilingual translations. This allows students to make connections between the lessons and the materials that might be missing in a fully English-based online class that offers limited bilingual support.

Solutions in Response to Learners' Limited Digital Literacy   As many of our students have limited digital literacy, in addition to familiarizing them with the functions of our main online learning platform Zoom, we have also utilized applications that students can use outside of the classroom to expand their digital literacy. For example, Quizlet, an online study application, has been provided to students to enhance their engagement with the course content on their own time and at their own pace. This application may be beneficial for teachers looking to create online quizzes for their learners to work with in their spare time. Teachers can send the link to their specific Quizlet classroom to their learners, which makes it easy for learners to sign up and access specific quizzes designed for them. These online quizzes are fully customizable by the teacher and track student activity, which can provide valuable data about where learners are having difficulties.

Solutions in Response to Learners' Unwillingness to Speak During Class   Several e-tools and applications (i.e., apps) that can help to create more effective and engaging online learning practices have been implemented. For example, the Zoom Annotate function allows students to interact with the homework sheets during class from either a computer or mobile device by marking or adding desired texts on the sheet while interacting with the instructor and peers. The Zoom breakout rooms, where students can work on their English conversation skills in pairs or small groups, provide a more low-pressure learning environment and help students speak up during the online classes. Teachers have the ability to "check in" or join different groups during this time to make sure that learners are staying on task and are

speaking in the target language. Regular practice via these smaller groups helps improve students' speaking skills and enhances their willingness to communicate with their instructor and peers during class by giving them the opportunity to first practice in small groups and then engage with the whole class.

Solutions in Response to Learners' Lack of Resources To resolve the issue of a lack of dedicated study space, we have arrived at a solution with the libraries involved with this project to make Wi-Fi available to students in the library parking lot. Students can maintain social distancing procedures by remaining in their cars or at available outside seating areas while using their mobile devices to attend classes and learn.

To address students' challenges with resources in print, we have created editable Word and PDF documents as replacements for the printed homework handouts that the students would typically receive in a face-to-face class. These documents are emailed to the students to complete before the next class session. They can also be reviewed at the beginning of class if students are unable to complete them on their own time. This ensures that all learners are given the opportunity to complete the materials as well as to check their answers for errors. The worksheets are kept by the student for further review if needed.

3   Implications

Points pertaining to instruction of LPRs with limited English proficiency have become apparent during these online citizenship classes. These have important implications for learning post-COVID-19 as well as for the professionalization of teachers of citizenship classes with a focus on history/civics and civics-based ESL.

3.1   Implications for Future Instruction of Adult Immigrant Literacy Learners

In a post-COVID-19 learning environment, online instruction seems to be inevitable; and as our experience has witnessed, online platforms offer a useful alternative for future instruction of LPR and learners with limited English proficiency, although they come with challenges. It is likely that our program will eventually return to the traditional delivery mode of face-to-face classroom instruction. However, at the present time and into the foreseeable future, we need to offer delivery modes that are flexible and responsive to the needs of seniors and those individuals with illness or preexisting conditions who may be at a higher risk for severe illness from COVID-19 or other viruses. The lessons we have learned from our experience working with LPRs with limited English proficiency may shed light on teaching

efficacy for teachers who will be working with the same student population in the future.

One major lesson we have learned is that regardless of the modes of instruction in the future—face-to-face, online, or hybrid combinations of face-to-face and online delivery modes—teachers may need to introduce the online platform(s) that the class is likely to use in the future right at the beginning of the program so that instruction can be transitioned to a fully online mode when needed. This is particularly essential to success of integrated history/civics and civics-based ESL classes with learners placed in beginning-, intermediate-, or mixed-level classes because learners in these classes may not only lack digital literacy but also lack basic literacy skills that prevent them from understanding communication in writing (e.g., emails, texts, and messages on social media) or oral instructions concerning the use of technology without visual support.

Another lesson from our experience is that digital literacy needs to be an indispensable component of citizenship instruction delivered face-to-face. This is in line with the USCIS (2019) Language Access Plan, which determines that digital literacy, "the ability to communicate, navigate, and conduct research using technology, is an essential component to supporting language access for LEP populations" (p. 7). The benefit of instruction that develops digital literacy is threefold. It helps students quickly adapt to online learning due to unexpected circumstances, such as a virus outbreak or dangerous travel conditions caused by weather. It also helps students navigate the USCIS online filing system and its numerous educational resources posted online that help them prepare for the naturalization interview. Such instruction will further prepare learners with the skills they need to live and work in a society with a wide spectrum of information that can be accessed via digital technologies such as the Internet, mobile devices, and social media. This instruction would eventually lead to the linguistic and civic assimilation of immigrants.

In addition, our experience has further demonstrated the need for collaboration with community partners such as local libraries and school districts, with the state government, particularly the Oklahoma State Department of Libraries, and with the federal government such as USCIS district offices. First, outreach performed by the coordinating librarians at our select local libraries in collaboration with the program prior to and during the COVID-19 pandemic has ensured that information regarding these classes and their transitioning to online is disseminated to LPRs in need of citizenship preparation services via online platforms, bulletin boards at local libraries, and friendly reminder phone calls and text messages. In addition to numerous resources, local libraries also offer a feasible solution for students who do not have access to the Internet at home during the pandemic. Second, the Oklahoma Department of Libraries has provided resources (e.g., additional funding for devices that can be used to teach students digital literacy) for the program, coordinated outreach efforts made by all community partners, and ensured smooth operation of the program in terms of securing appropriate facilities for instructor and learner use. Third, Community Relations Officers from USCIS Dallas and Houston District Offices have played an important role in educating LPRs with limited English proficiency. During the pandemic, they offered bilingual online sessions with our

Spanish-speaking students and provided timely, most recent, and most authoritative information concerning the N-400 application form, the naturalization process and resources, and the naturalization interview. Support from all these partners is invaluable to the continuing success of the program.

3.2   Implications for the Professionalization of Civics/ ESL Teachers

We believe our program is one of the first few "pioneers" in teacher education programs aiming simultaneously at provision of citizenship education to LPRs in need of naturalization preparation services and professionalization of novice Civics/ESL teachers enrolled in a graduate TESOL program.

Most of our teachers are graduate students majoring in TESOL. Many of them have gained a unique hands-on experience in curriculum development for civics/ESL classes and classroom instruction through working on this grant program. Such an experience is grounded in and guided by their graduate coursework (e.g., Second Language Acquisition, Methods of TESOL, and Curriculum Design and Materials Development). At the same time, it transcends their learning in regular university classrooms because any theory or model in relation to their teaching practice is materialized in a form that helps them see its suitability and limitations when applied. Similarly, their experience teaching adult immigrants with LEP via online platforms during the pandemic will imbue them with a deep understanding of the benefits and challenges that come with teaching adult civics/ESL classes online. The strategies and adaptability mechanisms gained by instructors will prove to be an invaluable asset for their future teaching practices both online and in face-to-face instruction. Overall, the grant program has taken a small step toward the professionalization of instructors of citizenship classes.

4   Conclusion

The challenges and corresponding strategies related to effectively teaching classes online during the COVID-19 pandemic may shed light on future practice of and collaboration among instructors, administrators, community partners, and government officials who work closely with the LPR population. For citizenship instructors, there is a wide array of resources available online for curriculum design and materials development, which can enhance the learning experience of students in both face-to-face and online classroom settings.

Citizenship instruction during the pandemic has been a challenging, collaborative, and enlightening endeavor for all key stakeholders in this process. We believe our discussion in this chapter marks the beginning of exchanges of practices among

instructors, librarians, administrators, and government officials who may need to work with LPRs with limited English proficiency via combinations of face-to-face and online delivery modes post-COVID-19.

References

Baker, B. (2019). *Estimates of the lawful permanent resident population in the United States and the subpopulation eligible to naturalize: 2015–2019*. U.S. Department of Homeland Security, Office of Immigration Statistics. https://www.dhs.gov/sites/default/files/publications/lpr_population_estimates_january_2015_-_2019.pdf

Chapralis, S. (2014). Addressing immigrants' information needs. *American Libraries, 45*(7/8), 11–12. www.jstor.org/stable/26197494

Freeman, G. P., Plascencia, L. F. B., Baker, S. G. l., & Orozco, M. (2002). Explaining the surge in citizenship applications in the 1990s: Lawful permanent residents in Texas. Social Science Quarterly, 83(4), 1013–1025. https://doi.org/http://onlinelibrary.wiley.com/journal/10.1111/%28ISSN%291540-6237/issues

Gambino, C. P., Acosta, Y. D., & Grieco, E. M. (2014). *English-speaking ability of the foreign-born population in the United States:* 2012. *American community survey reports, ACS-26*. U.S. Census Bureau. https://www2.census.gov/library/publications/2014/acs/acs-26.pdf

Gonzalez-Barrera, A. (2017). *Mexican lawful immigrants among the least likely to become U.S. citizens.* Pew Research Center. https://www.pewresearch.org/hispanic/wp-content/uploads/sites/5/2017/06/PH_2017.06.29_Among-Lawful-Immigrants-to-US-Mexicans-Least-Likely-to-Apply-for-Citizenship_Full-Report.pdf

Koerber, J. (2016). Celebration & integration. *Library Journal, 141*(10), 48–51.

Larrotta, C. (2017). Immigrants to the United States and adult education services. *New Directions for Adult & Continuing Education, 2017*(155), 61–69. https://doi.org/10.1002/ace.20241

Le, T. V., Pastor, M., Scoggins, J., Gonzales, D., & Ramirez, B. (2019). *Path to citizenship: Using data to understand and promote naturalization*. USC Dornsife Center for the Study of Immigrant Integration. https://dornsife.usc.edu/assets/sites/731/docs/PathsToCitizenship_Full_Report_CSII.pdf

Pete, J. K. (2016). A library's role in the success of adult English learners. *MPAEA Journal of Adult Education, 45*(1), 1–8.

Taylor, P., Gonzalez-Barrera, A., Passel, J. S., & Lopez, M. H. (2012). *Aging, naturalization and immigration will drive growth. An awakened giant: The Hispanic electorate is likely to double by 2030*. Pew Research Center. http://assets.pewresearch.org/wp-content/uploads/sites/7/2012/11/hispanic_vote_likely_to_double_by_2030_11-14-12.pdf

Teke, J. (2018). *U.S. naturalizations: 2017, Annual flow report*. U.S. Department of Homeland Security, Office of Immigration Statistics. https://www.dhs.gov/sites/default/files/publications/Naturalizations_2017.pdf

Teke, J. (2019). *U.S. naturalizations: 2018, Annual flow report*. U.S. Department of Homeland Security, Office of Immigration Statistics. https://www.dhs.gov/sites/default/files/publications/immigration-statistics/yearbook/2018/naturalizations_2018.pdf

U.S. Census Bureau. (n.d.). *American community survey, B16008, 2018 ACS 5-year estimates detailed tables, Citizenship status by age by language spoken at home and ability to speak English for the population 5 Years and Over* [Data Set]. Retrieved May 22, 2020, from https://data.census.gov/cedsci/table?q=B16008&g=0100000US,.04000&tid=ACSDT5Y2018.B16008&hidePreview=true&moe=false

U.S. Citizenship and Immigration Services. (2019). *Language access plan.* https://www.dhs.gov/sites/default/files/publications/uscisc-updated-language-access-plan-2020.pdf

U.S. Citizenship and Immigration Services. (n.d.-a). *Citizenship and assimilation grant program*. Department of Homeland Security. Retrieved May 26, 2020, from https://www.uscis.gov/about-us/citizenship-and-assimilation-grant-program

U.S. Citizenship and Immigration Services. (n.d.-b). *Libraries.* Department of Homeland Security. Retrieved May 28, 2020, from https://www.uscis.gov/citizenship/organizations/libraries

U.S. Citizenship and Immigration Services, Office of Citizenship, & Institute of Museum and Library Services. (2006). *Library services for immigrants: A report on current practices*. https://permanent.access.gpo.gov/lps76473/Library_Services_Report.pdf

U.S. Department of Homeland Security, Office of Immigration Statistics. (2019). *2018 yearbook of immigration* statistics (*Table 20, Applications for naturalization filed, persons naturalized, and applications for naturalization denied: Fiscal years 1907–2018*). https://www.dhs.gov/sites/default/files/publications/immigration-statistics/yearbook/2018/yearbook_immigration_statistics_2018.pdf

U.S. Department of Homeland Security, U.S. Citizenship and Immigration Services, External Affairs Directorate, Office of Citizenship. (2019). *Notice of funding opportunity (NOFO), FY 2019 citizenship and Assimilation grant program: Citizenship instruction and naturalization application services.* https://www.uscis.gov/sites/default/files/USCIS/files/FY19/FY19NOFO_CINAS.pdf

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Can You See Me? An Australian University Moves to Emergency Synchronous Delivery

Ratna Selvaratnam and Kate Rodgers

> *Why, sometimes I've believed as many as six impossible things before breakfast.*
>
> *Alice in Wonderland*

1   Background

Leading up to COVID-19 being declared a pandemic in March 2020, Australian universities were grappling with rapidly scaling online learning. The initial target student cohorts were international students who were still in their home countries and domestic students (Carver, 2020). They would possibly need to move off-campus and online due to government directives. This is not genuinely online learning (EDUCAUSE, 2020) as there was no time to plan and design the courses to provide effective learning online. Hence, most of the move was to provide learning as is but substituting face-to-face teaching with online, synchronous delivery with appropriate technology platforms. Australian universities in the main adopted teaching solutions which reflect most of the move globally. It was a concerted effort to use multi-platforms to scale and stabilize video delivery quickly while fast-tracking teacher and student adoption and proficiency of relevant learning technologies.

This chapter considers the success of emergency remote teaching and the impact that synchronous learning has on that success. With the context of global education and online learning, pandemic responses have been both unique to the institution and common across the sector, with considerations not only for how one institution can handle the increased load of synchronous video delivery but how the risks are mitigated when every institution is using the same platform.

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As per the thesis of this book, teaching in crisis has pushed thousands of educators to become innovative, independent, and technology experts overnight. This chapter is a case study of an Australian university ranked highly for teaching quality (Welcome to ECU, 2020) that was on such a journey. It is a mid-sized university with approximately 20,000 full-time equivalent students enrolled. Identifying lessons from emergency remote teaching is explored by looking at the use of synchronous delivery platforms and related video use, approaches taken with training and resources and feedback received.

2   Case Study

Synchronous online teaching delivery has had steady adoption in Australian universities in recent years. As universities move toward hybrid learning, they foster a trend toward lecture capture and pre-recorded videos shared over media streaming platforms (Koster, 2018). This is followed by face-to-face activities. However, the COVID-19 crisis has forced institutions to rapidly move all face-to-face delivery to online instead of on-campus (Bao, 2020). University campuses, while generally considered safe, have been subject to requirements of physical distancing that made remote learning the best option forward. The move to emergency remote teaching happened quickly, in many cases within a week. As such, classes were designed to still be held synchronously, simply replacing in-person sessions with online platforms (Lederman, 2020).

This resulted in several considerations (Sankey, 2020). The first is pedagogical. Consideration is needed to be given whether all teaching can simply move online. For example, practical chemistry labs or ballet in a performing arts school are likely scenarios to challenge the notion of online learning simply because of its highly effective teaching delivery. The second consideration is technological. The question the university faced was whether existing video platforms would cope with increased use. Another critical consideration was staff development. While our teachers are not unfamiliar with online delivery, there needed to be a needs analysis as to what they had to learn and how to transform their delivery to meet the crisis and achieve learning continuity. All this needed to be done quickly.

The scope of this chapter is limited to the experience of one Australian university. However, this may also be the experience of many other universities, both in Australia and globally. The method used for this chapter is the case study (Yin, 2014) with a mixed methods (Creswell and Plano Clark, 2018) approach. Ethics clearance was sought and approved as we examined the usage data from the relevant learning technologies with additional student and staff surveys also considered.

3   Findings and Discussion

Prior to COVID-19, video technologies in use in the university were limited to Blackboard Collaborate Ultra and Panopto, both adopted at the university since 2018. Blackboard Collaborate Ultra is a virtual classroom tool complementing the Blackboard learning management system. Panopto is a video capture and management platform with wide adoption globally. Through 2019, Microsoft Teams was rolled out to the enterprise, with the integration with telephony finalized in February 2020. The fourth synchronous platform, Zoom, is not a centrally supported service. However, the university holds a small number of licenses in use by the Digital and Campus Services department. It is offered in limited capacity as an alternative to Skype for Business. Academics could choose to use the free Zoom service if they opted. However, the license was uplifted to the enterprise version during COVID-19, doing away with the 40-minute limit to the duration of use per session.

When the university realized the potential impact of COVID-19 and the imminent move to emergency remote teaching, the Centre for Teaching and Learning (CLT) undertook usage modeling in order to determine what system resources would be needed to support the move. Examining face-to-face timetabling data and then limiting the data set to activities that would translate online (lectures, seminars, tutorials) across all campuses determined that the busiest time of the week was Tuesday morning at 8:30 am where 154 unique sessions were undertaken and participated in by 4287 students (see Table 1). Note that the data set excludes other activity types, including studio, workshop, and ensemble classes, all of which required special consideration when determining how to deliver online. The university's world-renowned performing arts program offers many studio classes and ensembles that needed to be dealt with separately.

Once the teaching sessions were identified, we needed to ensure faculty were prepared to teach off-campus within a matter of days. While CLT has a comprehensive suite of self-access materials for learning technology proficiency, they still needed to be updated to be quickly consumable and key material easily located for the particular need at hand. Academic staff would not have time to design units to be immediately online-learning friendly. Hence the first solution was to offer classes in synchronous delivery mode. Existing vendor partners were contacted to either ensure viability of service or increase offering licenses and capacity.

Table 1   Total unique lecture, seminar, tutorial (on-campus) activities scheduled semester 1, 2020

Day of week	Sessions	Total student access
Mon	930	22,609
Tue	1066	25,990
Wed	1035	23,719
Thur	1036	24,527
Fri	793	19,720
Sat and sun	40	2658

To this end, hybrid delivery of training sessions was increased in frequency to offer capacity building in virtual classrooms using Blackboard Collaborate Ultra, Microsoft Teams, and Zoom. Figure 1 shows the training attendance for the month of March 2020, which was the peak transition time. While the numbers may not look large on the graph, it is the highest attendance within a short period in these synchronous delivery platforms in the university's history, especially for the learning management system's native virtual classroom platform Blackboard Collaborate Ultra. Training in using Panopto was also ramped up to eventually cater to prerecorded lectures in shorter chunks of video.

The usage patterns of Blackboard Collaborate Ultra aligned with that of on-campus teaching activities. The greatest use of Blackboard Collaborate was at 8:30 am, 10:30 am, and 1:30 pm, with sessions more often lasting 120 minutes. Twenty-five sessions regularly had enrolments greater than 250 participants. This was of concern to the vendor, who had to be advised of sessions over 250 participants and whose tool was limited to a capacity of 500. Blackboard Collaborate Ultra has seen an unprecedented uptake of synchronous video sessions. Data was run to compare March to June 2019 and 2020. Figure 2 shows the number of Collaborate Unique Attendees across all sessions that ran during that period. The biggest day was 31 March when 1598 sessions were launched and attended by 5689 unique participants. Compare this to the most significant day in 2019 in Q1 (to April 14), which fell on 25 Feb and had 349 sessions launched with 356 unique participants. That is a 358% increase in sessions and 1498% increase in unique student attendance. Most sessions have under 20 attendees – only 5 sessions this year have had more than 100 attendees.

Panopto is our tool used for the video capture of lectures and utilized for two primary functions: Academic staff will record lectures, tutorials, PowerPoint, or
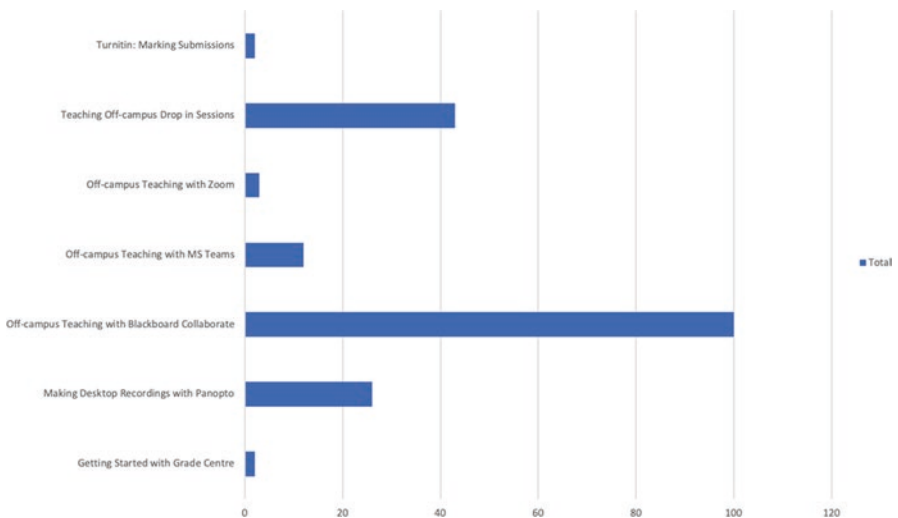
Fig. 1 Technology training attendance in March 2020 by content type
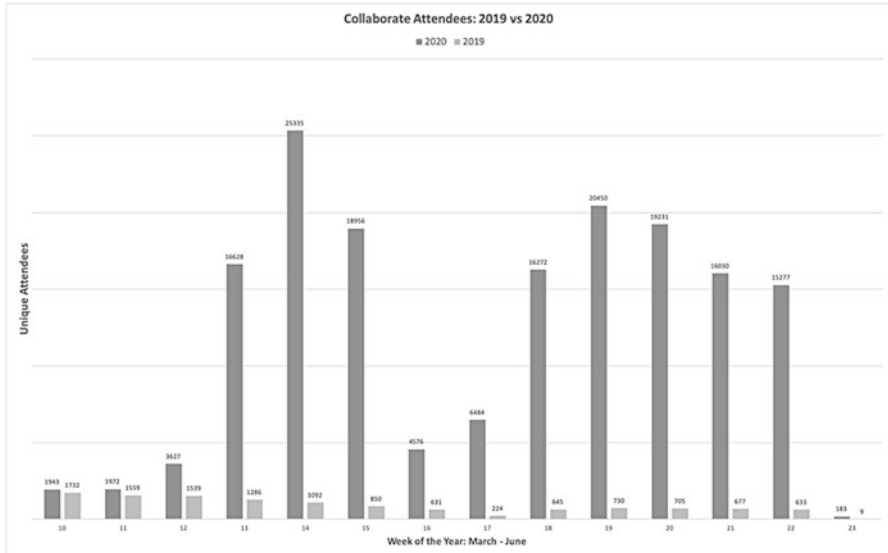
Fig. 2   Blackboard Collaborate sessions with unique attendees 2019 vs 2020

other video presentations and share these with students through a folder connected to a Blackboard LMS unit site. Students use Panopto to record directly or upload videos recorded on their device, save to a personal folder, and then submit that video to an assessment via Blackboard. Panopto was fully used in 2019, and adoption was significant. However, the data indicates that Panopto became a useful tool for students to contribute to what would be alternative on-campus delivery of classes in a remote way. The greatest use of this platform is for viewing prerecorded videos, as indicated in the data in Fig. 3. The hours of videos viewed have more than doubled for each month compared to 2019. In March 2020, almost 70,000 hours were logged as opposed to approximately 32,000 in March 2019. Panopto usage has been extensive and is a good indicator of the ramp-up in emergency remote teaching.

Another synchronous or collaboration platform is Microsoft Teams. This was rolled out as an enterprise-wide Office 365 project with a view to Teams replacing the use of physical handsets or cell phones with softphones. The project to move to softphones was concluded just before the move to emergency remote teaching. Microsoft Teams was presented to the academic community as the preferred alternative for video conferencing with students should issues be found with Blackboard Collaborate Ultra. For instance, MS Teams remained a tool available and accessible in China when the data center for Collaborate was blocked.

It is difficult to know exactly how many teaching and learning activities were conducted using Teams; however the call and meeting participation numbers highlight how Teams became a vital tool not just for engaging with students but for staff to engage with their colleagues and support teams while teaching remotely (see Fig. 4). Teams was rolled out in June 2019, and in the first 6 months of use, it saw
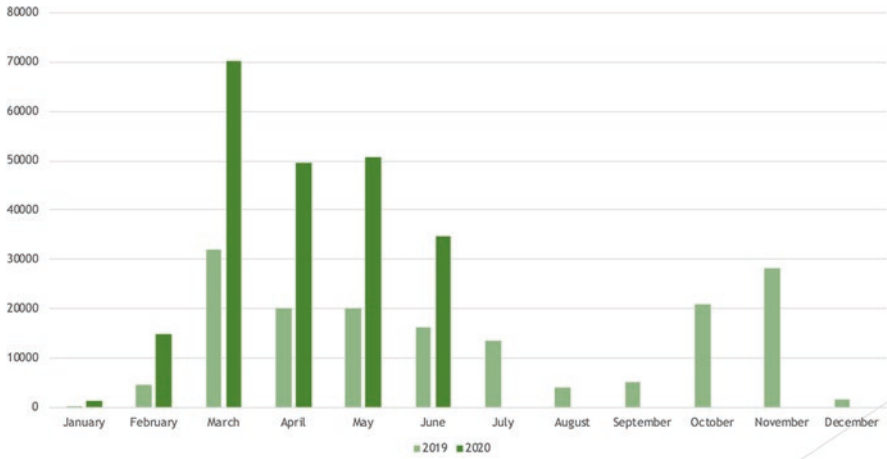
Fig. 3 Panopto hours viewed 2019–2020

little usage, although – as month 6 below shows – call attendance did increase. Few "meetings" were held – that is, multiple people in a meeting room as opposed to a 1:1 audio or video call. In the second 6 months of usage, January to June 2020, meetings and calls increased significantly as a result of off-campus work and teaching. Calls outnumbered meetings and saw an increase in usage from the year prior.

Like many institutions, Zoom was licensed to support off-campus teaching during COVID-19 as a popular platform of choice for synchronous classes. Prior to 2020, ECU had limited Zoom licenses. It had been licensed as an alternative video conferencing tool for staff who were using Skype and experiencing difficulties, as well as to provide high-definition video conferencing. To reduce systems risk and to address questionable usage load in particular, the Zoom license was expanded to an enterprise license with limited webinar licenses. While modeling indicated possible double usage, we were uncertain whether Collaborate would withstand the increased need. Further, Zoom integrates with Blackboard and Panopto. Fig. 5 shows Zoom attendance from February to May as with the Collaborate data in Fig. 2. It shows significant weekly use with numerous attendees – up to 4000 at one point in April.

While the usage data shows university-wide adoption and the increased use of synchronous and video platforms, it is useful to have feedback on how staff and students felt about the change. There were two measures of this via pulse-check surveys. To ascertain the impact on work culture, a Staff Check-in Survey (2020) was administered by the Human Resources department in April 2020. Centre for Learning and Teaching (CLT), which carried out these technology training sessions, had high scores in communication at 98%, while the university as a whole performed at 92%. Another high score is in collaboration, where CLT scored 98% satisfaction, while the university as a whole had a 93% satisfaction rate from all staff. This was a positive indicator of the effective arms of the university, both offering capacity building and those receiving the training. The other pulse-check survey
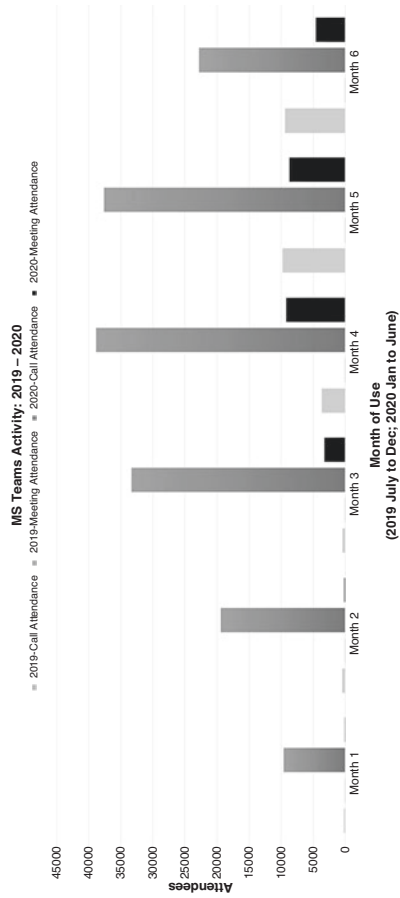
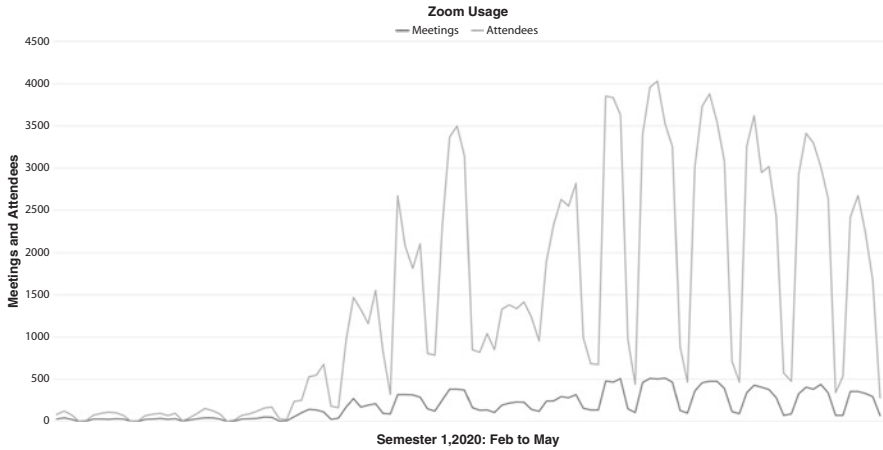**Fig. 4** Microsoft Teams activity 2019–2020

Fig. 5 Zoom usage semester 1, 2020

was administered to students. Student satisfaction improved in semester 1, 2020, compared to the previous year (Education Committee Minutes, 2020). This was measured through the Unit and Teaching Evaluation Instrument (UTEI), which is a centrally administered survey that seeks student feedback on the quality of their units and the teaching within those units. This is a win for the university, indicating a higher success than even the previous semester in 2019, when teaching was still on-campus.

4   Conclusion

The first 4 weeks of off-campus teaching saw the university rapidly deploying tools, creating resources, delivering training, and increasing support to facilitate teacher confidence in delivering online. There was a massive increase in the adoption of video technologies, including 1500% increase in the use of Blackboard Collaborate, which the university already had in place. Microsoft Teams and Zoom were also deployed as additional synchronous platforms for teaching delivery to spread the load and ensure there was a backup tool should any one platform fail. Panopto video capture and management was also used widely for capturing lectures and for student video assessment submissions.

The literature does recognize standard educational models where a university could provide off-campus education with various learning technologies, employing learning management systems, video-conferencing, and utilizing video platforms for lecture capture (Viola, 2019). Sometimes referred to as "flipped classrooms," video platforms such as Panopto improve student engagement, performance, and belonging (Riddle and Gier, 2019). Further, the wide use of Zoom during COVID-19 is well-reported in the mainstream media and industry news with the consensus that

the platform has helped to teach effectively online during COVID-19 (Contact North, 2020). Well-respected organizations such as the OECD list Zoom and Microsoft Teams as the technologies to support the continuation of teaching and learning during the pandemic (Reimers et al., 2020).

The adoption of the synchronous delivery platform owes part of its success to additional training and development support. This was mainly provided by the central teaching and learning service center. The adoption approach included a comprehensive expansion of guides developed collaboratively across staff involved in learning design, technology, and student support. The teams identified gaps and turned around resources within hours. Training sessions were also scheduled rapidly. Initial sessions were in-person and then hybrid, and finally, all sessions were online. Academics generally accepted all the support they could get and stepped up to ensure that, as much as possible, the student learning experience was not compromised under the crisis.

While the university as a whole has emerged relatively successfully from the first urgency of emergency remote teaching, there is room to build on this experience and further research. Concerns and issues of this paper are around the replicability of the approach to emergency synchronous remote teaching as the circumstances for each university are unique in dealing with the pandemic. This case study shows the success of this university within a country and, specifically, within a state that is managing the pandemic relatively well, affording the opportunity to successfully scale synchronous delivery of teaching through rapid implementation and planning.

Many universities worldwide will face challenges for years to come – namely, recovering financially should borders remain closed and change the international student market (Larkins and Marshman, 2020). Whether synchronous video delivery needs to be adopted on a wider scale and teaching adapted in these environments, particularly to reach these offshore markets, may also need to be explored. In terms of human resources, evidence-based discussions are emerging as to whether education providers are preparing teachers for emergency remote teaching in the future (Trust and Whalen, 2020). One thing is clear, the new normal remains hazy in a complex changing environment.

References

Bao, W. (2020). Covid-19 and online teaching in higher education: A case study of Peking University. *Human Behavior and Emerging Technologies, 2*(2), 113–115. https://doi.org/10.1002/hbe2.191

Carver, L. B. (2020). Supporting learners in a time of crisis. *Advances in Social Sciences Research Journal, 7*(4), 129–136. https://doi.org/10.14738/assrj.74.8109

Contact North. (2020). *How to use Zoom Videoconferencing to Teach Online Effectively*. Retrieved from: https://teachonline.ca/tools-trends/tools-to-teach-online/how-to-use-zoom-videoconferencing-to-teach-online-effectively

Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research (Third)*. SAGE.

Education Committee Minutes. (2020, July). *UTEI Semester 1, 2020*. Edith Cowan University.

EDUCAUSE. (2020). *The Difference Between Emergency Remote Teaching and Online Learning*. Retrieved from: https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-andonline-learning

Köster, J. (2018). *Video in the age of digital learning*. Springer. https://doi.org/10.1007/978-3-319-93937-7

Larkins, F., & Marshman, I. (2020). *Modelling individual Australian universities resilience in managing overseas student revenue losses from the COVID-19 pandemic*. In *LH Martin Institute*. Retrieved from: https://melbourne-cshe.unimelb.edu.au/lh-martin-institute/insights/modelling-individual-australian-universities-resilience-in-managing-overseas-student-revenue-losses-from-the-covid-19-pandemic

Lederman, D. (2020, April 22). How Teaching changed in the (Forced) shift to remote. Inside Higher Education. Retrieved from: https://www.insidehighered.com/digital-learning/article/2020/04/22/how-professors-changed-their-teaching-springs-shift-remote?utm_source=Inside+Higher+Ed&utm_campaign=be8f8da570-DNU_2019_COPY_02&utm_medium=email&utm_term=0_1fcbc04421-be8f8da570-198221877&mc_cid=be8f8da570&mc_eid=8dbe0024a7

Reimers, F., Schleicher, A., Saavedra, J., & Tuominen, S. (2020). *Supporting the continuation of teaching and learning during the COVID-19 pandemic: Annotated resources for online learning*. OECD. Retrieved from: http://www.oecd.org/education/Supporting-the-continuation-of-teaching-and-learning-during-the-COVID-19-pandemic.pdf

Riddle, E., & Gier, E. (2019). Flipped classroom improves student engagement, student performance, and sense of community in a nutritional sciences course (p07-007-19). *Current Developments in Nutrition*, *3*(Suppl 1). https://doi.org/10.1093/cdn/nzz032.P07-007-19

Sankey, M. (2020). Teaching on-line in the present crisis: what you need to know now. In *Campus Morning Mail*. Retrieved from: https://campusmorningmail.com.au/news/teaching-on-line-in-the-present-crisis-what-you-need-to-know-now/

Staff Check-in Survey. (2020, June). Edith Cowan University.

Trust, T., & Whalen, J. (2020). Should teachers be trained in emergency remote teaching? lessons learned from the covid-19 pandemic. *Journal of Technology and Teacher Education, 28*(2), 189–189.

Viola, S. (2019). Using distance education with nontraditional school psychology students. *National Association of School Psychologists Communique, 48*(2), 4–4.

Welcome to ECU. (2020). *5 Star experience*. Edith Cowan University. Retrieved from: https://www.ecu.edu.au/about-ecu/welcome-to-ecu/5star-experience

Yin, R. K. (2014). *Case study research : design and methods* (5th ed.). SAGE.

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Enhancing Student Participation and Engagement in Remote Learning Environments

Mojgan Afshari

> *Caring about students beyond the boundaries of the classroom is the first step of sparking engagement.*
>
> *Beth Morrow*

1   Introduction

As the number of coronavirus (COVID-19) cases increased throughout Canada, the government decided in mid-March 2020 to shut down all educational systems to decrease and prevent the spread of the virus. This great challenge created significant changes in higher educational institutions in Canada. Face-to-face learning was replaced entirely by remote learning as a solution (Bozkurt & Sharma, 2020). Although some educational institutions had online teaching and learning experience, it was a new approach for many administrators, professors, and students. Many instructors did not have sufficient training and skill to teach and engage students in an online environment. Therefore, some academic institutions provided emergency online training for their instructors to learn how to teach remotely and support their students during this difficult time.

One of the challenges most instructors faced during this period was enhancing students' motivation and engagement in their learning (Ng et al., 2020). Many scholars believe that students' academic engagement is an important criterion in assessing the quality and effectiveness of teaching and learning in educational institutions. In line with this idea, Martin and Bolliger (2018) stated that "student engagement in online learning is critical because online learners seem to have fewer opportunities to be engaged with the institution" (p.206). Engagement can enhance

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students' satisfaction and motivation and increase students' success in online learning environments (Banna et al., 2015).

On the other hand, "lack of engagement leads to passive learning and limited retention. Additionally, disengaged students are more likely to display disruptive behaviors and even drop out of school" (Goldman, 2018, p.1). Most learners enter higher educational institutions to learn and make a significant change in their lives. If online courses cannot satisfy students' needs and engage them in their learning, the probability of a student dropping a course or even leaving a university is high. Therefore, understanding more about student engagement and factors enhancing student participation and engagement in remote learning environments is important. Based on a review of the literature on this topic, the following factors can contribute to students' engagement in a remote learning environment:

- Using active learning strategies and technology.
- Using a flipped classroom approach.
- Giving emotional support to students.
- Student reflective self-assessment of class participation.
- Students' academic skills and personality traits.

This paper aims to scrutinize these factors by critically assessing previous studies. An awareness of these factors can help university professors modify their instructional strategies and learn how to foster students' learning and engagement in remote learning environments.

2   Academic Engagement

According to Axelson and Flick (2011), " student engagement refers to how involved or interested students appear to be in their learning and how connected they are to their classes, their institutions, and each other" (p.38). Also, they believed that highly engaged students are involved in their learning emotionally, cognitively, and behaviorally. Therefore, it can be said that real engagement occurs when students get interested and involved in learning and interact with course content, other students, and their instructors (Axelson & Flick, 2011).

In 2017, Pilotti and his colleagues (2017) found that students' feelings, emotions, and positive perceptions of learning are components of emotional engagement. Emotionally engaged students are interested in learning and have a strong motivation to work hard and learn deeply. Similarly, Luo et al. (2019), in a quantitative study, found a significant relationship between emotional engagement, students' satisfaction, and academic achievement.

Moreover, Pilotti et al. (2017) defined behavioral engagement as students' involvement in class discussions, learning activities, and extracurricular activities outside of the classroom. Engaged students regularly attend scheduled learning

sessions and participate actively in asynchronous and synchronous class discussions (Pilotti et al., 2017).

One of the critical factors in students' success in online courses is cognitive engagement. Students who engage cognitively in their studies use effective learning strategies to deeply understand learning materials (Pilotti et al., 2017). They not only attend classes regularly but also show up mentally. They take detailed notes, contribute to class activities, and participate in class discussions. They are responsible, independent, and self-regulated and can manage their time effectively. They can set clear, measurable goals and "monitor their progress toward those goals, and change their behavior based on the results they get" (Ellis et al., 2020). Many scholars believe that instructors can affect students' engagement. Therefore, they need to understand factors related to student engagement and learn practical strategies to cultivate students' motivation and engagement in remote learning environments.

3 Factors Affecting Students' Academic Engagement

3.1 Using Active Learning Strategies and Technology

One of the most important things that instructors can do to cultivate student engagement is to enhance their interaction with students. Vonderwell (2003) conducted a qualitative case study and reported that lack of connection with instructors, especially "one-on-one" relationships with the instructor and feeling isolated from their instructors and other learners, is the main challenge that students face in an online environment.

Many researchers believe that active learning techniques and various strategies such as using games and virtual reality (VR), giving timely constructive feedback, and teaching through storytelling not only enhance students' interactions with their instructors and classmates but also engage them emotionally in their learning (Caldas et al., 2020; Ally, 2012). Also, technologically enhanced interactions and effective use of educational media and tools like YouTube, Kahoot, OneNote, Google Forms, Blogger, Nearpod, and Socrative can provide opportunities for students to collaborate with their classmates, interact with their instructors, and share and create knowledge. In other words, integrating these technologies into the curriculum can enhance students' emotional and behavioral engagement. Therefore, professional development opportunities should be provided for instructors to apply educational technologies effectively in remote classes to apply strategies that can promote "classroom motivational climate" (Ruzek et al., 2016, P. 96).

3.2   Using the Flipped Classroom Approach

One of the innovative teaching approaches that can enhance active learning and student engagement is the "flipped learning model" (Bond, 2020, p. 1). This model is based on "active learning pedagogy" and has changed traditional teaching strategies (Smallhorn, 2017, p. 43). Students should review the reading materials, watch short videos, and prepare themselves before attending the class (Smallhorn, 2017). Assignments and learning activities need to be completed during class time. Students should be engaged in collaborative, reflective, and problem-solving activities (Bowen, 2012). They can receive immediate feedback on their assignments from their instructors and peers. In this way, they learn the application of concepts deeply and engage in their learning effectively.

According to Boettcher and Conrad (2010), a teacher's role in a flipped classroom changes "from information giver to the facilitator, counselor, advisor, guide, coach, co-learner, and mentor" (p. 14). Instructors can spend their time for "preparing short mini-lectures and introductions, preparing facilitation and community building experiences, and monitoring and guiding students in their learning experiences" (Boettcher & Conrad, 2010, p.7). Regarding the advantages of this innovative teaching approach, McNally et al. (2016) stated that flipped classrooms can help students become autonomous, self-regulated learners and improve their decision-making skills.

In line with this idea, Steen-Utheim and Foldnes (2018) conducted a qualitative study on 12 Norwegian undergraduate students to compare a traditional classroom with a flipped classroom. Their study results indicated that instructors who used innovative teaching strategies like flipped classrooms and applied active learning strategies in their online classes could engage students more in their learning (Steen-Utheim & Foldnes, 2018). They also added that several factors such as "commitment to peers, being recognized, feeling safe, instructor relationship, positive learning environment, learning with peers and using videos to learn new content" can significantly enhance student engagement and learning in a flipped classroom (Steen-Utheim & Foldnes, 2018, p.1). Based on the results of these studies, it can be concluded that using flipped classroom approaches can foster authentic engagement and motivate students to apply their knowledge and learn deeply. Therefore, instructors should learn strategies that can help them implement this innovative teaching approach in their classrooms.

3.3   Giving Emotional Support to Students

Students' psychological stress and anxiety can have a negative impact on their academic engagement. Due to COVID-19, many students, particularly international students, lost their jobs and faced economic problems. Also, some of their families were infected with the virus. These challenges can negatively affect students'

learning. In 2020, Huckins and his colleagues carried out a quantitative research on "the psychological impact of the COVID-19 outbreak on the mental health and behavior of college students" (p. 1). The study results indicated that this "global pandemic can increase levels of anxiety, depression, stress, and loneliness" among college students in China (Huckins et al., 2020, p.1). Also, Vakoufari et al. (2014) found that students who feel anxiety and loneliness have low levels of academic engagement and performance. They also added that interaction between students and their teachers can reduce students' stress, emotionally engage them in their learning, and increase their success in schools (Vakoufari et al., 2014).

A handful of studies highlighted that instructors play a critical role in enhancing students' learning and creating a supportive learning environment (Akram et al., 2018; Vakoufari et al., 2014). Innovative instructors are able to "empower students to engage with challenges" (Clifford, 2009, p.4). They are able to enhance students' coping skills. Moreover, Savery (2005) found that online instructors who are "visible, organized, compassionate, analytical, and leader-by- example (VOCAL)" can create productive and positive learning environments (p.141). They are able to inspire, empower, and stimulate students to learn and enjoy their learning. They are caring and compassionate and have a very strong relationship with their students.

In a supportive and positive remote classroom environment, students are relaxed, feel free to express their thoughts and ideas, and are intrinsically motivated to learn. According to Savery (2005), strategies such as creating a web site with personal and professional information, providing comments in a timely fashion, sending voice-mail and/or e-mail to intrinsically motivate students for learning, and providing an announcement about the due date of assignments and weekly homework can enhance students' motivation and increase their engagement. Therefore, it can be concluded that strong interpersonal relationships and close communication between students and instructors can create a positive learning environment and engage students in their learning.

3.4   Student Reflective Self-Assessment of Class Participation

Many scholars believe that active participation and contributions to learning activities and class discussions can enhance students' engagement and increase their academic achievement (Ally, 2012; Morgan, 2015). However, stimulating students to participate in class discussions is challenging, particularly in remote learning environments. Also, Marlina (2009) reported that many international students who have non-English backgrounds prefer to stay quiet and passive in class due to their cultural background and language barriers. They "interact less or prefer listening" (Marlina, 2009, p. 2). They feel uncomfortable and scared to participate in class discussions.

One of the strategies that can stimulate students to participate effectively in in-class activities is encouraging them to assess the quality and quantity of their classroom participation (Morgan, 2015). Morgan (2015) developed a "participation log"

and asked "students to record and assess their participation and reflect on improving their participation in class" (p. 6). This method can help students understand the importance of class participation in enhancing their learning and encourage them to participate and engage actively in class discussions and activities (Morgan, 2015). Moreover, it helps instructors learn how students have processed course materials and how they can improve their teaching practices (Morgan, 2015). Therefore, it can be concluded that involving students, particularly international students, from different social and cultural backgrounds, in peer and self-assessment of class participation can increase their contribution to class discussions and activities.

3.5   Students' Academic Skills and Personality Traits

According to Bircan and Sungur (2016), students who are familiar with various study skills and have high self-efficacy and self-esteem put more effort into achieving the goal of a given task. Many researchers also argue that students' personality traits, knowledge, and skill in using technologies could significantly increase students' academic engagement and achievement (Bircan & Sungur, 2016; Daugherty & Funke, 1998). Moreover, Pellas (2014) found that several factors like mastery goals, self-regulation, self-esteem, self-efficacy, and intrinsic motivation enhanced students' engagement in online courses (Pellas, 2014). Therefore, it would seem that students who are enthusiastic, energetic, and committed to their education engage more in their learning and learn much faster.

4   Conclusion

Students' engagement is one of the most significant factors in developing student learning. During the COVID-19 pandemic period, one of the main challenges that most online remote instructors have faced has been enhancing students' engagement and participation. An examination of previous studies on student engagement indicated that several factors could affect students' behavioral, cognitive, and emotional engagement in a remote learning environment. Some of these factors are related to students (students' academic skills and personality traits; student self-assessment of class participation); and some of them are associated with instructors (using a flipped classroom approach and giving emotional support to students).

The findings of this review suggest that applying empathy in teaching and learning and using strategies to enhance students' interaction with instructors, content, and peers can significantly increase students' participation and engagement in learning. During these uncertain times, providing care and emotional support for learners is critical. Instructors should be enthusiastic and approachable. They need to interact and build social relationships with their students. In these ways they can create a positive learning environment and emotionally and cognitively engage students in their learning.

References

Akram, A. S., Mohamad, A., & Akram, S. (2018). The role of clinical instructor in bridging the gap between theory and practice in nursing education. *International Journal of Caring Sciences, 11*(2), 876–882. https://www.internationaljournalofcaringsciences.org/Issue.aspx?issueID=48&pageIndex=0&pageReason=0

Ally, M. (2012). Student attention, engagement and participation in a twitter-friendly classroom. In *ACIS 2012: Location, location, location: Proceedings of the 23rd Australasian Conference on Information Systems 2012* (pp. 1–9). ACIS. http://eprints.usq.edu.au/22703/

Axelson, R. D., & Flick, A. (2011). Defining student engagement. *Change: The Magazine of Higher Learning, 43*(1), 38–43. http://nur655sect2jan12teama.pbworks.com/w/file/fetch/50933853/defining%20student%20engagement.pdf

Banna, J., Lin, M. G., Stewart, M., & Fialkowski, M. K. (2015). Interaction matters: Strategies to promote engaged learning in an online introductory nutrition course. *Journal Online Learn Teach, 11*(2), 249–261. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4948751/

Bircan, H., & Sungur, S. (2016). The role of motivation and cognitive engagement in science achievement. *Science Education International, 27*(4), 509–529. https://files.eric.ed.gov/fulltext/EJ1131144.pdf

Boettcher, J. V., & Conrad, R. (2010). *The online teaching survival guide: Simple and practical pedagogical tips*. Jossey-Bass.

Bond, M. (2020). Facilitating student engagement through the flipped learning approach in K-12: A systematic review. *Computers & Education, 151*, 1–36. https://doi.org/10.1016/j.compedu.2020.103819

Bowen, J. A. (2012). *Teaching naked: How moving technology out of your college classroom will improve student learning*. Wiley.

Bozkurt, A., & Sharma, R. C. (2020). Emergency remote teaching in a time of global crisis due to coronavirus pandemic. *Asian Journal of Distance Education, 15*(1), 1–6.

Caldas, O., Aviles, O., & Rodriguez-Guerrero, C. (2020). Effects of presence and challenge variations on emotional engagement in immersive virtual environments. *IEEE Transactions on Neural Systems and Rehabilitation Engineering, 28*(5), 1109–1116. https://ieeexplore.ieee.org/abstract/document/9056841

Clifford, V. A. (2009). The necessity to empower students to challenge and reshape higher education curricula in a global age. *Reflective Education, 5*(1), 4–15. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.828.5512&rep=rep1&type=pdf

Daugherty, M., & Funke, B. L. (1998). University faculty and student perceptions of web-based instruction. *Journal of Distance Education, 13*(1), 21–39. https://www.learntechlib.org/p/86789/

Ellis, D. B., Dawson, D., & Toft, D. (2020). *Becoming a master student*. Nelson.

Goldman, M. (2018). Engagement, the key to quality education. *Long Island Rse-Tasc, 5*(7), 1–4. https://docushare.esboces.org/dsweb/Get/Version-19452/rse-tasc%20newsletter%20march%202018.pdf

Huckins, J., Silva, A., Wang, W., & Hedlund, E. (2020). Mental health and behavior of college students during the early phases of the COVID-19 pandemic: Longitudinal smartphone and ecological momentary assessment study. *Journal of Medical Internet Research, 22*(6), 1–13. https://www.jmir.org/2020/6/e20185/pdf

Luo, Y., Xie, M., & Lian, Z. (2019). Emotional engagement and student satisfaction: A study of Chinese college students based on a nationally representative sample. *The Asia-Pacific Education Researcher, 28*(1), 283–292.

Marlina, R. (2009). I don't talk or I decide not to talk? Is it my culture? International students' experiences of tutorial participation. *International Journal of Educational Research, 48*(4), 235–244. https://doi.org/10.1016/j.ijer.2009.11.001

Martin, F., & Bolliger, D. U. (2018). Engagement matters: Student perceptions on the importance of engagement strategies in the online learning environment. *Online Learning Journal, 22*(1), 205–222. https://doi.org/10.24059/olj.v22i1.1092

McNally, B., Chipperfield, J., Dorsett, P., Del Fabbro, L., Frommolt, V., Goetz, S., & Rung, A. (2016). Flipped classroom experiences: Student preferences and flip strategy in a higher education context. *Higher Education, 73*(2), 281–298. https://doi.org/10.1007/s10734-016-0014-z

Morgan, T. D. (2015). The participation log: Assessing students' classroom participation. *Wiley Periodicals Inc, 27*(2), 6–7. https://catl.typepad.com/files/tdm-f15-cotl.pdf

Ng, D. C., Mahmoud, S., Hald, E., & Fang, Q. (2020). Overcoming challenges in teaching calculus remotely during COVID-19 pandemic. *Research Square*, 1–9. https://doi.org/10.21203/rs.3.rs-43728/v1

Pellas, N. (2014). Exploring interrelationships among high school students' engagement factors in introductory programming courses via a 3D multi-user serious game created in Open Sim. *Journal of Universal Computer Science, 20*(12), 1608–1628. https://pdfs.semanticscholar.org/1eae/059e8bb597011ec64aad1295bf94d1d0a192.pdf

Pilotti, M., Anderson, S., Hardy, P., Murphy, P., & Vincent, P. (2017). Factors related to cognitive, emotional, and behavioral engagement in the online asynchronous classroom. *International Journal of Teaching and Learning in Higher Education, 29*(1), 145–153. https://files.eric.ed.gov/fulltext/EJ1135992.pdf

Ruzek, E., Hafen, C., Allen, J., Gregory, A., Mikami, A., & Piantaa, R. (2016). How teacher emotional support motivates students: The mediating roles of perceived peer relatedness, autonomy support, and competence. *Learning and Instruction, 42*, 95–103. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5298258/pdf/nihms847296.pdf

Savery, J. R. (2005). Be vocal: Characteristics of successful online instructors. *Journal of Interactive Online Learning, 4*(2), 141–152. http://iowaascd.org/files/9313/3289/1827/4.2.6.pdf

Smallhorn, M. (2017). The flipped classroom: A learning model to increase student engagement not academic achievement. *Student Success, 8*(2), 43–53. https://pdfs.semanticscholar.org/494a/bd2fd25b3529da81a48bda9960349bce13fb.pdf

Steen-Utheim, A. T., & Foldnes, N. (2018). A qualitative investigation of student engagement in a flipped classroom. *Teaching in Higher Education, 23*(3), 307–324. https://doi.org/10.1080/13562517.2017.1379481

Vakoufari, M., Christina, A., & Mavroidis, I. (2014). Self-esteem and loneliness as factors affecting distance learning students. *European Journal of Open, Distance and e-learning, 17*(2), 1–17. http://www.eurodl.org/materials/contrib/2014/Vakoufari_et_al.pdf

Vonderwell, S. (2003). An examination of asynchronous communication experiences and perspectives of students in an online course. Internet and Higher Education, 6 (1), 77–90. http://anita-crawley.net/Resources/Articles/Vonderwell(2003).pdf

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Remote Synchronous Delivery for Interior Design Education: The Shift Toward Innovative Paradigms in Design Teaching Approaches

Maha Salman, Penny Fobler-Cressy, Reem Habib, Dina Elkady, and Gamal Mohammed

Challenging circumstances require new measures of implementation to sustain both the quality and integrity of the education process.

Salman et al.

1 Introduction

Educational models used by higher education institutions to assess and evaluate the validity and authenticity of how knowledge is gained and practiced amid the COVID-19 pandemic never envisioned such a critical situation as the fact of everyday life. Many higher education institutions around the world shifted the learning process from physical attendance classes to relying entirely on online synchronous delivery methods.

Being sudden and unaccounted for, this shift required both students and faculty to reciprocally coordinate and interact with the remote synchronous delivery (RSD) model as an alternative to physical classroom delivery. As with any sudden transition, the education process experienced some imbalances resulting from previously uninhabitable territories. Prior to the COVID-19 situation, most universities across the globe did not foresee the imminent need or urge to start transitioning a portion of the curriculum to be delivered online. However, in Canada, approximately 10% of courses offered in an accredited program in post-secondary institutions were fully online, and online enrolments overall had been increasing by about 10% per annum (CDLRA, 2017, 2018, 2019).

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This chapter explores the remote synchronous delivery (RSD) of the Bachelor of Interior Design (BID) program at University X, where students and faculty meet within scheduled hours on Zoom, mimicking the class environment. The focus is on three core interior design streams: studio, visual communication, and technical and software (computer-based). The four main areas that were explored are student and faculty preparedness, delivery methods and approaches, student engagement and activities, and evaluation and assessment.

2   Interior Design Education: Face-to-Face vs Online

The curriculum of interior design, architecture, and most other design programs are traditionally taught in a face-to-face mode. Courses are usually set into certain categories: theory-based courses, manual and drafting tools, visual communication and digital skills, and design studios that are the core of creative and applied arts education.

Design studios, in particular, have been built upon direct interaction where professors mentor, guide, and give feedback to students face-to-face over a specific number of in-class hours. This method has proven its success and has become the accepted framework for design pedagogy. However, in today's fast-paced world and with a vast amount of technology, it is essential to re-examine traditional studio education and its adaptability to accelerated changes worldwide (Salman et al., 2017). The COVID-19 pandemic has caused many changes for on-campus interior design students and faculty who had to shift to online remote synchronous delivery (RSD).

The shift of the Bachelor of Interior Design (BID) at University X to RSD might not have had as large an "aftershock" syndrome compared to most universities in North America due to several factors. Interior design online courses offered at the University are synchronized with on-campus courses, so curriculum content is designed to accommodate both delivery streams, thus accounting for the modifications needed to transform the delivered material to be taught by two different platforms. Students usually take some on-campus and some online courses. The interior design students who used to take on-campus courses are also already familiar with courses launched online via the Moodle LMS. This is also applied to BID faculty – most of them are experienced in teaching on both platforms, online and on-campus.

However, even with the above factors mitigating the transition process, the process was filled with challenges and alterations. This section has described the transition to RSD for the BID program to simulate a face-to-face in-class environment during the COVID-19 crisis.

The next section explores the modification and implications of RSD for the main interior design program streams that are core program related: studio, visual communications, and specialized computer-based software.

3 Remote Synchronous Delivery for Interior Design Education

The COVID-19 pandemic has caused many changes to take place for on-campus interior design students and faculty who had to transfer to online RSD. Design studios, in specific, are an integral part of interior design education. This is discussed based on qualitative analysis and observations of offering RSD for almost three terms. The RSD delivery for interior design is analyzed according to four aspects: student and faculty preparedness, delivery methods and approaches, student engagement and activities, and evaluation and assessment methods.

3.1 Faculty and Student Preparedness

Faculty and students had to be prepared for this new RSD method in relation to aspects such as software and technology, course materials, work zone for class meetings, and future preparations.

In design studios, software and technology could be considered the biggest factor for both faculty and students. Having the necessary software programs on a personal home computer was important. Computers with working cameras and microphone functions were necessary to hear and participate in the RSD learning experience as was access to Wi-Fi and the Internet.

Workspace for the scheduled class times is another important aspect. Both students and faculty need areas within their homes to listen to the lectures, participate in discussions, and meet for desk critiques. The work zone needs to be free from potential interruptions, noise, and background distractions. Class preparations for faculty changed, too, as professors needed to provide students with the schedule for the upcoming live class session. On-campus students typically do not use the course bulletin forum online as often as was required for the RSD class. For example, faculty needed to prepare the schedule prior to class for the desk critiques instead of a sign-up during class.

The lectures in visual communication and presentation classes targeted human cognitive architecture to simulate interest, motivation, focus, and interaction. The challenge arose when it came to online-live teaching where interaction is virtual. Faculty found themselves designing an online experience for students to interact with every day. Spending hours in live online meetings and going through the same material that was once delivered on campus imposed a tremendous effort for the lectures to meet weekly outcomes and to elevate the contact between students and faculty.

RSD aspired to engage technical courses (i.e., CAD, Revit, Photoshop, etc.) and students in an educational process that involves sharing, analyzing, and creating. This was sought to be achieved through a variety of both designed and revised procedures that faculty devised to remedy the absence of some vital physical

interactions. The procedures were devised to stimulate and engage students in an interactive virtual environment.

3.2 Delivery Methods and Approaches

Delivery methods for design studios via RSD include Zoom and PowerPoint, while activities include discussions, design activities and assignments, and desk critiques. Sharing the faculty computer screen in Zoom for the lectures and assignments was necessary for clear delivery of the course materials. PowerPoint was used to provide added resources to support the unit (i.e., notes and clarification on assignments, overviews of the upcoming due assignments, and general comments on completed assignments). Sharing examples of previous students' work was also completed through the Zoom delivery methods.

Desk critique (crit), as an important part of the design studio, was a necessary and challenging approach in RSD classes. Desk crits were scheduled by faculty with 20–30 minutes allocated per student or team with a recap at the end of the desk crits. The desk crits successfully addressed specific questions, reviews of instructions, feedback, and processes.

Because people learn in a variety of ways, it is important to provide a variety of learning strategies and teaching approaches in visual communication courses. The challenge was to deliver the course learning outcomes deemed necessary to students regardless of their levels of knowledge and expertise. Thus, delivery methods in digital and hand rendering courses took a different approach – from using the "whiteboard" option in Zoom to explain perspective drawing to connecting a digital writing pad to execute shading techniques. While it was easier in face-to-face delivery as information was provided using paper and pencil, students showed interest and focus and the ability to adapt to new tools to convey their design ideas. In addition, short videos were streamed during the session, showing different techniques and media in interior presentations.

Lectures designed explicitly for digital technical courses such as computer-aided design (CAD) taught on campus rely mostly on addressing students' need to produce and share their digital creations with professors and peers. This model of teaching certain digital skills might appear synonymous with the revised Bloom taxonomy theory that was offered by one of Bloom's former students in 1990 and which was considered as a step to adapt educational practices to the twenty-first century. The revised version stresses substituting the evaluation element with the creation or artifact that seems to represent evidence of the knowledge developing process. Consequently, creation becomes an essential aspect for CAD and technical courses (Anderson & Bloom, 2001). However, the expectation that RSD digital technical courses can offer the same creation-sharing experience as its counterpart offered through the F-2-F on-campus delivery method proved challenging – if not daunting.

3.3 Student Engagement and Activities

Students were engaged and prepared for each class as they were experienced in the studio process. There was nearly a 100% student attendance – that is a high percentage not typically seen on campus. For studios that required collaborative work, teams needed to be engaged and prepared to meet with their groups during class time.

Discussions, activities, and desk crits were approaches that were easily completed through the Zoom platform with the faculty able to set up small group breakout rooms for the individual teams for one-on-one meetings. Discussions, for example, were completed in the Zoom breakout rooms initially with faculty encouraging and listening to student discussion in small group formats and then completing the discussion with the full class. This encouraged all students to have the ability to participate in the discussion and have their voices heard. Faculty also prepared keynotes and posted them to the course bulletin forums online as required.

Visual communication is a specific type of course that might be overwhelming as it contains a heavy load of information. Faculty had to break the session into different activities, for example, open a discussion during class, give more chances to ask questions and offer prompt feedback, specify a time for reflection, and end the session with frequently asked questions – all this, as well as troubleshooting techniques for common problems, especially in digital software. Moreover, students asked for recordings of the sessions for reference and later review – during these hard pandemic times, many students found themselves working in new fields or as essential workers. Video recordings saved time for faculty and allowed these students to go through the ins and outs of the session they missed.

Encouraging active learning was constantly underway. As in the physical classroom, students had to prepare their tools for sketching and hand rendering and apply their knowledge during the lecture. Students were then asked to take a photo and share it with their peers through Zoom. As for digital presentation, the process was straightforward in applying exercises and sharing their Zoom screen.

Additionally, keeping students engaged was essential. Students were asked questions to trigger higher cognitive levels of analysis, synthesis, and hypothesis, which were evident in the discussions.

Students were found to have better interaction and sharing opportunities during their technical courses, such as CAD courses, when they had the possibility of operating two screens simultaneously. One screen was dedicated solely to projecting the live synchronous Zoom course session, while the other was assigned to practicing the skill the faculty was presenting. Students reported accomplishing this procedure using smartphones or tablets or by displaying the live course session while using a second laptop or desktop as the platform operating the software of practice.

A characteristic element of CAD and technical courses is a constant need for students to remember and retrieve information related to manipulating a specific digital tool to create a certain form. This aspect was achieved by recording the live synchronous session and providing the video link for students to view the recorded session when needed. The application of such a procedure received positive and

continuous appraisal from students. This step also solved a critical issue that emerged as one of the pandemic side effects. Some students reported having unmanageable time conflicts due to the changing nature of work and family obligations imposed by the pandemic restrictions. Thus, attending the live session set at a specific time was not attainable as frequently as needed. The recorded sessions allowed students faced with these challenges to continue their education opportunity without feeling anxious or left behind.

3.4   Evaluation and Assessment Methods

The evaluation and assessment methods were the same as on-campus and online classes, as students submitted all assignments as PDFs through the online Moodle course site as usual. Faculty graded the assignments and provided marked-up comments on the PDF as well as within the rubric. The usual course rubric was followed for grading.

In visual communication courses, some graded discussions in the online forum required research and a narrative answer. To raise the bar of communication for these activities, these were accomplished during the Zoom sessions. Using breakout rooms in Zoom was favorable among students as they enjoyed working in groups, and it certainly developed reciprocity and cooperation among peers. Students chose their own group members, researched answers, and communicated solutions. Faculty would "visit" the breakout rooms to assist with coaching and review. One member of each group would post the answers in the discussion forum, and the members took turns in posting future exercises.

We agreed that the main challenge for faculty and students was to adapt to the sudden shift from the conventional learning model to alternate means of remote instructional delivery to meet the needs of students. While assessments in this stream fulfilled the learning outcomes, individual feedback and suggestions for future improvement – something that was provided for students one-to-one in the on-campus classroom – were challenging. In this new forum, multiple reviews were essential before submission; comments were entered through the Moodle platform under every project after submission; and professors communicated with students individually upon their request via Zoom conference.

Evaluation and assessment methods for technical courses such as CAD had to change as well to accommodate the absence of student/professor face-to-face interaction and the need for constant feedback as it used to take place in a physical classroom setting. The use of a digital pen and digital drawing tablet proved to be fruitful tools in providing students with feedback that could be digitally archived and reviewed. Students and faculty alike reported difficulties with installing CAD and building information modeling applications as some versions were not compatible with what faculty and students had as personal laptops. Newer versions of the software were sometimes ahead of the capacities of personal devices owned by the students.

4   Reflections and Challenges

In the final class, students were asked questions about the RSD process. The following represents some of the overall feedback about this new delivery method. Students found that classes seemed more organized than on campus, especially for discussions in the breakout rooms that provided timely and concise discussion allowing for more individual participation.

In collaborative assignments, students felt a stronger connection with their partner through the RSD process versus in class as students had to schedule regular Zoom meetings to connect daily.

However, students missed the on-campus student community to meet up with peers and did feel lonely at times. Entering the campus turned their "brains on" for the upcoming classes. It was noted that there is a learning barrier involved in RSD classes as there is a mix of asynchronous (online) and synchronous delivery (campus). This was overwhelming for its impact on the students' mental and physical health. Unlike on-campus, RSD adversely impacted students' ability to attend more than one class/day. Some even reached a state of "environmental numbness" in which the user rarely exercises any actions to mitigate unfavorable situations (Gifford, 1976). This limited the teaching hours per day and program schedule flexibility.

On the other hand, the RSD added more family and personal time as there was no wasted travel time for commuting to the campus. The RSD method was convenient and allowed for flexibility. The extra time gained from not commuting added more time for personal commitments. Having cameras enabled added a personal touch to working at home for the faculty and students.

In conclusion, this remote synchronous delivery motivated faculty for improvements and modifications of online as well as on-campus education delivery methods. One aspect to be noted is that the adaptation and support processes were reciprocal between faculty and students as if the sudden shift toward remote synchronous delivery also shifted and developed a sense of connection and communication between peers and faculty. While the continuous and arduous conditions of COVID-19 still unravel with the hope it will dissipate soon at the time of this writing, both students and faculty are working hard to move forward through these challenging times that require new measures and degrees of implementation to sustain both the quality and integrity of the education process.

References

Anderson, L. W., & Bloom, B. S. (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. Longman.

CDLRA. (2019). *Tracking online education in Canadian universities and colleges: National survey of online and digital learning 2019 national report*. Canadian Digital Learning Research Association.

Gifford, R. (1976). Environmental numbness in the classroom. *The Journal of Experimental Education*, *44*(3, February), 4–7. https://doi.org/10.1080/00220973.1976.11011527.

Salman, M., Kominek, A., Jenner, E., Sabie, S., & Sabie, D. (2017, April 18–20). Delivery of design studios for on-line platforms and its impact on teaching and learning outcomes. *8th IFEE201 conference*, Sharjah, United Arab Emirates.

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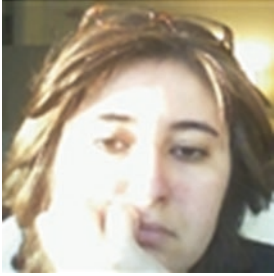
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Blended Learning for Teaching During the COVID-19 Pandemic

Ludovica Mazzucato, Naghmeh Babaee, Aida Kazemi, Zohreh Daeizadeh, Navdeep Kaur, and Oluseyi (Seyy) Sode

The emergency response of the education sector demonstrated that placing the needs of the teacher-student at the center of the instructional design should become a priority for any educational to remain competitive and relevant in the post-COVID-19 era.

Mazzucato, Babaee, Kazemi, Daeidzadeh, Kaur, and Sode

1 Literature Review

There are different ways to define BL (Driscoll, 2002). Graham (2006, 2013) provides an insightful contribution, (i.e., BL system combines face-to-face instruction with computer-mediated instruction). The concept integrates traditional face-to-face classes in a live synchronous environment and computer-based learning material technologies in an asynchronous environment (Garrison & Kanuka, 2004; Graham, 2006). In 2003, BL was deemed one of the top ten methodologies for educational deliveries by the American Society for Training and Development (Graham, 2006; Rooney, 2003). One of the most favorable characteristics of blending learning is its ability to enable creativity in learning and instruction. In BL, the online and on-site learning's dual settings are combined to augment pedagogical goals (Wingard, 2004). Flexibility is a key characteristic of BL as the ratio of time devoted to different forms of learning is usually dependent on the nature of the

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course and the instructor's preference. A well-structured BL program can have numerous advantages, for example, tracking the student's usage of the program, managing access to the next learning phase based on the completion or result of an assessment, and lastly, following up with another form of communication with students who are not completing the expected work (Hoyle, 2003).

Moreover, one does not have to be physically present in the classroom to benefit from the instruction fully. One can simply ask for help by clicking a button. The class is viewable, and the information can be shared across the Internet (Woodall, 2010). Some disadvantages also transpire in this process, for example, all participants must be simultaneously online and may need a reliable high-speed Internet connection. Besides, where the instructor cannot deploy interactive skills, the learner may be placed in a passive role, and their attention may be lost (Woodall, 2010). Several digital tools offer solutions to these challenges, as suggested by the authors in this paper. An adequate level of competence training can enhance the ability to integrate interactive elements in classroom research. Bliuc (2007) also suggests that blended learning is most effective when there is institutional support for redesigning courses aligned with the most appropriate blend.

2   Theoretical Framework

For the scope of this contribution, BL is intended as a conjunction of face-to-face interaction and digital experiences (Horn et al., 2014) to fulfill learning outcomes. As illustrated in Fig. 1, the literature and scholarly research on BL can be traced back to three leading schools of thought: (a) cognitivism, which was led by Gagne, Merrill, Clark, and Bloom, (b) performance support as illustrated mainly by Gery,
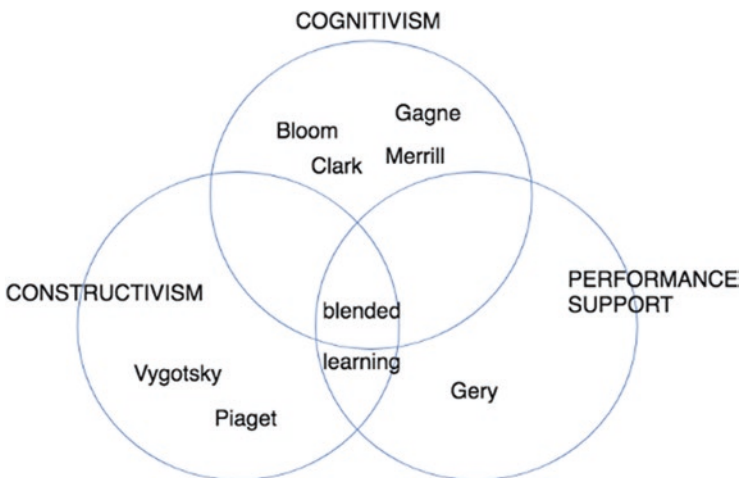
Fig. 1 Pedagogical models

and (c) constructivism whose initial contribution to the educational theories can be mostly attributed to Vygotsky and Piaget. The latter pedagogical model argues that the learner reframes the information received, thus enabling a gap between the intended outcome and the new scheme formed by students (Alonso et al., 2005). Performance support models that build on the behaviorist theories suggest that the outward exemplification of the learning outcome is necessary to the learning process itself. On the other hand, according to cognitivism, the focus should be placed on the internal learning process rather than an exhibition of the consolidation of knowledge.

In more recent years, the Christensen Institute, Blended Learning Universe (2000) has categorized the BL courses offered in contemporary educational settings into four models, namely, Enriched Virtual, Rotation, Flex, and à la carte (Horn et al., 2014), as visualized in Fig. 2. While this taxonomy is meant as a guide rather than a rigid compartmentalization, it offers a literature-based perspective to interpret the reflections offered by the authors throughout this chapter.

3   Digital Tools: Enhancing Remote Teaching and Learning Through the Screen (Table 1)

This section presents the digital tools utilized by the faculty to teach online synchronous classes. Synchronous sessions via Zoom have replaced the physical classroom since the pandemic outbreak. The instructors and students have weekly Zoom classes, and they engage in educational activities, including delivering lectures; participating in discussions; completing individual, pair, and group tasks; reading instructional materials; and watching videos. The meetings are password protected
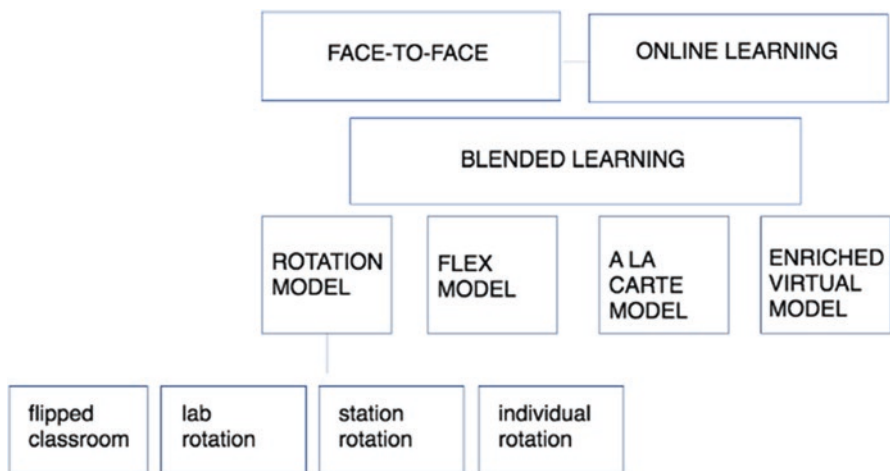
Fig. 2 The four models of blended learning

Table 1 Activities to enhance the online teaching-learning experience

Activity	Primary digital solutions leveraged	Skills and learning outcomes	Type of activity: objectives, warm-up, lead-in, lecturing, elicitation, presentation, practice, assessment, consolidation, closing
Flashcards	MindTap Cengage, zoom, Quizlet	Ability to identify and apply the appropriate terminology and vocabulary. Critical thinking. Synthesis and text-screening. Communication. Teamwork and collaboration. Delegation and coaching .	Consolidation. Elicitation. Practice .
Anonymous discussion forum	Top hat	Exploratory talk. Sensitive discussions. Collaboration and teamwork.	Consolidation. Lead-in. Warm-up .
Engaging educational games	Kahoot	Engaging review of the syllabus materials. Pop quizzes and tests. Teamwork. Learning at individual pace and convenience. Assessment purposes.	Assessment. Consolidation. Elicitation. Practice. Warm-up .
MindTap educational platform	Cengage	Reviewing and recapping through varied learning methodologies. Case-based scenarios. Customizable exercises to pace the rhythm and level of the class. Developing accountability and independence by adapting the platform to their specific needs .	Assessment. Consolidation. Elicitation. Objectives. Practice.
Breakout room activities	Zoom	Assessment of comprehension. Completing jigsaw activities. Discussing the topics and extending them beyond classroom discussions. Practicing teamwork and sharing responsibilities among team members .	Assessment. Elicitation. Practice. Presentation. Warm-up .
Lecture videos	YouTube, MS OneNote	More interaction in the class by watching videos before coming to the class. Accessible organized lecture notes even for those missed classes.	Lecture.

Table 1 (continued)

Activity	Primary digital solutions leveraged	Skills and learning outcomes	Type of activity: objectives, warm-up, lead-in, lecturing, elicitation, presentation, practice, assessment, consolidation, closing
Discussion and quizzes	Nearpod	Assessment of students using open-ended questions, draw it (for graphs), and multiple-choice questions .	Practice. Assessment .
Keywords cloud	Zoom, Cengage, e-books	Ability to assign the appropriate terminology and vocabulary. Time management. Communication. Teamwork and collaboration. Synthesis and visualization .	Assessment. Consolidation. Objectives .
Business simulation	Interpretive simulation, zoom	Teamwork. Ability to apply the theory. Critical thinking. Business management. Entrepreneurship. Accountability .	Assessment. Consolidation. Objectives. Practice.

for privacy matters. Zoom's breakout rooms provide students with an opportunity to have group activities in small-sized separated rooms, and the instructor joins the rooms to monitor participation and address questions.

Microsoft Teams (MS Teams) is also used to complement the Zoom sessions. Synchronously, students are tagged into pre-assigned class groups to have them complete class activities in real time, while correspondences can be transmitted asynchronously within groups or individually via texts/chats, voice, or video calls. One advantage with the MS Teams is that the instructor being the creator of the tagged groups can oversee activities within the various groups simultaneously.

Top Hat is another state-of-the-art online platform that can provide solutions to some of the most challenging aspects of a classroom, like lack of participation due to reluctance. This has been an important issue, and numerous research studies (Deng et al., 2017; Bosacki et al., 2014) have emphasized the importance of addressing shy students' psychosocial needs. Top Hat's "Anonymous Discussion Forum" is a milestone in developing a series of adaptive pedagogies to address dispositional shyness. Total anonymity facilitates exploratory talk and consolidation of understanding – processes that have been termed as instrumental in student engagement by Barnes (1976) and Vygotsky (1978). Besides facilitating learning, it enhances the instructor-student equality and moderates power relations in the classrooms. Apart from the "Anonymous Discussion Forums," Top Hat also offers online supervision of exams with a sophisticated surveillance level. Features like the prevention of screen capturing, sharing of assessment materials online, advanced facial detection, and the use of artificial intelligence to flag irregular behaviors are worth being

trialed in the classroom. Conclusively, Top Hat offers commendable solutions to emerging needs in pedagogy and constitutes a dependable interface in an online learning environment.

Flashcards can also be utilized in the online classroom. This is primarily a knowledge consolidation exercise whose objective is to offer the students the opportunity to acquire and review a professional and academic vocabulary drawing from the textbook and internalize and rephrase the concepts in their own words (Vygotsky, 1978). It also provides the students with additional visual tools to contextualize and memorize (Jiang et al., 2012) terminology and concepts. One of the authors introduced creative variations of the flashcards to include elements of teamwork. This fosters a dynamic and collaborative environment and pedagogical dialogue (Burbules & Bruce, 2001; Wood, 2000), where the coaching activities empower individual contribution (Golding, 2013) to accomplish the goal in the quest and co-construction of knowledge, experiential learning (Dhand et al., 2016), and tacit teaching (Burbules, 2004). After a first instance led by the instructor, a student will guide the ritual instead of the teacher, thus practicing leadership, delegation, and communication skills.

To enhance the online learning-teaching experience, the MindTap Cengage platform provides both the student and the teacher with immediate access to the e-book adopted in the course, slides, concept maps, recap and introduction videos, and appendixes for further exploration of the subject, flashcards, case studies, quizzes, and simulations. The dashboard allows the instructor to monitor the students' engagement with the activities and adapt the material to suit the desired schedule, learning outcomes, rising trends and resources, and class level (Christensen et al., 2015). Particularly suitable for remote, global, or international classes due to its immediate access and flexibility, MindTap Cengage is also an effective companion to allow students to track their progress and access supplemental aids such as the book-reader or dictionary.

For entrepreneurship, marketing, and business management courses, the web-based simulation platform Interpretive offers an attractive option. Students collaborate in teams to build and grow a company in a simulated environment that poses challenges and opportunities. After an initial trial period, the instructor can assign the schedule of due business decisions that best suit the course. During that period, the students will be prompted to engage as professionals, growing their business step by step, including the possibility of experiencing how to increase revenues or overcome the threat of a new competitor in the market. Points are assigned to each company, based on the decisions made by its management team (i.e., the students). This is a remarkable experience that promotes accountability for business students who would otherwise seldom have the chance to practice the theory in such a pragmatic and safe manner. For instructors, the dashboard allows addressing critical elements for further discussions or review. The Interpretive simulation platform can be deployed in blended or online learning modalities.

Multimedia learning technologies such as YouTube, OneNote, and Nearpod can also allow students to watch lecture videos at home. While in the class, they can do assignments and quizzes and have more group discussions. This methodology in the

literature is flipped, or inverted classroom, and Lage et al. (2000) define it as "events that have traditionally take place inside the classroom now taken place outside the classroom and vice versa." This creates more interaction between students and instructors, which works efficiently with small-sized classes (Lage et al., 2000). As a practical example, short lecture videos by topic with the length between 5 and 20 minutes can be created by recording the voice and note screen in a software (Norvig, 2012) like MS OneNote, as a virtual whiteboard, where all lecture notes can be found and saved in both a computer drive and on the cloud. Videos can then be uploaded on a YouTube channel and shared with students. The format of short lecture videos allows more time for learning activities in quizzes (Timothy, 2015) or group discussions in the class. Quizzes can be created on the Nearpod platform in the format of open-ended questions, draw it (for graphs), and multiple-choice questions options, all related to the topics of the videos that students watch beforehand. This teaching style also provides students with the means to review lectures and notes and recover lectures missed because of being absent (Ronchetti, 2010).

To review the lesson as a warm-up or wrap-up/end-of-class activity or test students via online quizzes and educational games, Kahoot is a useful application. It is used by more than six million teachers and hundreds of millions of students around the world (Pedersen, 2020). The games can be played individually or in groups with randomized questions on mobile phones, tablets, and computers. The instructor can then collect the Kahoot website's data to assess the students' learning via the "Reports" menu. It is a motivational platform that, by igniting the learning process' spirit, motivates the teacher and the students to attend the class and makes the learning process much more fun through group challenges. The question timer can be turned off to generate more accuracy rather than speed (Golubeva, 2020). It also allows utilizing parts of or the whole game made by others in any discipline and all age groups or creating one's games. The picture and sound features in Kahoot take the boredom away from the classroom. One other interesting feature of Kahoot is that it can be connected to and played on Microsoft Teams. With the "Word Cloud" option, the students can even interact lively by entering a 20-word answer of their own (Golubeva, 2019). The most popular answers will be shown in a larger font.

4   The Challenges of Teaching Online Synchronous Classes

Utilizing the Zoom room and breakout rooms presented challenges to the instructors. Some students used cellphones and engaged in irrelevant activities during Zoom lectures, which distracted the student and instructor from the lecture and class activities. Additionally, some students talk off-topic in the breakout rooms or turn off their cameras and refrain from participating in the discussion. Simultaneously monitoring all the breakout rooms is currently unavailable in Zoom, and the instructor can only join the rooms one at a time to guide the discussions and assist those who request support.

Accessing digital devices and high-speed Internet also poses a challenge to some students. They may lack a personal device and use a friend's laptop or utilize other devices such as mobiles and tablets. Since the technology platforms' functionalities change depending on the device utilized and its operating system, some students may have to leave the Zoom meeting to perform learning activities such as watching a video or accessing an external link. The lack of a high-speed Internet connection prompts some students to turn off their cameras to improve the audio of the lecture. Low-speed Internet also caused the student's voice to come through as distorted, and they may even completely disconnect from the online session. Similarly, lacking an appropriate workstation and sharing a house with roommates can distract students from the class activities and lectures and increase the chances of malfunctioning Internet connections.

From the students' point of view, the challenges of the flipped classroom pertain to the experience of accessing less time interacting with their instructor as the role of the educator changed from a sole teacher to a facilitator (Ronchetti, 2010) or otherwise experienced more interactions because of additional activities being done in the class (Lage et al., 2000). It is also worth considering that asking students to watch some videos before coming to the class might bear an additional workload on students, and they may not commit to the task beforehand. Another challenge for implementing this method is the lack of cooperation of some students for watching the videos before joining the class. For that reason, in some instances, more than the session's anticipated time devoted to watching the videos shortened the time of interaction, doing quizzes, and participation in discussion in the class. From an instructor's perspective, this approach may be time-consuming in the preparation stage. However, if the course syllabus is predetermined, videos can be used for the following semester (Lage et al., 2000), decreasing the time devoted to class preparation.

Finally, when using Kahoot, students need to access a tablet, a laptop, or a computer to see the game's questions and a smartphone to tap on their chosen answer. However, due to bandwidth-related issues, students may not be able to follow the game in its entirety.

5   Conclusion and Discussion

Although limitations currently exist, the contributing faculty recognize the value that digital tools and the online classroom setting contribute to educational pathways. These options were deployed to respond to the COVID-19 pandemic; nonetheless, the authors suggest that selected course management techniques and digital applications could be implemented permanently. The contributing faculty recommends further research to identify the best practices deployable across higher educational institutions to guarantee comparable learning experiences to students moving from a face-to-face setting to an online or BL modality. However, the authors argue that digital tools offer a wider portfolio of options for teachers to

match the students' needs and the challenges of increasingly diverse classes (Luthra & MacKenzie, 2020; Holonl, 2020; Taparia, 2020).

Moreover, the faculty suggests that for educational institutions to remain relevant and competitive, permanent online programs constitute a viable option to be offered alongside face-to-face courses, thus opening the doors to students seeking flexibility (Bates, 2018). Online teaching-learning and the deployment of digital tools therein have accommodated the changing dynamics of an interconnected world by securing continued access to higher education (UNESCO, 2020), while life and formal learning collided and intertwined under the hardships imposed by the COVID-19 emergency measures. Lastly, the faculty concludes that for students' adequate preparation for increased use of virtual reality, a timely introduction to digitalization is recommended, whether through a fully remote and online experience or with BL modalities in the classroom.

6 Recommendations

While COVID-19 may have accelerated the process of decentralization and digitalization of contemporary educational institutions by widening the access to remote learning, these phenomena are far from new. As such, research has provided evidence of, and constructive debate about, their effectiveness (Bernard et al., 2004; Turney et al. 2009), reliability, flexibility, and accessibility to be deployed as standards across educational levels and areas of study (Ebner & Gegenfurtner, 2019). However, this study focused on the faculty's teaching experiences during the COVID-19 pandemic. Through systematic case studies and statistical analyses, further research is recommended to investigate and act upon the dynamics impacting the successful outcome of online education and BL (Bower et al., 2015), whether synchronous or asynchronous.

References

Alonso, F., López, G., Manrique, D., & Viñes, J. M. (2005). An instructional model for web-based e-learning education with a blended learning process approach. *British Journal of Educational Technology, 36*(2), 217–235. https://doi.org/10.1111/j.1467-8535.2005.00454.x

Barnes, D. (1976). *From communication to curriculum*. Penguin.

Bates, T. (2018). The 2017 national survey of online learning in Canadian post-secondary education: Methodology and results. *International Journal of Educational Technology and Higher Education, 15*(1), 1–17. https://doi.org/10.1186/s41239-018-0112-3

Bernard, R., Abrami, P., Lou, Y., Borokhovski, E., Wade, A., Wozney, L., Wallet, P. A, Fiset, M., Huang, B. (2004). How does distance education compare with classroom instruction? A meta-analysis of the empirical literature. Review of Educational Research, 74(3), 379–439. www.jstor.org/stable/3516028

Blended Learning Universe. (2000). https://www.blendedlearning.org/research/

Bliuc, A. G. (2007). Research focus and methodological choices in studies into students' experiences of blended learning in higher education. *Internet and Higher Education, 10*(4), 231–244. https://doi.org/10.1016/j.iheduc.2007.08.001

Bosacki, S. L., Rose-Krasnor, L., & Coplan, R. J. (2014). Children's talking and listening within the classroom: Teachers' insights. *Early Child Development and Care, 184*(2), 247–265. https://doi.org/10.1080/03004430.2013.781165

Bower, M., Dalgarno, B., Kennedy, G. E., Lee, M. J., & Kenney, J. (2015). Design and implementation factors in blended synchronous learning environments: Outcomes from a cross-case analysis. *Computers and Education, 86*, 1–17. https://doi.org/10.1016/j.compedu.2015.03.006

Burbules, N. C. (2004). Rethinking the virtual. *E-Learning and Digital Media, 1*(2), 162–183. https://doi.org/10.2304/elea.2004.1.2.2

Burbules, N., & Bruce, B. (2001). Theory and research on teaching as dialogue. In V. Richardson (Ed.), *Handbook of research on teaching* (4th ed., pp. 1102–1121). American Educational Research Association.

Burgess, S., & Sievertsen, H. H. (2020, April 1). *Schools, skills, and learning: The impact of COVID-19 on education*. Vox Eu. https://voxeu.org/article/impact-covid-19-education

Christensen Institute. (n.d.). *Blended learning definitions*. Christensen Institute. https://www.christenseninstitute.org/blended-learning-definitions-and-models/

Christensen, S. S., Andrews, C., Harris, S. P., Lloyd, A., Turley, C., & West, R. (2015). Interactive learning environments, 2004–2013. *Educational Technology, 55*(5), 43–48. https://www.jstor.org/stable/44430408

Deng, Q., Trainin, G., Rudasill, K., Kalutskaya, I., Wessels, S., Torquati, J., & Coplan, R. J. (2017). Elementary preservice teachers' attitudes and pedagogical strategies toward hypothetical shy, exuberant, and average children. *Learning and Individual Differences, 56*, 85–95. https://doi.org/10.1016/j.lindif.2017.04.007

Dhand, A., Luke, D. A., Carothers, B. J., & Evanoff, B. A. (2016). Academic cross-pollination: The role of disciplinary affiliation in research collaboration. *PLoS One, 11*(1), e0145916–e0145916. https://doi.org/10.1371/journal.pone.0145916

Driscoll, M. (2002). Blended learning: Let's get beyond the hype. *e-Learning, 1*(4), 1–4.

Ebner, C., & Gegenfurtner, A. (2019). Learning and satisfaction in webinar, online, and face-to-face instruction: A meta-analysis. *Frontiers in Education, 4*(92). https://doi.org/10.3389/feduc.2019.00092

Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The Internet and Higher Education, 7*(2), 95–105. https://doi.org/10.1016/j.iheduc.2004.02.001

Golding, C. (2013). The teacher as guide: A conception of the inquiry teacher. *Educational Philosophy and Theory, 45*(1), 91–110. https://doi.org/10.1080/00131857.2012.715387

Golubeva, D. (2019, November 6). *How polls and word clouds in Kahoot! For business fuel live audience interaction*. Kahoot. https://kahoot.com/blog/2019/11/06/word-cloud-polls-kahoot-audience-interaction/

Golubeva, D. (2020, February 6). *Inducing student-paced games, a new way to play Kahoot!* Kahoot. https://kahoot.com/blog/2020/02/06/what-is-student-paced-challenge/

Graham, C. R. (2006). Blended learning systems: Definition, current trends, and future directions. In C. J. Bonk & C. R. Graham (Eds.), *The handbook of blended learning: Global perspectives, local designs* (pp. 3–21). Pfeiffer Publishing.

Graham, C. R. (2013). Emerging practice and research in blended learning. In M. G. Moore (Ed.), *Handbook of distance education* (3rd ed., pp. 333–350). Routledge. https://www.routledge-handbooks.com/doi/10.4324/9780203803738.ch21

Holonl Q (2020, January 28). *$87bn+ of Global EdTech funding predicted through 2030*. $32bn last decade. Global EdTech Venture Capital will nearly triple over the next decade. HolonIQ online. https://www.holoniq.com/notes/87bn-of-global-edtech-funding-predicted-to-2030/

Horn, M., Staker, H., & Christensen, C. (2014). Blended: Using Disruptive Innovation to Improve Schools. The Christensen Institute. Retrieved from http://www.wiley.com/WileyCDA/WileyTitle/productCd-1118955153.html

Hoyle, R. (2003). *How to evaluate blended learning*. People Management. https://www.peoplemgmt.com

Jiang, J., Dai, B., Peng, D., Zhu, C., Liu, L., & Lu, C. (2012). Neural synchronization during face-to-face communication. *The Journal of Neuroscience, 32*(45), 16064–16069. https://doi.org/10.1523/jneurosci.2926-12.2012

Lage, M. J., Platt, G. J., & Treglia, M. (2000). Inverting the classroom: A gateway to creating an inclusive learning environment. *The Journal of Economic Education, 31*(1), 30–43. https://doi.org/10.1080/00220480009596759

Luthra, P. & Mackenzie, S. (2020). 4 ways covid-19 could change how we educate future generations. World Economic Forum. https://www.weforum.org/agenda/2020/03/4-wayscovid-19-education-future-generations/

Norvig, P. (2012, February). *The 100000-student classroom* [Video]. TED Conferences. https://www.ted.com/talks/peter_norvig_the_100_000_student_classroom?language=en

Pedersen, A. T. (2020, June 17). *Announcing Kahoot! Academy – A global knowledge platform, community, and marketplace for educators and publishers*. Kahoot. https://kahoot.com/blog/2020/06/17/announcing-kahoot-academy/

Ronchetti, M. (2010). Using video lectures to make teaching more interactive. *International Journal of Emerging Technologies in Learning, 5*(2), 45–48. https://doi.org/10.3991/ijet.v5i2.1156

Rooney, J. E. (2003). Blended learning opportunities to enhance educational programming and meetings. *Association Management, 55*, 26–32.

Taparia, H. (2000, May 25). The future of college is online, and it's cheaper. *The New York Times*. https://www.nytimes.com/2020/05/25/opinion/online-college-coronavirus.html

Timothy, A. (2015, September 22). *How to effectively use videos in eLearning*. eLearning Industry. https://elearningindustry.com/effectively-use-videos-in-elearning

Turney, C. S. M., Robinson, D., Lee, M., & Soutar, A. (2009). Using technology to direct learning in higher education: The way forward? *Active Learning in Higher Education, 10*(1), 71–83. https://doi.org/10.1177/1469787408100196

UNESCO. (2020). *Education: From disruption to recovery*. https://en.unesco.org/COVID-19/educationresponse

Vygotsky, L. S. (1978). *Mind in society. Development of higher psychological processes*. MIT Press.

Wingard, R. G. (2004). Classroom teaching changes in web-based enhanced courses: A multi-institutional study. *Educause Quarterly, 27*(1), 26–35.

Wood, K. (2000). The experience of learning to teach: Changing student teachers' ways of understanding teaching. *Journal of Curriculum Studies, 32*(1), 75–93. https://doi.org/10.1080/002202700182862

Woodall, D. (2010). Blended learning strategies: Selecting the best. SSWP.1610.0810.

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Teaching Quantitative and Non-quantitative Courses: Online and Remote Delivery during the COVID-19 Pandemic

Mandev Singh and Daman Singh

> *Online teaching is Teaching together even when we are apart.*
>
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1   Background and Literature Review

The inspiration for this work comes from the present COVID-19 pandemic and our university teaching. During this COVID outbreak, university programs like ours have moved from on-campus delivery to online and remote synchronous delivery (RSD) via video conferencing. With the first case of COVID-19 diagnosed in December 2019 in China (World Health Organization, 2020), the coronavirus spread impacted the entire world. The first presumptive case of coronavirus was reported in Canada on January 25, 2020 (Global News, 2020). At the beginning of the pandemic, most North American institutions were in the middle of the Winter 2020 semester and were getting ready for the Spring/Summer 2020 term. For example, this is one announcement regarding this transition to RSD that we noted: "Online classes are scheduled to begin on Monday at UBC and SFU, and Wednesday at TWU. In the meantime, staff are helping faculty adapt their teaching materials" (Kotyk, 2020). By the start of the Spring/Summer 2020 semester, it was clear that all courses offered by post-secondary institutions would be moved from on-campus and could only be offered online.

There are a few different models of instruction that have replaced on-campus delivery during this crisis – for instance, Yorkville University where we teach business courses has implemented two different models, namely, remote synchronous delivery (RSD) and asynchronous online instruction. The online delivery mode does not include any synchronous interactions between faculty and students, whereas

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RSD is a direct solution to the coronavirus situation. RSD classes are held as per their original on-campus schedule but virtually via the use of tools like Zoom or MS Teams (Remote vs. Online Instruction, 2020). The scope of this paper covers mainly the RSD mode of teaching for the courses which we have taught. We discuss some of the issues faced during the transformation from in-class to the online synchronous delivery mode, in which classes are held via video conferencing – in our case, via Zoom.

Transformational teaching requires faculty members to shift their mindsets and classroom practices (Woodley & Parra, 2019). In April 2020, a survey was done with 826 faculty members and administrators from 641 American colleges and universities. It was found that 90% of institutions were engaged in some or the other form of virtual education as an alternative to face-to-face delivery (Inside Higher Ed., 2020). More than 75% of instructors noted that they were forced to move the remainder of the courses online. Nearly half of the administrators reported that their faculty members had experience in teaching online. In terms of adapting the teaching methods from in-class to the online mode, it has been found that faculty members with prior experience of online teaching reportedly had to make fewer adjustments to their teaching style as compared to the faculty who had no experience of online teaching previously. Consequently, about two-thirds of faculty members had to make changes to the delivery style or type of student assessments (Inside Higher Ed., 2020). It has also been reported that faculty members lowered their expectations, and in 46% of cases, some assessments (either exams or other assignments) were dropped (Inside Higher Ed., 2020).

As an adaptive strategy, universities announced the transition of their courses (including both quantitative and non-quantitative ones) to an online mode of delivery to accommodate students during the Summer 2020 term. Due to time constraints, and often regulatory procedures, it was hard to make changes to the existing format – new online courses could not be designed and implemented so quickly. Universities worked hard to adapt the available resources to start working in the online mode. Many instructors and students were not quite familiar with the online mode of learning. It was a new experience for all stakeholders.

A study on teaching mathematics courses online to undergraduate students identified different benefits and problems (Engelbrecht, 2005). The benefits reported in this study include convenience, accessibility, and flexibility. The problems reported include lack of face-to-face contact, inexperience and technical problems, and immaturity of students (Engelbrecht & Harding, 2005).

2 Teaching Mathematics Online and on Campus

The experience of teaching mathematics online as compared to on-campus has been explained by Fernandez (2014), wherein the instructor shared a possible model for instruction and assessments while teaching such quantitative courses online. The author recognized the need to develop new reading materials focused on students

and proposed new methods of evaluation like open-book examinations, take-home tests, or even oral examinations (Fernandez, 2014). Teaching quantitative courses online added more challenges. It has been reported that online tools offered by publishers for assisting the instructors play a significant role in testing the students' knowledge and understanding – for example, "Quiz Me Mastery Points" by Pearson My Lab (Ahmadi et al., 2019).

3   Academic Integrity

The online mode of study has also presented relatively new and previously unseen methods of cheating. A trial of allowing students to use devices like laptops, smartphones, tablets, and other Internet-enabled devices created possibilities for cheating (Maciejewski, 2020). Other issues related to cheating while using technology have been discussed by Bain (2015). It has been concluded that while students have access to the Internet, they might be tempted to perform acts of academic dishonesty; however, a majority may be prevented by traditional ways such as not allowing smartphones during exams and consistently reporting all acts of academic dishonesty (Bain, 2015). However, during online and remote synchronous delivery, it might be challenging for the faculty to completely enforce the same rules as for on-campus examinations – in other words, it might be difficult to ascertain whether the student has access to a smartphone during a virtually invigilated exam. It was also concluded by Fernandez (2014) that online or virtual exams may be conducted more effectively if instructors receive more support from their university, possibly in the form of additional invigilators or proctors. The difference between quantitative and non-quantitative based assessments means that theory-based or non-quantitative courses have essays, reports, case analysis, and such types of tasks that may be run through a text-based plagiarism testing tool (like Turnitin) upon submission. However, the same plagiarism testing tools may not be so effective in quantitative-based assessments where all students are presented with the same numerical problems.

The decision to shift to the online mode raised many questions for us. Based on our observations, these are some key issues being faced so far. First, the greatest challenge was that all courses were designed for on-campus teaching with a focus on traditional teaching methods, styles, and formats. Second, students' adaptation to online learning was difficult as most students were not familiar with studying various quantitative and non-quantitative courses online. For example, a 2013 study that focused on 500,000 online courses offered by 40,000 technical college students concluded that all the students suffered decrements in performance, and students were found struggling more in non-quantitative courses (Xu & Jaggers, 2013). Third, it was challenging to identify and access students' learning during the online mode, especially for quantitative courses. A well-explained format and multiple ways to assess student learning for the desired learning outcomes have been provided by Sebastianelli and Tamimi (2011). We started working on making this plan

possible with the help of these reviewed articles and research papers. The aforementioned articles present relevant solutions to tackle these current issues. However, we could not ignore the possibility that students might compare the difference between online and on-campus delivery of courses.

A similar study compared quantitative and non-quantitative courses delivered face-to-face versus online delivery (Bandara & Wijekularathna, 2017). The study demonstrated that students perform better online when the assessments include essays; however, students' performance was found to be better in the face-to-face setting when the questions required analytical (quantitative) skills. Overall, it was concluded that the students' performance was better on-campus than learning via the online mode (Bandara & Wijekularathna, 2017).

We anticipated that teaching online during the Spring/Summer term 2020 not only would pose these initial challenges of making the transition but would soon be followed by difficulties with major course assessments resulting in instances of cheating during tests, quizzes, and exams. Devices that can be connected to the Internet like mobile phones, tablets, and computers may also help in cheating. The new online realm is likely to create new ways with which one can cheat as compared to in-class examinations. It means instructors must be ready to tackle these new ways of cheating. Instructors like us must be prepared to face possible questions and excuses from students such as the following: "I could not attend the online exam session due to bad connection" or "It was hard for me to submit an assignment or test on time because of an Internet-related issue." Most of the course content, including learning outcomes, must be assessed and revised. A detailed explanation of reducing cheating and accommodating students with special needs has been discussed by Davidson-Shivers and Reese (2014). Although post-secondary institutions are being forced to make some changes to the format of courses to adapt during COVID-19, some have little or no experience in offering online courses or even hybrid courses. We may also have to consider the impact of this sudden and drastic change in the teaching-learning process and its impact on the mental health of the students, although this is beyond the scope of this paper.

3.1 The Goals, Concerns, and Issues

As courses were moved to the online mode, it led to some unseen challenges. Based on the aforementioned literature and our personal experiences of teaching the same courses on-campus during the last few years and now teaching them online via RSD since mid-March 2020, we discuss the following: the impact of switching to online RSD instruction during the COVID-19 crisis.

As already discussed, post-secondary institutions worldwide have had to shift to the online or RSD mode. Therefore its impact needs to be analyzed. We compare the impact of transitioning to online instruction for quantitative courses such as "Statistics for Business" versus non-quantitative courses such as "Introduction to Marketing."

It is important to compare the impact of the recent switch from on-campus to online RSD instruction. Many programs include a variety of different courses. Some courses are theory-based (non-quantitative courses). These courses may be taught effectively online using tools like PowerPoint slides and multimedia (e.g., images and videos) as in the physical classroom. Similarly, assessments for the theory-based courses may include essays, reports, and other theoretical submissions that may be performed by students away from a classroom and then submitted through the online learning management system. At the same time, our quantitative courses require different methodologies during instruction and practice and even different assessment techniques.

We consider the possibilities for cheating/plagiarism during different online assessments like mid-term and final exams. While it is important to implement the rules and regulations for upholding academic integrity for all the courses, it is important to understand that with online assessments, it is not possible to have the same conditions for tests and exams as originally planned for on campus.

3.2   Concerns and Issues

A wide variety of issues have been observed during our transition from on-campus to online delivery. Some major ones include the following.

3.2.1   Students' Adaptation to the New Delivery Mode

There was little or no time between moving from on-campus to online delivery. The students were used to attending the classes on-campus and now suddenly found themselves attending classes virtually using different tools. A major challenge in the process was to prepare them for using this technology effectively.

3.2.2   Dependency on Internet Connectivity and Devices

With this new format of online teaching, students and instructors are required to stay connected through a platform. This may not sound like a challenge if only a few connections were to be made for a short period. However, now a significant number of users are required to be online for hours at length, which is prone to issues around Internet connectivity. Another major issue is the availability of devices. While many students have access to a laptop for attending the virtual classes, some students rely on smartphones. Although smartphones allow the students to connect to the virtual class, there are limitations in terms of multitasking during in-class RSD learning activities. From a smartphone, the students may not be able to research the Internet effectively while staying connected with the virtual class.

3.2.3 Privacy and User Authentication Concerns

This transition to the online mode of instruction has also created concerns around privacy. Another challenge is the authentication of users on online platforms for remote synchronous delivery platforms like Zoom. There have been widely reported issues of "Zoom bombing" during online classes ("'Zoom bombers' disrupt online classes with racist, pornographic content," 2020).

3.2.4 Health-Related Issues

Although the long-term impact of attending long virtual meetings while staring at a small screen remains unseen, in a few cases, based on our personal experience, students have started reporting about some health-related issues of attending classes online. For instance, based on our experience of offering RSD courses so far, different students on multiple occasions have complained about headaches due to continued exposure to the screens because of back-to-back lectures.

3.2.5 Continuity of Class/Full Attendance

The virtual classes sometimes present a new challenge for full attendance and participation in class. In an on-campus setting, it was a lot easier to monitor the students while they enter or leave the class. However, in a virtual class session, the students may enter the class after the scheduled start time (although in theory that may be prevented by locking the virtual meeting or having the wait listing feature turned on); and, more importantly, leave before the scheduled end of the session (it is more difficult to control students if they leave early). A bigger challenge, in this case, is to record attendance, and instructors feel the need to mark the attendance multiple times during a class. More importantly, it has become more challenging to keep track of students who attend the class only for a partial period of the session.

3.3 Teaching and Testing Strategies

Our experiences in this transition and the cited research led us to respond herein to the following issues as key questions for making the transition to online delivery from on campus:

- How to develop widely accepted methods for delivering lectures online
- How to find ways to conduct quizzes and exams remotely for quantitative and non-quantitative courses
- Possible solutions for preventing cheating and plagiarism during the remote assessments.

3.3.1   Teaching Quantitative Courses

Based on our teaching experiences during these times in 2020, completing Statistics for Business, a quantitative course, was one of the greatest challenges during this transition to RSD. The students, who had previously participated in classes on campus, were not familiar with learning a quantitative course online via video conferencing. After deep research and discussion among different faculty members about the available online applications, we figured out that none of the apps were suitable and compatible as per the requirements of the course assessments. Therefore, we developed our own ideas and solutions.

First and foremost, the issue was to find a suitable solution for course delivery. After researching the vast number of available programs, we decided to continue with Zoom (the resource provided by the university for online instruction) rather than using any other third-party software or applications. After a couple of training workshops and some practice, the lectures were delivered online through Zoom without too many challenges.

The other issue was to write and type the statistics formulas and equations for students to see during the virtual class time. This was overcome by using the Whiteboard feature of Zoom. Moreover, it is possible to handwrite on the whiteboard using a touchscreen device such as a tablet or an iPad. After some practice, this turned out to be similar to our experience in using an in-class whiteboard. Based on the students' verbal responses, they found this lecture delivery format to be interesting.

Second, conducting quizzes and exams online was found to be a bigger issue for academic integrity. There could be the possibility that multiple students would take the test while sitting in the same room at home and possibly share the solutions. To overcome this issue, new and different strategies were needed. We designed quizzes and exams that were required to be submitted within a short period depending upon the length of the questions, assuming students would have limited time to complete their own exams. For example, a quiz that would require half an hour to attempt was now required to be submitted in a total of 35 minutes, which included 30 minutes for the attempt and an additional five minutes for submission. We were assuming that the limited time would act as a constraint and prevent students from indulging in any possible act of academic dishonesty. However, it was not a sufficient measure to prevent all forms of cheating. Still there were some possibilities of cheating. We needed a strong and effective plan to overcome this issue. We started working on the idea of creating different question sets for the students and designed six different sets of questions that were assigned to randomly chosen groups of students who took the same exam. All the exam sets had the same difficulty levels – only the data values were changed. In other words, if a student were to read them unconsciously, they would all appear to be the same. The different question sets were individually emailed to the students. The students were given clear instructions to stay ready with their official university accounts accessible before the exam times. Some questions had been designed where students needed to create their own data set of 15 two-digit values. For example, in the Statistics for Business course exam to

calculate mean, median and mode, students had to choose ten two-digit numbers of their choice (between 10 and 99). It was almost impossible that two or more students would think of the same data sets. This idea of creating different questions and test versions worked well. While marking the exams, it was observed that there was almost zero percent cheating. The values chosen by the students for the questions were different. That they struggled on paper while finding solutions was clear evidence of the success of the plan to prevent cheating. Additionally, it was observed that the students' performance throughout the course (before the final exam) was consistent with their performance in the online final exam. These strategies were quite effective in dealing with the possibilities of academic dishonesty in quantitative courses.

3.3.2 Non-quantitative Business Courses

The lecture delivery of the non-quantitative courses was done similarly to the quants-based courses – that is, by using Zoom synchronous sessions. In addition, the virtual classes were supplemented by Moodle where the assignments, resources, grades, and feedback were accessed and noted. The possibility of using other third-party applications was discussed. None were deemed appropriate for the task at hand. Other than some generic challenges associated with virtual teaching, no major issues were observed during the delivery of non-quantitative courses. The basic issues (that apply to all the courses) have been discussed earlier in this paper. These include partial attendance, internet connectivity issues, and the stress involved in constantly being online in a virtual classroom.

Most of the non-quantitative courses, including Introduction to Marketing, generally do not include on-campus exams. Instead, the major assessments include reports, essays, and other take-home assignments which could be run through a similarity testing application such as Turnitin upon submission to check for plagiarism. The course included Moodle-based quizzes which remained unimpacted during this switch from on-campus to online RSD.

Cheating and plagiarism are possible issues for non-quantitative courses; however, there were no significant changes before and after shifting the delivery to the online mode. As already discussed, cheating and plagiarism could be prevented by running the submissions through Turnitin or similar originality reporting programs.

4   Conclusion

This paper has presented different methods for teaching during COVID-19 and further compared the methods used for the aforementioned quantitative and non-quantitative courses online – that is, Statistics for Business and Introduction to Marketing. Based on our discussions and experiences, it may be concluded that both courses could be delivered online through remote synchronous delivery via Zoom,

although the quantitative courses required more adjustments while being taught online in this way. Second, in terms of conducting assessments, the quantitative courses required more changes and adjustments, as compared to the assessments planned for the on-campus course, whereas the assessments for the non-quantitative course remained unchanged. Finally, the assessments for the quantitative courses required more changes and very careful execution of assessments to avoid cheating and plagiarism, while the non-quantitative courses required fewer changes.

This discussion and related recommendations are based on our recent experiences transitioning these courses to online and remote synchronous delivery during COVID-19. These strategies revealed some issues for teaching courses online that were originally designed for on-campus delivery. Educators need to plan with careful consideration and figure out effective methods for delivering lectures and conducting assessments during situations that require remote synchronous online delivery. We agree that "Online teaching is Teaching together even when we're apart." Educators like us need to continue to share and discuss our experiences, observations, and solutions.

References

Ahmadi, M., Dileepan, P., & Wheatley, K. (2019). Teaching quantitative courses online: Are learning tools offered by publishers effective? *Journal of Educators Online, 16*(2), 1–9.

Bain, L. (2015). How students use technology to cheat and what faculty can do about it. *Information Systems Education Journal, 13*(5), 92–99.

Bandara, D., & Wijekularathna, D. K. (2017). Comparison of student performance under two teaching methods: Face to Face and online. *International Journal of Education Research, 12*(1), 69–79.

Davidson-Shivers, G. V., & Reese, R. M. (2014). Are online assessments measuring student learning or something else? In J. C. Richardson, C. S. York, & P. R. Lowenthal (Eds.), *Online learning: Common misconceptions and benefits and challenges* (pp. 137–152). Nova Science Publishers, Inc.

Engelbrecht, J., & Harding, A. (2005). Teaching undergraduate mathematics on the internet. Part 2: Attributes and possibilities. *Educational Studies in Mathematics, 58*(2), 253–276. Retrieved April 24, 2020, from www.jstor.org/stable/25047149

Fernandez, E. (2014). Transitions from live to online teaching. *PRIMUS, 24*(1), 1–11 . Retrieved April 24, 2020, from. https://doi.org/10.1080/10511970.2013.821193

Global News. (2020). *Coronavirus: Here's a timeline of COVID-19 cases in Canada.* Retrieved June 2, 2020, from https://globalnews.ca/news/6627505/coronavirus-covid-canada-timeline/.

Inside Higher Ed. Insidehighered.com. (2020). *How professors changed their teaching in this spring's shift to remote learning.* Retrieved June 2, 2020, from https://www.insidehighered.com/digital-learning/article/2020/04/22/how-professors-changed-their-teaching-springs-shift-remote

Kotyk, A. (2020). *UBC, SFU moving all classes online starting next week.* British Columbia. Retrieved June 2, 2020, from https://bc.ctvnews.ca/ubc-sfu-moving-all-classes-online-starting-next-week-1.4851991

Maciejewski, W. (2020). Let your students cheat on exams, *PRIMUS.* Retrieved June 2, 2020, from https://doi.org/10.1080/10511970.2019.1705450

Redden, E. (2020, March). '*Zoom bombers' disrupt online classes with racist, pornographic content. Insidehighered.com* Retrieved July 15, 2020, from https://www.insidehighered.com/news/2020/03/26/zoombombers-disrupt-online-classes-racist-pornographic-content

Remote vs. Online Instruction. Instructional Resources. (2020). Retrieved June 2, 2020, from https://blog.citl.mun.ca/instructionalresources/remote-vs-online-instruction/#:~:text=In%20short%2C%20remote%20teaching%20occurs,using%20online%20learning%20design%20principles

Sebastianelli, R., & Tamimi, N. (2011). Business statistics and management science online: Teaching strategies and assessment of student learning. *Journal of Education for Business, 86*(6), 317–325. https://doi-org.libraryservices.yorkvilleu.ca/10.1080/08832323.2010.525545

Woodley, X. M., & Parra, J. (2019). (Re)framing and (Re)designing instruction: Transformed teaching in traditional and online classrooms. *Transformative Dialogues: Teaching & Learning Journal, 12*(1), 1–11.

World Health Organization. (2020). *WHO timeline* COVID-19. Retrieved June 2, 2020, from https://www.who.int/news-room/detail/27-04-2020-who-timeline%2D%2D-covid-19

Xu, D., & Jaggers, S. (2013). *Adaptability to online learning: Differences across types of students and academic subject areas*. CCRC Working Paper No. 54. Retrieved June 2, 2020, from https://ccrc.tc.columbia.edu/media/k2/attachments/adaptability-to-online-learning.pdf

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Internationalization of Higher Education During and After COVID-19: Crossing Borders on a Flying Carpet

Sajjad Pouromid

> *The use of the Internet by all students to access information, communicate with teachers, and interact and collaborate with other scholars and learners all over the world means that distance and time are, theoretically at least, no longer barriers to international exposure and awareness for any student with access to a computer and a modem.*
>
> *Betty Leask*

1 Internationalization in Higher Education

When Betty Leask celebrated the theoretical removal of distance and time barriers from the path to internationalization, thanks to advances in the Internet technology in 2004 (see the quotation above), she had not probably envisaged how another formidable obstacle would jeopardize all humanity and, by extension, internationalization of higher education some 16 years later. However, what she said then seems to hold true now more than any other time. Here we are in 2020 with the borders of many countries still closed to students seeking to gain international exposure and awareness and to develop their skills as global citizens. What are these students to do with their hopes and dreams if international borders remain closed for longer (and who knows how long, really?) to prevent the spread of the novel coronavirus? They appear to need a flying carpet to make their dreams come true. Before discussing this flying carpet, however, one needs to be clear about what is meant by internationalization in higher education. I will first discuss the necessity of internationalization in higher education and then elaborate on several ways it has been pursued so far. Finally, I will deliberate about how internationalization can be

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made possible despite the current pandemic and closure of universities and colleges and then introduce the approach I believe can serve as a flying carpet for students to cross international borders.

The increasing demands of globalization have made it necessary for higher education institutions to embark on internationalization. For an institution to survive in this highly competitive market, it needs to cater to the growing needs created by emerging situations. One such demand is that universities can no longer solely depend on domestic students as sources of revenue and need to develop strategies to attract students from overseas as well. Of equal importance is the fact that even domestic students might no longer be merely interested in acquiring domestic-level skills. In other words, along with prospects for increasing student mobility worldwide, universities are understandably expected to prepare students to compete in the global job market. To achieve these two goals, universities need to come up with new ways both to become internationally recognized and to enhance the international experience of their faculty, staff, and students. In response to these demands, many universities around the globe have come to recognize their role in promoting international and intercultural competencies in their students (de Wit, 2010).

There is no one unitary understanding of internationalization. There is, in fact, controversy regarding what it is and what it entails. One of the most cited definitions of this concept is by Knight (2004), who stated that internationalization is "the process of integrating an international, intercultural, or global dimension into the purpose, functions or delivery of post-secondary education" (p. 11). The definition is particularly interesting because it explicitly denotes internationalization as a process and refers to international and intercultural aspects of this process. It also seems to be broad in scope, encompassing almost any activity at the level of planning or implementation. Knight (2006) further explores the concept, setting distinctions between Internationalization Abroad (IA) and Internationalization at Home (IaH).

1.1   IA and IaH

IA, according to Knight (2006), is characterized by education taking place across borders and mobility of students, teachers, scholars, programs, courses, curriculum, and projects. On the other hand, Knight argues, IaH comprises activities designed to provide students with the chance to develop intercultural awareness and international understanding while residing in their home countries. However, the distinction is not free from controversy.

The Organization for Economic Co-operation and Development (OECD) defines internationalized curriculum as the one "with an international orientation in content and/or form, aimed at preparing students for performing (professionally/socially) in an international and multicultural context and designed for domestic and/or foreign students" (OECD, 1996, p. 6). Campus internationalization is also often used interchangeably with comprehensive internationalization (Hudzik, 2011). According to

Hudzik (2011), comprehensive internationalization is best conceptualized as a commitment realized through action encompassing all aspects of teaching, research, and services in a higher education institution. It is hence not limited to the campus life of students and should be instead extended to the institutions' "external frames of reference, partnerships, and relations" (p. 6).

The main goal of IaH would be to enable local students to experience international higher education in the absence of mobility. One of the first instances of such a proposition can be seen in the paper published by the European Association for International Education (Crowther et al., 2001), which expanded the definition of internationalization and delivered a more comprehensive one encompassing university internationalization beyond student, staff, and researcher mobility and international collaboration (Knight, 2004). This was quite interesting because student mobility programs are often reported to be dominated by students from socially advantaged families with the economic and cultural capital necessary for supporting a student living and studying abroad (Brooks & Waters, 2011). For this reason, IaH is believed to offer "democratization of the benefits of internationalization to a much wider segment of the society than that which could be, or wanted to be, geographically mobile" (Harrison, 2015, p. 414).

IaH, as envisioned by Crowther et al. (2001), has three major components. First is the consideration of diversity as a resource. The idea here is that internationally mobile students can create a space in universities which is both socially and academically more diverse. This diversity can then be regarded as a potential resource for home students which enriches their academic experience by making it possible for them to study in an educational setting more diverse than usual. Second is the existence of an internationalized curriculum that benefits from the addition of different cultural perspectives to the existing more conventional curriculum. The third component is culturally sensitive pedagogy, which requires universities to consider their culturally and internationally diverse students as a resource and cater to their specific needs (Harrison, 2015).

A review of the literature on IaH programs provides ample evidence in support of these goals. This, of course, does not undermine the significance of studying abroad framed within the IA agenda. Neither does it deter higher education institutions from encouraging their students to try studying in an overseas institution. For various reasons, including the obvious financial benefits, universities have disregarded research which has shown that many study abroad programs, particularly the shorter ones, fail to enhance students' intercultural awareness (Hammer, 2012; Peng, 2010; Salisbury et al., 2013) as they foreground the travel experience over the learning experience (Stigger et al., 2018). This has been by and large true up until now. However, since March 2020, with the strict travel bans in place as a measure to curb the further spread of the COVID-19 pandemic, things have changed to a great extent. Thousands of students who were preparing to study abroad have had to cancel their plans and instead lock themselves up in their rooms. With epidemiologists voicing their doubts as to when an effective vaccine can be developed and available for all, and with airlines unwilling to return international flights to normal due to low demands, and more importantly, with governments keeping their borders

closed to foreigners, the future of internationalization in higher education seems utterly uncertain – if not gloomy. What happens if the situation does not improve any time soon? Are we giving up on our hope for universities to prepare future-ready, global-minded, and interculturally aware individuals? Probably not. As the old saying goes, necessity is the mother of invention. In a fairly short time since the announcement of a state of emergency around the globe, we have noticed several innovations helping education go on despite campuses being closed to students. Probably a very similar scenario is awaiting internationalization of higher education in the wake of the COVID-19 crisis.

1.2   Emerging Categories

Scholarship on internationalization of higher education has been already shedding doubts about the binary distinction between IA and IaH practices. This argument is largely grounded in the accessibility of the Internet and information technology tools (ICT) and its influence on our conceptualization of higher education. An increasing number of students across the world have opted for distant learning options across geographical borders, thanks to the use of technology (Gunter & Raghuram, 2018; Tait, 2018). In fact, distant learning, in its various forms, is argued to have developed a third category of internationalization as students are learning "through institutions based in a culture or country distant from their own, while simultaneously remaining within their own country of residence" (Mittelmeier et al., 2019). This new category, which was first called Internationalization at a Distance (IaD) by Ramanau (2016) and then developed further (Mittelmeier et al., 2019; Mittelmeier et al., 2020), blends Knight's (2008) IA and IaH categories to include students residing in their own countries while receiving education from an overseas institute. As discussed earlier, mobility is a key component and a distinctive feature in IA. In this mode of internationalization, students leave their country of residence for a certain period of time and are enrolled in an overseas institute. In IaH, by contrast, international and intercultural dimensions are purposefully added to the formal and informal curricula of a domestic institute (Beelen & Jones, 2015). What this means is that students receive international education from a domestic institute in which they are enrolled. IaD features characteristics of both of these while being different from both as well. In IaD, students do not travel overseas (similar to IaH) but receive education from an overseas institute (IA). Clearly enough, this has great potential for the internationalization agenda in a time of crisis and travel restrictions such as the one we have experienced in 2020. Thanks to the accessibility of the Internet, students can receive education from an institute located abroad while still residing in their home country. What is noteworthy is that instead of students, it is knowledge and teaching that have become mobile with the help of technology in IaD (Mittelmeier et al., 2020). In such a context, internationalization of higher education is indeed able to overcome the barriers of time and distance (at least theoretically) with the help of technology (Leask, 2004).

Through IaD those students who wish to study at an overseas institute, but are unable to leave their country, manage to do so, thanks to the Internet. What this means is that these students may not be directly affiliated with a single institute in their home country. Other scenarios can also be envisaged. In a time when university partnership is no longer unheard of, IaD can take another turn to offer international education to more and more students. Technology has now made it possible for universities from across borders to host students from their partner institutes without them having to leave their countries. Virtual exchange between partner universities over the Internet can engage students in various collaborative activities designed to develop intercultural and international competencies. What happens in this case is beyond the current conceptualization of IaD and therefore can be called Collaborative Internationalization (CI). Although this term does not actually exist in the literature on internationalization efforts in higher education, the underlying tenets of CI seem to be at least tacitly understood and practiced. Bilateral (or multilateral) internationalization efforts and collaborations between geographically distinct institutes lie at the center of CI. In what follows I will introduce collaborative online international learning (COIL) as an approach in CI and discuss why I believe it has the potential to be the flying carpet students need to cross borders during these times of crisis and travel restriction.

2   COIL

COIL can be best described as an innovative approach to teaching various content areas with the central aim of providing teachers and students with the chance to collaborate with partners from overseas and develop their intercultural awareness without having to be physically mobile. These goals are achieved by employing various information and communication technologies (ICTs). What makes COIL an innovative approach, however, is not its application of ICT tools. The use of such tools has been popular in both formal educational settings and for lifelong learning. As a case in point, one could refer to the massive online open courses (MOOCs) which have provided shared access to online materials to students from various geographical places. Similarly, one could mention distanced learning which makes it possible for students to access instruction from a teacher in another country. However, these examples lack the collaborative component which is exactly what helps COIL stand out as an innovative approach. What is more, COIL often takes the form of a cross-disciplinary project, meaning that it can focus on shared learning goals between classes that are meant to teach different subject matters. In a world that is increasingly becoming globalized, students need to acquire skills beyond those in the discipline they are studying. Among these skills are global citizenship, cross-cultural competence, and digital literacy. COIL creates a ground on which students from across different disciplines (or within one) can learn these skills collaboratively.

In its simplest form, COIL can be defined as a form of online learning involving classes from two or more countries to heighten learners' awareness of intercultural

differences (Shiozaki, 2016). Although the original idea of COIL was probably to bring learners from distant areas together and promote collaborative learning and cross-cultural understanding, it can arguably provide a reliable approach for maintaining international education in a time when student mobility is not even an option due to disasters or health concerns such as the current pandemic. Rubin and Guth (2015) argue that COIL is not simply a platform for intercultural communication; rather that it is a paradigm for the development of cross-cultural understanding across various shared multicultural learning settings. That is what IA programs often take pride in regardless of the fact that some of these programs turn out to offer students little more than a travel experience (Stigger et al., 2018). In COIL, by contrast, collaborative work and the development of intercultural and international understanding are core components.

A variety of Internet-based tools have the potential to be used in a COIL model to link university classes in geographically distant areas and to help teachers and students engage in meaningful intercultural exchanges. A COIL project usually starts with at least two teachers in the two collaborating universities sharing their course syllabi and then developing a shared syllabus for the project with an emphasis on students' experiential and collaborative learning. The two (or more) courses in a collaboration do not necessarily need to be within the same discipline. What matters most is having common ground in course objectives. Activities and tasks in the COIL project can be designed in a way that can benefit the students in both classes. Ideally, and if time zone differences and other constraints allow, it is good for students to be able to interact with each other over a video conferencing platform in real time. However, not all sessions have to be held synchronously online, and students can collaborate with their international partners asynchronously online as well. Also, there may be traditional lectures and teacher-led sessions co-taught and managed by teachers from partnering universities. The asynchronous online collaborative sessions can come in between these sessions. It is, therefore, easy to consider COIL as a framework that can be adapted to the specific needs and expectations of specific settings.

Depending on the overall aim of the course, COIL can take different forms. While live collaboration facilitates interactions among learners for the development of linguistic competencies online, for other courses textual or multi-modal exchanges among students can be a better option. For a project to be considered COIL, it needs to satisfy four criteria. First and foremost, the activities and tasks students will be engaged in have to be collaborative. Students from the two (or more) universities need to work collaboratively toward the completion of a predefined task. Second, the project needs to be done online. This can include both synchronous and asynchronous interactions taking place among the students and the teachers. Third, the project needs to take place between two or more higher education institutions from across national borders, meaning that a project between two universities within one country will not count as COIL. Finally, the project needs to have a clear statement of the intended learning outcomes.

2.1   A Flying Carpet

How can COIL be, one might wonder, a flying carpet during a time of crisis? There are several reasons why I believe COIL, virtual exchange, or any other similar approach can serve such a function. First and foremost, COIL can ensure inclusivity. It is always likely that a privileged group can have better access to opportunities, and it is even more so during a time of crisis. Take the case of the COVID-19 as an example. At the time I am writing this chapter, there is no vaccination available for this disease, but what happens when one is developed? It will be a coveted commodity and in high demand. As demand for this vaccination will surely exceed supply, at least during the initial phases, a new social class is likely to emerge including those who will have the privilege of becoming immune to the virus and, therefore, will be able to cross borders with ease. COIL, however, has the potential to provide international education to students regardless of their status. Second, COIL provides a sustainable platform for internationalization in higher education before, during, and after a crisis. Not all students have the financial ability to be physically mobile and seek education across the borders of their country of residence. During a crisis, as we have witnessed recently, even financial ability will not get students too far. Furthermore, while international education in its traditional sense (e.g., IA) gives students the opportunity to study in a particular country, COIL and virtual exchange, by definition, can expose students to education from countless contexts. It is an economical and sustainable approach that surmounts the barriers of not only distance and time but also expense. Finally, COIL is a chance for network building. It makes it possible for both individuals (students, faculty, and staff) and universities to develop partnerships with long-term goals. Such a partnership need not be contingent on running COIL projects. They could start from a COIL partnership before or during a crisis and then expand to other forms once the hurdles of international mobility are removed.

Even before the current pandemic started in March 2020, COIL had been practiced in a good number of universities in the USA, Europe, and Asia. For some institutions COIL has been a cost-effective approach to internationalization and for others a model of teaching that increases the students' interests in studying abroad. The level of engagement in COIL has also varied for institutions. In some cases, COIL initiatives have had the support of national governments. The USA-Japan COIL initiative, for instance, has had the support of the American Council on Education (ACE) sponsored by the US Embassy in Tokyo and Japan's Ministry of Education, Culture, Sports, Science, and Technology (MEXT) with the purpose of expanding higher education ties between the two countries (ACE, n.d.).

What we are witnessing now, as a result of or in response to the COVID-19 pandemic, one might argue, is that COIL is becoming an institutionalized practice with more programs in universities across the world intent on preparing and motivating faculty and staff to embark on forms of virtual exchange. Although COIL projects do not necessitate the use of high-end technology, preparing faculty for designing learning activities that are experiential and collaborative seems to be a key initial

step in institutionalizing COIL. Moreover, the availability of staff who are familiar with educational technology and support faculty can certainly add to the quality of the project. The current pandemic seems to have provided sufficient reason and impetus for universities to consider COIL as a viable option to internationalization. However, we are still in the early stages of this approach and will probably hear more about it in terms of research and practice even after the pandemic is hopefully over someday. COIL has provided a flying carpet with immense possibilities for future use and connections among universities, countries, and students.

References

ACE. (n.d.). *U.S.-Japan COIL initiative*. Retrieved July 10, 2020, from https://www.acenet.edu/Programs-Services/Pages/Communities/US-Japan-COIL-Initiative.aspx

Beelen, J., & Jones, E. (2015). Redefining internationalization at home. In A. Curai, L. Matei, R. Pricopie, J. Salmi, & P. Scott (Eds.), *The European higher education area: Between critical reflections and future policies* (pp. 67–80). Springer.

Brooks, R., & Waters, J. (2011). *Student mobilities, migration and the internationalization of higher education*. Palgrave Macmillan.

Crowther, P., Joris, M., Otten, M., Nilsson, B., Teekens, H., & Wächter, B. (2001). *Internationalisation at home: A position paper*. EAIE.

De Wit, H. (2010). Internationalisation of higher education in Europe and its assessment, trends and issues. Nederlands-Vlaamse Accreditatieorganisatie (NVAO). Retrieved from http://www.nvao.net/page/downloads/Internationalisation_of_Higher_Education_in_Europe_DEF_december_2010.pdf

Gunter, A., & Raghuram, P. (2018). International study in the global south: Linking institutional, staff, student and knowledge mobilities. *Globalisation, Societies and Education, 16*(2), 192–207.

Harrison, N. (2015). Practice, problems and power in 'internationalisation at home': Critical reflections on recent research evidence. *Teaching in Higher Education, 20*(4), 412–430.

Hammer, M. (2012). The intercultural development inventory: A new frontier in assessment and development of intercultural competence. In Vande Berg, M., Paige, R. M., Lou, K. H. (Eds.), *Student learning abroad* (pp. 115–136). Sterling, VA: Stylus.

Hudzik, J. K. (2011). *Comprehensive internationalization: From concept to action*. NAFSA: Association of International Educators.

Knight, J. (2004). Internationalization remodeled: Definition, approaches, and rationales. *Journal of Studies in International Education, 8*(1), 5–31.

Knight, J. (2006). *Internationalization of higher education: New directions, new challenges*. IAU.

Knight, J. (2008). *Higher education in turmoil: The changing world of internationalization*. London: Sense Pub.

Leask, B. (2004). Internationalisation outcomes for all students using information and communication technologies (ICTs). *Journal of Studies in International Education, 8*(4), 336–351.

Mittelmeier, J., Rienties, B., Rogaten, J., Gunter, A., & Raghuram, P. (2019). Internationalisation at a Distance and at Home: Academic and social adjustment in a South African distance learning context. *International Journal of Intercultural Relations, 72*, 1–12.

Mittelmeier, J., Rienties, B., Gunter, A., & Raghuram, P. (2020). Conceptualizing Internationalization at a Distance: A "Third Category" of University Internationalization. *Journal of Studies in International Education, 25*(3), 266–282.

OECD. (1996). *Internationalizing the curriculum in higher education*. OECD press.

Peng, S. Y. (2010). Impact of stereotypes on intercultural communication: A Chinese perspective. *Asia Pacific Education Review, 11*, 243–252.

Ramanau, R. (2016). Internationalization at a distance: A study of the online management curriculum. *Journal of Management Education, 40*(5), 545–575.

Rubin, J., & Guth, S. (2015). Collaborative online international learning: An emergent format for internationalizing curricula. In A. S. Moore & S. Simon (Eds.), *Globally networked teaching in the humanities theories and practices* (pp. 15–28). Routledge.

Salisbury, M., An, P., & Pascarella, E. (2013). The effect of study abroad on intercultural competence among undergraduate students. *Journal of Student Affairs Research and Practice, 50*(1), 1–20.

Shiozaki, H. (2016, January 21–22). *Collaborative online international learning (COIL) for critical reading of media: Collaboration between IIUM and Kansai University.* Paper presented at the International Language and Tourism Conference, Kuala Lumpur, Malaysia.

Stigger, M., Wang, D. L., & Bordilovska, A. (2018). *Internationalization within higher education: Perspectives from Japan*. Springer.

Tait, A. (2018). Open Universities: The next phase. *Asian Association of Open Universities Journal, 13*(1), 13–23.

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Keeping a School Community Together in Times of COVID-19

Attilio Galimberti

> *Education is not the filling of a pot but the lighting of a fire.*
>
> W.B. Yeats

1 Background

Before the world pandemic, Bergamo, a historic city in Northern Italy, was almost unknown to the rest of the world. Unfortunately, a massive virus spread was responsible for bringing Bergamo to the fore. The city had just started the first day of Carnival on Monday, February 23, 2020, when the week ended with the interruption of lessons because of COVID-19. It did not take long before the whole region, Lombardy, was fully locked down with all schools closed after 2 weeks. The rest is history. This city was devastated by coronavirus (COVID-19).

Paleocapa Technical High School is a school where 1800 students a year specialize in computer science, electronics, and electrical, mechanical, and textile engineering. It was a real shock when all the schools were closed. We thought that schools would be closed only for a short time, but then we realized that the closure would continue until the end of the school year.

From the first days of the lockdown, the Italian Ministry of Education informed teachers that they had to guarantee the delivery of distance education activities. On the official Ministry website, teaching resources and educational platforms appeared on the first days of this emergency in order to hastily train an entire category of teachers who, except for a small number, were not accustomed to teaching online or in a blended learning context.

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It was difficult to deliver online classes to students who were presumably struggling and were losing motivation – not only because of this unexpected teaching situation but because they knew that some of their friends, classmates, teachers, family members, neighbors and other acquaintances were ill, infected, or hospitalized. Almost every day we learned that some of these people had passed away. Consequently, the focus was not only on selecting the most motivating tools for language learning but on finding effective ways to try to divert students from their fears, anxieties, and concerns and let them share how they were spending their quarantine at home with their families.

Learning online represented a useful way of not losing contact with the school community. An important aspect of this uneasy situation was the fact that everyday students were sharing much more time with their parents and other family members than before.

This had advantages and disadvantages at the same time. On the one hand, closer family relationships were established in the quarantine. On the other hand, this new family organization had brought new problems, such as sharing electronic devices among children for their online lessons and the parents for their smart working, not to mention slow Internet connections and technical issues.

The three case studies presented here from my teaching experiences during the COVID-19 pandemic illustrate how the main aims of learning a language changed during this disease outbreak and how learning technologies were beneficial.

2   Case Study 1: A Project-Based Learning Experience

During the first days of the lockdown, the way students were addressed changed immediately. Waiting for each of them to appear onscreen in their new virtual classrooms via video conferencing, we teachers greeted them one by one, which is rarely done in a physical classroom in Italy.

It was a bit embarrassing to ask the usual question: "How are you this morning?" Teachers were afraid of hearing awkward answers about the health conditions of their family members. It was not unusual to hear that some had been hospitalized in another Italian city, perhaps miles away, or even in another European city.

To avoid uncomfortable conversations, the focus was on everyday routines, which had changed a lot. One of these changes was related to meals and mealtimes. Very rarely had students previously eaten breakfast, lunch, and dinner at home and with the whole family. An interesting fact was that most students said that they were learning how to cook some dishes from their parents or grandparents.

So, why not start from this new family reality to go on to learning and practicing English? Actually, before the lockdown, a joint project had been implemented with an American school in New Jersey where students study the Italian language in their curriculum.

Therefore, this first case study refers to this multilingual project carried out using project-based learning (PBL) in which learning shifts from a teaching-centered approach to a student-centered one using real-world tasks.

PBL is quite different. Students need to make a final product based on a kind of project chosen according to their needs and interests. The teacher is their guide and helps them set up a learning environment in which students can express their creativity, collaboration, and critical thinking. The distinguishing feature of PBL is that it is public since the students' final product has to be presented to real people.

It immediately seemed that in this situation it might be appropriate to shape the PBL according to the emergency circumstances in which we lived and worked. The challenge was to keep a group of 23 students united despite their physical isolation at home. Involving some of their family members could alleviate the students' isolation and help them face this serious outbreak by devoting their extended time to learning how to cook a family dish.

3   Planning the PBL

In small groups and using a shared instructional document, students planned objectives, steps, and tasks autonomously. They chose a topic related to food, the tools they had to use, and the ways to show their final product. They also had an audience already available: the American students from New Jersey. One of the teaching objectives was to have students practice the English language, but the most important goal was to have them feel part of a big community in such a painful moment. The class was divided into five groups. Each group worked from a distance online to prepare the recipe for their favorite dish. Then, together with their family members, they demonstrated how to make this dish in their original language, in Italian, or in English.

Students were 16 or 17 years old and studied at Paleocapa High School where their core subject is computer science. With the help of their family members, they chose their favorite or most popular recipe in their family, wrote down the ingredients, learned how to prepare this dish by watching somebody else in the family when they were preparing it, wrote a script for the video mainly in English, and then recorded the video showing their preparation of this dish in English or in Italian. Some parts of the videos were also recorded in Albanian, Arabic, Romanian, Spanish, and even the local dialect! Some students come from other European countries or other continents, and it was a good idea to have them use their original languages. They also added appropriate subtitles, usually in English and in Italian if the person spoke English or another language. In all cases, Italian and English were the main languages used in writing and speaking because the "public" or audience of the presentations was represented by the group of students and teachers of Italian in the American school.

The tool students used to record and upload the videos is an excellent educational platform called Flipgrid. It allows people to exchange video messages. Their

videos were made using a smartphone and other simple free tools to edit and subtitle them such as YouCut, Adobe Premiere, Windows Movie Maker, or iMovie. As an extension of this project, a class blog was created by the students to show how they prepared their dishes. They used a free web hosting platform – https://dfaw.000webhostapp.com/.

4   Case Study 2: "Stay Home" Project

Keeping schools closed for weeks and not being able to leave the house were exceedingly difficult experiences. It was clear that locking up an entire population was not a simple thing. The urge to "escape" was strong. However, due to the serious pandemic that was causing thousands of deaths, it was necessary to respect the ban on external interaction with other people.

After the cooking project, a second and new Flipgrid project was then created for our classes, giving it the name "Stay at Home." Students were asked to record a video announcement in which their main objective was to convince many others to stay home.

At the same time, they had to describe and show their best idea and way to pass the time at home to fight boredom. Finally, everybody had to vote on their mates' videos by adding a "like" after watching and listening to them. The main aim of this activity was to have the students feel part of the school community.

Since the pandemic had started spreading slowly in the USA, the students from New Jersey were involved again. They, too, recorded short video messages about their situation, lesson interruption, and doing lessons from home.

This is the link to see some of the videos created by the students (https://flipgrid.com/bed955a8) and the password (Paleo-2020). There were more than 100 responses, some even recorded by teachers from Utah State University who had planned to send student teachers to Italy prior to the pandemic. The school in Bergamo pre-COVID pandemic had organized a project in which student teachers would come to Italy to teach lessons together with some of the subject teachers who usually deliver part of their content in English. This European project is called Content and Language Integrated Learning (CLIL). However, just a few days before the departure of these student teachers from the USA, given the very worrisome situation, it was agreed to postpone the project. The USA began to cancel flights to Milan and other Italian cities. Fortunately, having these student teachers come to Italy only to spend 2 months confined in their Italian host families' homes was avoided. Toward the end of the school year, students were asked to fill in a questionnaire on this Stay Home activity during the lockdown. Here are some of the most interesting questions.

1. How do you rate the 'Stay Home' experience with Flipgrid?
     (interesting   uninteresting   not interesting at all.)
2. How did you feel when you had to record the video?
     at ease   a bit embarrassed   uncomfortable
3. Was it difficult to think about what to say in the video to convince others to stay at home?
     a lot   a bit   not at all
4. Did the experience help you feel less isolated and closer to your classmates?
     yes   just a little   not at all
5. Did you enjoy communicating in English about your time at home during the quarantine?
     yes   not much   not at all

As for their responses to questions 4 and 5 regarding communicating in English, "yes" was the most frequent answer – 95%. Students did appear to benefit from these communication activities in English, which helped them feel more connected during the quarantine.

These responses made teachers reflect on the fact that the desire to learn and actively use a language depends on how emotionally involved the students are. This illustrates the so-called holistic curriculum in which the learning experience integrates subject, community, thinking, earth, body-mind, and heart and soul in teaching and learning (Miller, 2019).

5   Case Study 3: "A Language Competition" Project

The third case study demonstrates how the use of gamification techniques can be helpful to motivate students. The most common definition of gamification is "the use of game mechanics and experience designed to digitally engage and motivate people to achieve their goals" (Yasmin, 2015). Gamification tools help make boring tasks more entertaining. They use points, levels, and awards to engage people in competitive tasks in a social community.

The psychological impact consists of encouraging people to compete and do their best. The satisfaction of accomplishing a difficult task contributes to trying, doing better, and being rewarded. Instead of feeling frustrated because of a negative mark, students experience failure as something to overcome and continuously look for positive reinforcement.

One of the most popular gamification tools known in schools is Kahoot (https://kahoot.com/), a game-based learning platform primarily used for formative assessment. In the USA Kahoot is used by many K-12 students with positive effects on

students' performance. Even in Europe, this tool is immensely popular, and many teachers of different subjects take advantage of its didactic power.

Although students like Kahoot, new tools that are used to enliven lessons and change teaching activities may become boring when they are repetitive. In the lock-down, it was even more necessary to try out different platforms, to keep students' attention always focused on ever-changing tasks.

During the Easter holidays, Italy was still in the middle of the pandemic, although things were slowly improving. It was strange to tell students "Enjoy your Holidays!" as everybody knew that nobody could go anywhere.

Students were therefore urged to use an app called "QuizYourEnglish" (https://www.cambridgeenglish.org/learning-english/games-social/quiz-your-english/) offered by Cambridge English. The app was designed for students preparing for the Cambridge English language exams. This app allows people from all over the world to compete with other learners. They can choose different topics (e.g., technology, going out, studying entertainment, grammar, language level from A1 to C1) and challenge other players to English games via Facebook or search an opponent by name. The final aim of the game is to score the best.

It is not difficult to understand that competing with players is very motivating for students when learning a language. This was the reason why a "school competition" was set up among the students during Easter holiday. Students from many classes (from the first high school year to the fifth – in Italy high schools last 5 years) were invited to take part in this competition.

After downloading the app and registering with the first letter of their surname and their class (e.g., MARIO R. 1IC), students had to choose one or more topics the app offers. As far as grammar and language topics were concerned, they could decide which level to take part in. To maximize competition, students were given a precise period to connect every day and were asked to compete for about half an hour.

At the end of the daily competition, students could see their ranking by clicking on the function "Full Leaderboard" and selecting "Italy." When the competition ended, the teachers took some screenshots of the leaderboard so that they could draw up a ranking and see who the top student with the highest score in each class was. There were about 120 participants, which was a particularly good number considering this voluntary activity was to be done during the Easter holidays. In 2021, a prize-giving event will be organized, and these students will receive an Easy Reader Book or an English language magazine.

6   Conclusion

It is necessary to share these experiences with other teachers worldwide in an overly critical time for schools. The global crisis caused by the COVID-19 pandemic in 2020 has given teachers many opportunities not only to collaborate but also to find new educational roles, activities, and tools. Not only was using learning

technologies one of the ways and means to survive in such a challenging time but also a major support for students and their families in facing the shock provoked by the lockdown. These three case studies from our experience in teaching online via technologies during the COVID-19 pandemic in Italy illustrate the educational lessons developed and learned during this experience.

In Italy, despite criticism and practical problems, the lethal virus has given a strong impetus to the renewal of teaching methodologies and practices. It has significantly contributed to reflection on the importance of the teacher-student relationship. In online classes, this has improved the personalization and individualization of learning paths. For example, the opportunity given to the students to use online platforms has allowed contact of students with their teachers. This has turned out to be very much appreciated by the weakest and shyest students.

When the schools reopen post COVID-19, surely even the teachers who have always declared themselves against distance learning and the use of educational technologies will have had the opportunity to experiment with teaching methods other than traditional ones. Furthermore, in one way or another, they will have enriched their professional skills.

References

Miller, J. P. (2019). *The holistic curriculum*. University of Toronto Press.
Yasmin, Y. (2015). *Gamification in E-learning*. Pädagogische Hochschule Ludwigsburg.

Resources

Adobe Premiere. https://www.adobe.com/products/premiere.html
https://play.google.com/store/apps/details?id=com.camerasideas.trimmer&hl=en_US

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Part III
Innovative Teaching and Assessment Paradigms in Crisis Situations

Photo by Husniati Salma on Unsplash: https://unsplash.com/photos/DIC2XZd_YgQ

Toward Resilient Online Assessments: Lessons Learned from the COVID-19 Era

Walid Massoud and Mohamed Abdel-Latif

> *"During COVID-19: No managerial strategies, no teacher training, no debates on technological design or politics, no arguments about the pros and cons—we just do it".*
>
> *Michael Kerres*

1 Motivation and Anticipations

At the beginning of COVID-19, educators and assessment practitioners all over the world had several hard questions. The most demanding questions were when this pandemic will end and how teaching/testing activities can be managed during this period. They found no choice but to expand the use of technology in all fields of education, which was taken with no debates or arguments (Kerres, 2020). They just did it! In fact, everyone gambled on the use of technology and its compliance with the requirements of education in these difficult circumstances.

Assessment is globally one of the toughest educational challenges during the COVID-19 era. According to UNESCO (2020), 58 out of 84 surveyed countries had postponed or rescheduled exams; 23 introduced alternative methods such as at-home testing; and 22 maintained exams. In comparison, exams in 11 countries were canceled altogether (UNESCO, 2020). It seems that there has been an increasing trend toward using online testing in summative and standardized exams. Despite the common challenges and concerns that have been noted by several communities, such as non-ready infrastructure and risk of malpractices, it seems that online assessments will most likely be one of the central characteristics of education in the future.

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Since many researchers anticipate that a new educational ecosystem will be introduced in the coming era, it becomes a must to review/evaluate all existing online assessment options. This review can help different stakeholders by selecting assessment solutions that can satisfy their requirements and needs. Moreover, it can help in upgrading existing solutions or designing new ones that can adapt to the emerging characteristics of the new era, cope with the diversity of contexts, and provide high-quality assessments.

The design of this review has two phases. It has started with an exploratory online survey to explore assessment users' attitudes to online testing, major challenges, and the most commonly used platforms. In the second phase, a critical review of the online assessment models/systems has been conducted in terms of various aspects such as core features, security, practicality, fairness, maintaining test-takers' privacy, equality, and diversity of cultures.

2   An Exploratory Survey

The authors conducted an online survey of the test-takers' and teachers' attitudes of e-testing, challenges, and platforms used for online or e-testing during COVID-19. The survey consists of five multiple-choice questions (MCQs) and an open-ended question. The link of the survey on Google Forms was shared with faculty, teachers, and social media groups. Participation was voluntary and anonymous. Participants agreed on the survey consent before answering the questions.

The participants were 285 test-takers (164 females; 121 males) and 18 teachers (8 females; 10 males) who took or participated in electronic tests. Although the sample is not representative and may be biased (90% Egypt, 9% Qatar, and 1% KSA), we believe that the results can be considered an indication of reality due to the similar nature of challenges of infrastructure and culture in developing countries. The experience of e-testing seems successful, to some extent, from the views of both sub-samples, an average of 6.7 out of 10 (6.72 test-takers and 6.89 teachers). The preference of test types among test-takers is at-home e-tests (56%), paper-based tests (37%), and on-site (lab) e-tests (7%), respectively. Teachers' preference is the same (39%) for at-home and paper-based tests and then comes the on-site e-tests (22%). Fifty-three percent of the test-takers prefer using at-home e-tests for final exams. On the contrary, only 22% of the teachers trust at-home e-tests for final exams. While only 4% of the test-takers have not faced any challenges during at-home e-tests, the rest (96%) have faced challenges and issues; the most common of them are system glitches (45%) and technical issues (35%) such as Internet connections and sudden electricity outage. The testing time has not been enough for 9%, and 6% have the difficulty of having a place at home that complies with the requirements of the test environment. The most frequent platforms used for assessment by the sample can be seen under Learning Management Systems and included Blackboard, Google Classrooms, Microsoft Teams, Microsoft Forms, and Google Forms. Pure online assessment platforms used by the sample were Surpass and Assessment Gourmet.

3   Online Assessment Models: A Critical Review

To understand the nature and limitations of each online assessment model or approach, we first need to explore a taxonomy of the assessment-related systems. It may be hard to have one taxonomy that includes all systems. However, we propose a classification based on our analysis of the available platforms in the market and a review of known taxonomies in the field (Fig. 1). First of all, let us differentiate between two components of educational technologies: learning management systems (LMS) and assessment management systems (AMS). LM (and blended learning)[1] systems, on the one hand, include a testing component to support the learning process. Although the testing component may not fulfill some of the key features of standard online assessment, it has taken the spotlight in most educational institutions during COVID-19 because it is available with the e-learning platform in some organizations or because it is free (which was the case of many participants in the exploratory survey). On the other hand, AM systems are designed to provide high-quality assessments and exams and comply with the standards of testing.

The AM systems and the testing components can also be classified based on delivery mode into two models (Fig. 2): center-based testing (CBT) and home-based testing (HBT), which has recently been called at-home testing. The CBT
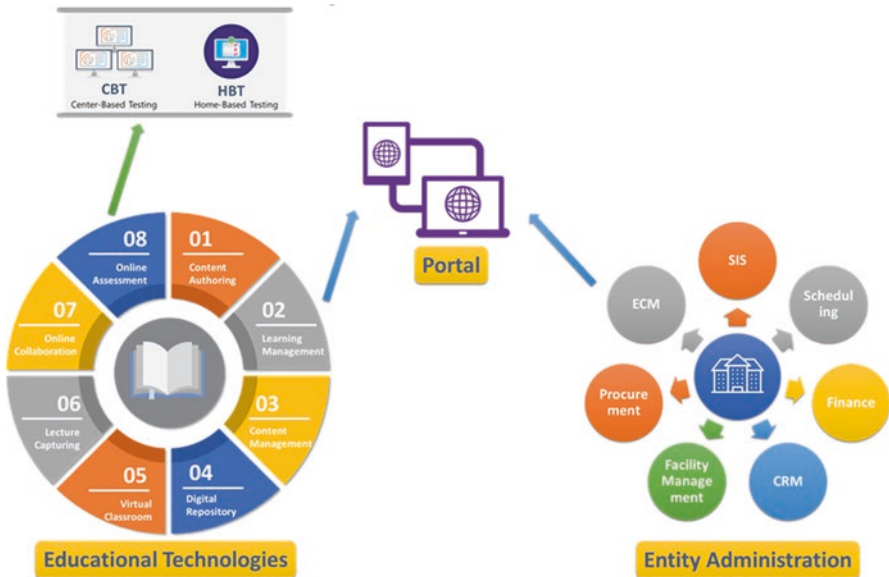
Fig. 1   Digital transformation for educational institutions

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[1] Blended learning (BL) system is a style of education in which students learn via electronic and online media (e-learning) as well as traditional face-to-face teaching, such as Microsoft Teams and Google Classroom.
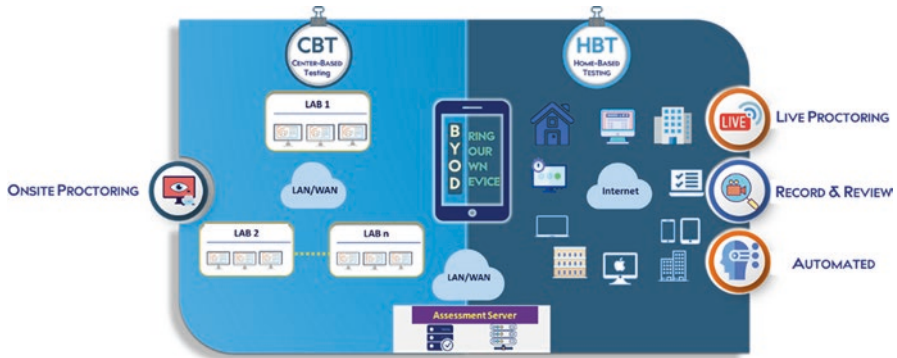
Fig. 2 Classification of assessment management system**s**

model usually takes place in computer labs by using desktops or laptops under the direct supervision of human proctors. Due to a limited number of labs in some educational institutions, a new sub-model has emerged, which is bring-your-own-device (BYOD). Institutions using the BYOD model ask test-takers to bring their laptops or tablets to have their tests in classrooms under the supervision of a teacher or a proctor. The HBT model usually takes place at home or any other locally suitable test environment by using the Internet on desktops, laptops, tablets, or mobiles. Mobiles with screen size less than 10 inches are not recommended for testing. The requirements of a test environment may include that the test-taker is alone in the room and the testing area is free of outside materials.

Within the HBT model, some institutions have utilized the learning management or blended learning systems to offer their summative exams (course quizzes and final exam) by integrating secure browsers. Secure browsers are applications that have control over the test-takers' devices to prevent test-takers from using the Internet or materials that are saved on their devices. They also prevent test-takers from copying-and-pasting the questions or taking screenshots of the test content.

Although many institutions use this approach, it lacks very important testing characteristics, which include having full control of the test situation and preventing impersonation. Failure to visually observe test-takers during the exam allows anyone to help the examinee in answering the questions or even answer the test on their behalf. Although before the start of the test all test-takers must accept the testing policies that impede these violations, the use of such an approach will lead to unfair situations as the results will be biased to test-takers who will crack the system over those who will follow the policies. Furthermore, it represents a high risk to the quality of the test (American Educational Research Association et al., 2014) and the credibility of the test results (Association of Test Publishers & National College Testing Association, 2020). Nevertheless, some institutions have resorted to this approach due to several reasons, such as simplicity, the large number of test-takers to be tested, and limitations of budget and resources.

Far from non-proctored tests, we can propose three models for online proctoring that can be recognized from the various platforms on the market. The proctoring component is available either as a sub-module of an LM or AM platforms or as a standalone software that integrates with other platforms. These proctoring models are live, record-and-review, and automated proctoring.

A. **The live proctoring model** refers to a session in which one or more human proctors use technology to manage, monitor, and supervise remotely one or more test-takers, ID verifications, test authentications, test environment, and test device(s). It ensures that test integrity is maintained through the use of secure browsers, web cameras, and screen-sharing software. It can use machine learning and artificial intelligence (AI) algorithms to flag irregularities and suspicious instances, alerting the proctor to take action or decision.
B. **The record-and-review model** refers to recording test-takers' behaviors, data, and screens during the test to be reviewed later by human proctors. It also uses the same technologies of the Live Proctoring and flags or adds time-stamped remarks on potential suspicious instances to ensure test integrity. However, the irregularities and suspicious instances are reported for the post-test review. Some systems provide a review of the recording by professional proctors as a service to educational institutions.
C. **Fully integrating AI** technology is the third model to monitor test-takers during exams and ensure test integrity by providing reports of potential suspicious instances just after the test session ends. Table 1 summarizes the most important features of proctoring models.

Table 1 Key features of proctoring models

Key features	Live proctoring	Record-and-review	Automated
Test-takers' ID verification	Manual/automatic	Automatic	Automatic
Test-takers' Authentication	Manual/automatic	Automatic	Automatic
Session launch with a live proctor	Yes	Yes	Yes
Real-time security checks (test-takers' environment)	Yes	-	-
Real-time proctor, monitoring, and flagging	Yes	-	-
Proctor intervention	Real-time	Post-test	Post-test
Post-test review of the session to catch misconduct	-	Yes	Optional
AI flags any irregularities and suspicious instances	Optional	Yes	Yes
Video recording of test-takers' behaviors and screens	No	Yes	Yes
Time-stamped video events for review	Optional	Yes	Yes

Moreover, the proctored online exams, especially using the live model, have been adopted, for standardized and high-stakes exams that include school leaving and university entrance exams as well as gateways for jobs. Based on research, the developers and users of this approach claim the robustness of the measures they use. The main purpose of this approach is to have full control of the test situation and prevent impersonation.

A pure live proctored exam refers to live proctored exams implemented without the supported of AI. The "pure" live proctored exams have considerable challenges, such as the limited number of test-takers to be tested in each session (max. 6), availability of experienced proctors, dividing proctors' attention, the complexity of the systems, and inconvenient scheduling as based on available proctors and time zone differences. The utilization of AI has empowered live proctoring through flexible scheduling and an increased number of test-takers to be tested at the same time (Harmon & Lambrinos, 2008; Hylton et al., 2016; Milone et al., 2017).

One major plus of the live proctored exams is the real-time intervention as the proctor can take action like canceling the test if there is an attempt of cheating or malpractice, especially if there is an impact on the security of the test content. Both record-and-review and automated models have a post-test intervention, which may be sometimes late.

Exams using the record-and-review and automated online assessment proctoring and monitoring models have been reported to negatively affect test-takers' academic performance (Crişan & Copaci, 2015; D'Souza & Siegfeldt, 2017; Dawood, 2016). Allowing human proctors to start the test to decrease test-takers' test anxiety is one way to overcome this challenge. Another method can be incorporating materials within test-takers' e-learning courses and sample online exams that help test-takers become calmer while taking their online exams (Vitasari et al., 2010). Furthermore, the systems using the automated model should allow test-takers to provide an appeal to a human reviewer to evaluate the fairness and appropriateness of the decision taken (Association of Test Publishers & National College Testing Association, 2020). Hence, some of these systems added a layer to automated-proctoring features called audit for human reviewers.

The proctored online exams, in general, have financial, technical, and sociocultural challenges. The financial challenge is mainly the high cost of proctored online platforms that prevent institutions and test-takers from trying it. The technical challenges may also be related to a limited budget, such as the absence of suitable Internet bandwidth for using the camera and video recording. Furthermore, cracking the security of the used technology is always a potential threat. The financial and technical challenges may increase educational inequalities and limit access to education at the end. The sociocultural concerns include the refusal of some test-takers, especially females, to allow photographing and video recording of themselves and their rooms during the test. This concern is considered a possible breach of test-takers' privacy and a limitation in some cultural/religious contexts. This concern has highly increased due to data leaks of many technology firms and governmental servers in previous years. The European data protection law (European Union, 2016) and the Privacy Guidance When Using Video In The Testing Industry

(ATP Security Committee, 2020) are useful resources that can help to govern such issues, especially the collection and processing of a test-taker's personal information, the nature of data, and the purposes for which it will be used.

Further to the review of the online assessment models and to help the readers learn more about the features of various platforms, we came up with a comparison between the commonly used platforms. The comparison is based on the key features that can be impacted by the purpose of the test (high, medium, or low stakes) and accordingly can impact the quality of delivered assessments. The features are item-banking capabilities, item development, test construction methods, delivery modes, proctoring options, scoring methods, and supported statistics. We believe that this comparison can guide readers to identify their needs and select a suitable solution/platform. This comparison can be accessed via the following link: https://sites.google.com/view/assessment-platforms/home, and we will keep updating it by adding new platforms.

4   Conclusion

It may be hard to draw a conclusion about the future of online assessments as the pandemic has not ended yet, and there is an opportunity for emerging factors that may add to the future of using technology in assessment. However, we can draft some lines about the overall image based on our review of the available online assessment models.

It is noticeable that at the beginning of the COVID-19 era, the HBT model has dominated most of the exams in many institutions. However, due to challenges of the proctoring models and with the re-opening of some testing centers, the CBT model has started slowly to re-operate with social distancing and precaution measures. It seems there is little trust in the usage of AI and a lack of well-developed standards for using video in the testing industry. Accordingly, we can conclude that in the post COVID-19 era, the CBT will be the best model for high-stakes exams, and the HBT can be used widely in medium and low stakes. This conclusion is consistent with teachers' fears about using HBT for final exams reported in the survey. We expect that the non-proctored secure exams will stop soon due to the weaknesses related to its security.

The gap between the learning management systems (with an assessment component) and the assessment management systems will gradually disappear due to the high demand from educational institutions to use one solution for both purposes, which is the case of many platforms according to our online survey. The vast development of AI and educational technologies will assist in achieving the fusion between the two systems. Nevertheless, the need for pure, highly equipped online assessment systems will continue for high-stakes standardized exams only.

It is also obvious that educational entities, especially in developing countries, have to upgrade their infrastructures, redesign their organizational schema, and

develop their human resources to adapt to a new era. All these changes have to comply and achieve 21st century skills in education. Ministries of education and organizations that fail to cope with these changes will have hard times and may not be able to qualify their graduates for the market.

5   Recommendations

Based on our analysis and evaluation of the current approaches and common practices that have been adopted during COVID-19, as well as the lessons learned from the COVID-19 era, we recommend these guidelines for each group of assessment users.

For educational policymakers, we recommend they review the current testing standards and policies to create new policies and adapt the current ones to ensure their appropriateness for the post COVID-19 era. They also have to establish new policies that highly consider test-takers' privacy and cultural/religious concerns.

As for decision-makers in educational institutions, they need to be open-minded to modern methodologies and innovations that can cope with the shift happening to test-takers while transferring from a traditional testing environment to the new conditions. They also have to choose the most fitting methodologies for the context of their institution. Then, they have to ensure the selected methodologies fit with the context and standards of their educational institution, as there is no single methodology that fits for all educational settings.

For test designers, it is recommended to consider the new conditions and methodologies while designing assessments by shifting from assessment of knowledge to critical thinking and problem-solving skills, which should be reflected in the selection of item types and design of scoring rubrics. Estimation of answer time and test-takers' experience of using technology should be considered as well to ensure testing quality and fairness.

For educators, administrators, and IT professionals, it is recommended to choose the most appropriate tools and practices that standardize and facilitate the use of the selected methodologies, whether in test administration or invigilation. Appropriate training should be provided to those who are involved in testing situations to enforce the new policies and avoid exposing test-takers to obstacles that may affect their performance in the test.

Finally, for researchers in the field of educational technology, we recommend reviewing our proposed classification and conducting research that can use the new computer science technologies and innovations to empower online assessment systems.

References

American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (2014). *Standards for educational and psychological testing* (2014th ed.). American Educational Research Association. https://www.apa.org/science/programs/testing/standards

Association of Test Publishers, & National College Testing Association. (2020). *Online Proctoring and Monitoring Standards (Draft Version)*.

ATP Security Committee. (2020). *Privacy guidance when using video in the testing industry*. Amazon Digital Services LLC - KDP Print US. https://books.google.com.qa/books?id=JbSVzQEACAAJ

Crișan, C., & Copaci, I. (2015). The relationship between primary school childrens' test anxiety and academic performance. *Procedia – Social and Behavioral Sciences*. https://doi.org/10.1016/j.sbspro.2015.02.311

D'Souza, K. A., & Siegfeldt, D. V. (2017). A conceptual framework for detecting cheating in Online and take-home exams. *Decision Sciences Journal of Innovative Education*. https://doi.org/10.1111/dsji.12140

Dawood, E. (2016). Relationship between test anxiety and academic achievement among undergraduate nursing students. *Journal of Education and Practice, 7*, 57–65.

European Union. (2016). *General Data Protection Regulation (GDPR) – Official Legal Text*. General Data Protection Regulation. https://gdpr-info.eu/

Harmon, O. R., & Lambrinos, J. (2008). Are online exams an invitation to cheat? *Journal of Economic Education*. https://doi.org/10.3200/JECE.39.2.116-125

Hylton, K., Levy, Y., & Dringus, L. P. (2016). Utilizing webcam-based proctoring to deter misconduct in online exams. *Computers and Education*. https://doi.org/10.1016/j.compedu.2015.10.002

Kerres, M. (2020). Against All Odds: Education in Germany Coping with Covid-19. *Postdigital Science and Education*. https://doi.org/10.1007/s42438-020-00130-7

Milone, A. S., Cortese, A. M., Balestrieri, R. L., & Pittenger, A. L. (2017). The impact of proctored online exams on the educational experience. *Currents in Pharmacy Teaching and Learning*. https://doi.org/10.1016/j.cptl.2016.08.037

UNESCO. (2020). Exams and assessments in COVID-19 crisis: Fairness at the centre. *United Nations Educational, Scientific and Cultural Organization*, 1. https://en.unesco.org/news/exams-and-assessments-covid-19-crisis-fairness-centre

Vitasari, P., Wahab, M. N. A., Othman, A., Herawan, T., & Sinnadurai, S. K. (2010). The relationship between study anxiety and academic performance among engineering students. *Procedia – Social and Behavioral Sciences*. https://doi.org/10.1016/j.sbspro.2010.12.067

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Best Practices for Building Faculty Presence and Student Engagement

Iram Tanvir

"The world is changed. I feel it in the water. I feel it in the Earth. I smell it in the air. Much that once was is lost. For none now lives who remember it." (Jackson, 2001, 0:00:32)

1 Redefine Your "Why?" to Include Empathy

Faculty wear many hats, from a field expert to a mentor, with leadership being the common denominator among all. In his book *Start with Why*, Simon Sinek (2009) argues that great leaders have one thing in common: they all know their "why." Extended lockdowns, measures of social distancing, and strained finances make us seek more personal and meaningful relationships than ever. According to a Toronto Star Editorial (May 8, 2020), COVID-19 might be laying grounds for the upcoming mental health pandemic. These challenging times call for the role of faculty to be redefined to include a "why" and approach the role as that of mentors, leaders, and gurus who not only impart skills but help the followers steer through tough times. I suggest revisiting your "why" to capture the essence of mentorship – empathy (Sinek, 2009).

Revisiting my "why" helped me adjust my vision, stay focused, and energized and be consistent and empathetic. I had a student in one of my asynchronous courses who stopped submitting his assignments halfway into the course. Upon inquiring, he shared that his grandfather, whom he was very attached to, was critically ill. He called me a few times to request extensions for his course deliverables, but we ended up talking more about Grandpa than about school. He submitted his pending work within the extension period and passed the course. He later on called to update me

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when his grandfather passed away. There have been many such cases in which I approached failing students empathetically to offer extra help, just to realize that they were dealing with some serious issues: anxiety, insomnia, domestic violence, death of a close family member, and financial issues, to name a few. The majority have exceeded the minimum requirement of the course. It might be safe to conclude that empathy allows students to be vulnerable, which helps them learn and perform better.

2 Break That Ice with Reverse Introduction

Most of the learning management systems feature the faculty profile and introduction on the course site. These introductions are impactful and give a reason why the faculty has been assigned to a particular course; however, they do little to establish faculty presence and student engagement. I recommend using the technique I call "reverse introduction" to break the ice in the first week and kick off effectively.

Step 1: Student Introductions In this technique, I ask my students to introduce themselves using the course portal. Introductions should include three things: (i) what they want me to know about them, (ii) what makes them different from others, and (iii) what they enjoy the most. They can use the format of their choice – audio recording, video recording, or written text.

Step 2: Draw Insights The introductions generally are insightful, and frequently the choice of the format used to introduce reinforces the insights. I also use the insights to help identify people with similar interests and inclinations, so that they can be grouped together as and when needed.

Step 3: Faculty Introduction and Welcome Note At the end of week 1 or the beginning of week 2, I hold a live session or post a video recording that includes three things: introducing myself, what I have in common with the group, what makes me different, what I found most interesting about each of the students, and also introducing people with common interests.

It is heartwarming to see students' responses. They feel acknowledged and valued as an important member of the group with unique strengths. You will be surprised to see how much your students will value your effort of investing time and energy in getting to know them better in this way. If done effectively, you will not only break the ice at the beginning of your course but will also set grounds for creating a meaningful mentoring relationship. This also helps identify the strengths of the groups as cohorts.

3 Level Up the Content!

What goes in the course pack is strongly influenced by the mode of delivery – synchronous, asynchronous, or hybrid. However, certain practices are effective in engaging students irrespective of the mode of delivery. And keeping the content updated and current makes it to the top of the list. A lot that was considered a norm in pre-COVID-19 times is now irrelevant. Updating the content not only keeps the course contemporary but also adds to the branding of the faculty. I have practiced teaching pre-COVID-19 marketing theories with the "new normal practices," and student engagement has been phenomenal. Living through these novel times, students find updated content more relatable than ever, which adds to student engagement.

Another aspect of "leveling up" involves the content to be relatable. The more relatable the content is, the easier it is for the students to contribute to the group learning. I see much more engagement discussing Instagram in courses with a demographic makeup of 18–25 years of age than discussing Facebook. However, discussion related to Twitter gets more responses from millennial women. Thus, knowing the audience and using the content accordingly can help improve learning and engagement.

Lastly, I suggest helping students steer field problems and approach the problems as opportunities to innovate and grow. Steering the content from data to information to analysis to innovation can have a profound impact on how students approach problems in their field of occupation and life in general. For instance, I have adapted some of my marketing strategy learning activities around the theme of "Challenges and Innovations during COVID-19." The faculty, however, should strike the right balance, so that COVID-19 does not overwhelm the course content.

4 Use LectureBits and BabyClips

In a letter to its shareholders dated July 16, 2020, Netflix identified TikTok as one of its key competitors (Epstein, 2020). The two services do not have much in common in terms of content, but they do compete for customers' screen time. A three-hour-long lecture can be compared to a Bollywood movie with the exception that lectures lack drama, action, music, and dance. Not many would like to watch a three-hour movie with no dance and the same lead actors every week for 11–15 weeks. Experts suggest a content redesign due to a significant drop in the attention span (Murphy, 2019). From Khan Academy to TikTok, we have examples in education, video, and streaming services that suggest moving toward with shorter engagement and learning sessions.

I suggest breaking down a three-hour lecture into three bits. I like calling these "the LectureBits" with each LectureBit followed by activities, group work, and audio/visual resources. I used this in my Marketing Strategy classes in conjunction

with the leveled-up content and have experienced the results that earned me to write this chapter. For asynchronous courses, I try making short customized clips with three features: (i) a short duration, (ii) delivery of the content, and (iii) mention of a couple of students in each clip. In addition to bringing the "wow factor" to the content, it also creates the faculty-student connection that is characteristic of synchronous courses, builds faculty presence, and adds to the engagement. I call this "the BabyClips Approach." Experts also suggest using bite-size video content to build engagement (Wochit Inc., 2016).

5 Encourage Learning Through Collective Vulnerabilities

Research suggests that adults learn better in collaborative group settings if used effectively. Imel (1991) and Brown's (2015) work present strong evidence in support of vulnerability and its effectiveness in cultivating relationships. I use a combination of the two to keep engagement levels high. The week following reverse introductions involves discussing our vulnerabilities as a group. We identify the industries we want to explore for the term. Students then sort themselves into teams based on their interests. Each team picks a current strategy article or case from a trusted business news source, conducts research, and shares the learning with the rest of the group. Teams are graded based on their contribution to the learning of the group, thus encouraging cooperative learning to get improved results and engagement (Peshkam, 2020). This not only helps students stay on top of the current practices shaping their field of interest but also gives them confidence as they contribute to the learning of others, including the faculty.

6 Leverage Social Media to Develop 360° Communication

Having an effective communication plan is crucial to establishing faculty presence and student engagement. I begin the term by posting a warm customized "welcome note" outlining the essence of the course, the expectations, and the values a few days before the start of the course. The welcome note is followed by subsequent short announcements on things like submission format, online meeting schedule, and meeting reviews. I make a conscious effort to keep the announcements brief and focused instead of posting one long announcement carrying all the information. In my observation, students do not read long welcome notes; instead, short, focused announcements serve better in delivering the specific bits of information that they seek.

In addition to the posts made on the learning management system, I also encourage students to create a social media group for their class. It allows for an efficient flow of information and encourages a coherent approach toward achieving course objectives as a team. Capitalizing on social media also helps develop the course

community that stays active outside of stipulated course hours, keeps the faculty approachable and relatable, and serves as a handy content-sharing portal. For asynchronous courses, using social media allows the faculty and students to connect socially, which is characteristic of synchronous delivery (Cano & Venuti, 2020). I recommend using a combination of tools adapted to meet the need of the specific group. For an asynchronous course with students spread out in Asia and Africa, I use the learning management system, MS Teams, email groups, WhatsApp, and WeChat to build my 360° communication.

Feedback is one of the most important aspects of communication when it comes to establishing faculty presence. I tried using more audio feedbacks last term and noticed an improvement in the way feedbacks were perceived. I received acknowledgment messages that were much more positive and reassuring. It could be the tone of the voice that made the feedback sound more positive or the students feeling valued. Lastly, it always helps to do a quick review of things as you go along the course, from reviewing the topic at the end of the hybrid or synchronous session to making meeting review announcements. Everything adds up to create a holistic 360° communication plan.

7   Be the Brand

Being the brand is synonymous with building trust and delivering the promise over and over again. It is an extension of your "why" and thus strategic in nature. Defining your core identity will answer why students should take the course with you. It is a rigorous exercise that gets you to think about your strengths and values and is worth the time and energy. You can use a combination of your expertise, personality, values, interests, practices, and more. I make a conscious effort to stay true to my identity and to consistently improve in delivering my promise of being "Robust, Fun, Empathetic, Innovative, and Blue Hair."

It also includes defining standard practices like response time. As a practice, I reply to most of my students' emails within 15 minutes of receiving them, which reinforces the fact that they are valued. This also includes making a conscious effort to keep the interaction upbeat and fun. Having a good sense of humor helps particularly well in building engagement for relatively dry topics. All this adds to how students see you as a brand.

Lastly, end of term "goodbyes" have always made me sad, but I cannot emphasize enough the importance of giving the course a happy ending with a "thank you note." Last term, I wrote personalized messages to students upon the conclusion of the course, thanking them for the wonderful term and offering to write a reference letter for them if they need it at any point in time. All that you do adds up to your branding and should come from a place of love and genuineness.

8 Game On!

Games are a fun way to build engagement and encourage teamwork. Options could range from using team-based simulation games built into the course pack to playing the course-adapted version of Kahoot as your quiz review activity. Games also add to the group's informal learning. As a practice, I let students pick their teams. Breakout rooms provide adequate time and space to allow teams to plan and strategize. Breakout rooms can give the course the energy boost needed to develop the right engagement (Babaian & Schiano, 2020). Poll options also come handy in synchronous courses.

9 Optimize the Medium

Optimizing the medium can add a great deal of value in building engagement. I have built my virtual library of content comprised of videos and charts from both academic and industry sources. I use these resources to complement my LectureBits. This not only makes the lecture more interactive and engaging but also allows the session to flow organically while it establishes the preparation of the faculty.

Most of the media being used by academic institutions allow participants to share reactions like thumbs up, clap, and raising hands. These can be used to engage the students who feel more comfortable hiding behind the camera. Online media also allow a more private space for the groups in the form of the breakout rooms. Breakout rooms, if used effectively, can be used for time-specific activities, brainstorming sessions, discussing problems, and finding solutions. Similarly, the polling feature can be used in many ways, from topic review to playing games to scheduling tutorials. Using emojis can also keep it easy, upbeat, and more personal.

10 Conclusion

Leading with empathy and having a bigger goal in sight will always keep you energetic. Do not be scared of trying new things, and most importantly, take a break every now and then to breathe, meditate, re-evaluate, refocus, and rejuvenate. We are all in it together. Feel free to connect!

References

Babaian, T., & Schiano, B. (2020, April 14). *Energize your online course with group work.* Harvard Business Publishing Education. https://hbsp.harvard.edu/inspiring-minds/energize-your-online-course-with-group-work

Brown, B. (2015). *Daring greatly*. Penguin Publishing Group.

Cano, Y. M., & Venuti, F. (2020). *Online learning can still be social*. Harvard Business Publishing Education. https://hbsp.harvard.edu/inspiring-minds/online-learning-can-still-be-social

Epstein, A. (2020, July 17). *For the first time, Netflix name-checked TikTok as a major competitor*. Quartz. https://qz.com/1881983/netflix-says-tiktok-is-now-a-major-competitor/

Jackson, P. (2001). The lord of the rings: The fellowship of the ring [Film]. Warner Bros.

Imel, S. (1991). Collaborative Learning in Adult Education. *ERIC Clearinghouse on Adult Career and Vocational Education Columbus OH*. (ERIC Document Reproduction Service No. ED377313) https://www.ericdigests.org/pre-9220/adult.htm

Murphy, C. (2019). *The shrinking attention span & what it means for marketers*. Boston Digital. https://www.bostondigital.com/blog/shrinking-attention-span-what-it-means-marketers

Peshkam, A. (2020). *What your pre-COVID course design was missing. 8 cooperative learning practices to enrich your online or hybrid classroom*. Harvard Business Publishing Education. https://hbsp.harvard.edu/inspiring-minds/cooperative-learning-practices

Sinek, S. (2009). *Start with Why*. Portfolio.

Toronto Star Editorial. (2020, May 08). Mental health may be the next pandemic. The Star. https://www.thestar.com/opinion/editorials/2020/05/08/mental-health-may-be-the-next-pandemic.html

Wochit Team. (2016, July 27). *Why are short-form videos so effective on social?* Wochit Inc. https://www.wochit.com/blog/short-form-videos-effective-social-2/

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Using Cognitive Tools in Imaginative Assessment for Learning in Higher Education: Engaging Learners in Times of Calm and Crisis

Gillian Judson and Ivona Mladenovic

> *Why imagination? Because our ability to engage a world in flux depends on it.*
>
> *Liu and Noppe-Brandon (2009, p. 27)*

We often call imagination to action in times of crisis. With pandemics impacting our lives in so many profound and unforeseen ways, we need to envision the possibility of finding direction amidst uncertainty. Educators worldwide are re-imagining how they teach, and learners of all ages are re-imagining how they learn.

Our exploration of imagination actually began before COVID-19 radically changed education. We know that imagination lies at the heart of all learning (Egan, 1997). It is vital for functioning in a rapidly changing and complex world (Gamwell & Daly, 2018; Paradis, 2019; Robinson, 2017), and allows for empathy, emotional wellness, and social justice (Greene, 1995). We sought to better understand imagination's role in our pedagogy and, specifically, its potential role in improving students' learning and creativity. Starting in the Fall of 2019, we began to explore ways to engage imagination in the context of assessment in higher education.

All educators know that assessment plays a key role in the teaching-learning dynamic. It shapes how and what instructors teach and learners learn, impacting students' achievement and motivation (Ajjawi et al., 2017; Carless, 2017a; Sambell et al., 2017). Assessment for learning (AfL) is an assessment practice that has the potential to effectively support both learning and student engagement (Carless et al., 2017). This chapter describes our experiences in implementing imaginative AfL

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practices designed to emotionally engage students and give them creative freedom to express their learning. We worked in two dramatically different contexts: a graduate seminar with 18 students and an undergraduate science course with 107 students. Our first implementation occurred in a face-to-face teaching context before the pandemic. Our second implementation occurred soon after the pandemic led to the cancellation of all face-to-face classes, closure of all campuses, and a transition to remote learning. When we embarked on our investigation of imagination in the context of AfL in higher education, we did not realize that we were implementing practices that supported students' engagement, motivation, and creativity in times of calm and times of crisis. We hope that in sharing our experiences, we can support other educators' pedagogical growth and, ultimately, create space for a collaborative re-imagining of assessment in the context of higher education post-pandemic.

1   Imaginative Education

Our use of the terms "imagination" and "imaginative" is rooted in Kieran Egan's pedagogical theory of Imaginative Education (Egan, 1997; Egan & Judson, 2016). The term "Imaginative Education" (IE) here refers specifically to Egan's conception of education and the practices it includes as opposed to a more general sense of creative or innovative pedagogies. In IE, imagination refers to the ability to think of the possible in all things. Imagination is the source of invention, novelty, and flexibility in human thinking.

In line with Immordino-Yang's (2015) research in affective neuroscience, we acknowledge that emotional and imaginative engagement lies at the heart of effective learning (Judson, 2019). Immordino-Yang (2015) indicates that, in order to remember, we must be affected. IE is a pedagogy that indicates how to affect learners. Egan (1997) contends that cognitive tools engage and develop the imagination by engaging emotion and connecting it with knowledge in the process of learning. As a whole approach to education, IE offers an understanding of how cognitive tools impact the growth of knowledge in the mind and how they impact the shape of the imagination during our lives. Examples of cognitive tools include:

- **Stories** that help people to remember things by making knowledge more engaging
- **Metaphors** that enable people to understand one thing by seeing it in terms of another
- **Transcendent heroic qualities** such as strength, steadfastness, or flexibility that help people to emotionally connect to shared emotional attributes of topics.

In this chapter, "imaginative AfL" refers to activities that employ the cognitive tools of IE to assess student learning. We intentionally employ cognitive tools in order to frame learning activities that will engage students in broad thinking and create an emotionally engaging context while providing feedback useful for

students' learning and/or our instructional choices [learn more about Imaginative Education at www.educationthatinspires.ca or www.circesfu.ca].

1.1 Case One (Graduate Course)

Students in this course were all practicing teachers with experience in the classroom ranging from less than five years through more than 20 years. Pedagogically, the students learned about cognitive tools and other aspects of IE pedagogy *through* IE pedagogy. Over the semester, students engaged in various imaginative AfL activities (e.g., role-play, story-shaped entry/exit tickets, outdoor journaling, and "one-word" emotional responses). This chapter looks at the imaginative AfL activity that the students identified as the most impactful on their learning and engagement: "a scholarly role-play." The purposes of the scholarly role-play activity were threefold:

- To encourage students to deeply learn about an educational idea
- To engage students in playful, community-building activities
- To provide students with a broad and engaging introduction to a range of educational ideas.

The main cognitive tools employed in this imaginative AfL activity were a change of context, role-play, and the story form. Early in the semester, the classroom context changed; it became the site of a simulated "educational conference." In preparation for this activity, students had read one theoretical article and then came to class in a role as the author of the article. They presented their ideas and interacted with others, maintaining their role as "expert" throughout the event. The instructor was also in a role as a keynote speaker and conference organizer.

At the end of the course, the instructor asked students for their feedback on all the imaginative AfL activities they had completed over the semester. This request for anonymous feedback included the following questions:

- What assessment activities did you find the most impactful on your learning this semester?
- Which assessment activities were the most emotionally engaging this semester?

1.2 Case One: Instructor Observation and Student Feedback

At the end of the course, all 18 students provided written feedback on the imaginative AfL activities. In response to the two questions, 11 and 12 students respectively identified the scholarly role-play as their first choice. These responses align with the instructor's observations. The students' high level of understanding and accuracy of content matter in the role-play suggests that they had taken time to carefully learn the material. More than that, the questions students posed to one another in role and

their responses to questions about the material demonstrated that they had deep knowledge and, to remain in role, had empathized with the author in order to respond appropriately.

In terms of engagement, the instructor observed students going beyond assignment requirements. The majority of the students had props and costumes to support their role, even though this was not a requirement. Many had read beyond the required article to learn more about the theorist they were representing. Moreover, to the surprise of the instructor, many students stayed in role for the entire evening event—including the dinner break. The scholarly role-play activity provided immediate and useful feedback to the instructor and to the students. From the instructor's perspective, it was a positive learning experience that was highly emotionally and imaginatively engaging for students and, thus, encouraged a deep knowledge of their topic. It revealed students' understanding of key concepts in the assigned articles, offering useful insight for what misunderstanding should be addressed in future classes.

Students' feedback was positive. Two themes that emerged from students' responses link to memory and meaning. Students mention their experience of the activity (e.g., doing a role-play) and the learning of the material as a result of the activity. Nine students said that they found the activity to be a highly emotional experience and, as a result, both memorable and meaningful. For example, two respondents described the learning in the scholarly role-play as "deep." Another said it was "*very* helpful in understanding the theorists" (student emphasis). Another noted that the experience was "unforgettable and inspiring" and "incredibly memorable." One student said the role-play was initially "unnerving" but then provided them with a sense of confidence, while another commented that the "role-play made the articles come alive."

Still, not all the feedback was positive. Two students noted their initial discomfort with the role-play activity due to the "risk" the activity presented for them (e.g., putting themselves "out there" before a sense of trust, community, or safety had been established in the class). Also, two respondents found that the imaginative AfL activities created a sense of dissonance for them in terms of what they were expecting in graduate study. One student commented: "I think [the imaginative AfL activities] made me uncomfortable at first because my expectation was what I experienced in undergrad: sit and listen." Another student's comment points to how imaginative AfL seemed to shift the focus of the class to "learning." She said: "I felt like this wasn't 'learning for grades' but learning for learning, very helpful…when I remember that learning is the goal, not a letter grade."

1.3   Case Two (Undergraduate Course)

During pre-COVID-19 instruction of this course, the instructor did not employ an IE approach to learning with her students, and the theory of IE was not part of the curriculum. The students and instructor met in person for the first nine weeks of the

course. Three weeks before the end of the semester, the pandemic was declared, and the course moved to remote learning. The shift was unexpected and quick; both the students and their instructor found themselves finishing the course in a completely new learning environment. It was then that the instructor employed some imaginative AfL activities.

The imaginative AfL activities in this course required students to answer two open-ended questions on a quiz. The first question employed the "abstract binary opposites" cognitive tool. Students selected one out of three different abstract binary opposites provided by the instructor and shared their opinion on how their choice best represented a dramatic tension within the concept of meiosis. Students had three binary opposites to choose from: alone/together, linear/cyclic, and parent/child. The second question employed the "transcendent heroic qualities" cognitive tool. Students selected a heroic quality and indicated how this quality revealed a central aspect of the general topic of genetics. Students had to choose from the following six qualities: power, mystery, protectiveness, fearlessness, adaptability, and efficiency. In their responses, students had to think broadly about the topics and then justify their selections in both their answers.

After the implementation, the instructor asked students the following question: How did the two questions (referring to the questions using IE cognitive tools described above) on your test help you learn? Students' opinions were gathered in an anonymous online feedback questionnaire. The instructor had observed past students struggle in understanding meiosis and genetics and wondered if employing imaginative AfL activities may be beneficial for student understanding.

1.4   Case Two: Instructor Observation and Student Feedback

The instructor received written responses from 61 students. These responses informed her teaching in at least three ways. The responses:

- Corroborated the importance of establishing assessment approaches early in the course and providing ample time, examples, and practice
- Stressed the need to encourage and support students in thinking for themselves in creative ways
- Stimulated the instructor to design and apply more imaginative AfL activities in her teaching.

Analysis of students' questionnaires provided very positive (54%) to negative (21%) responses. The positive dimensions related to depth of learning, creativity, better concept understanding, real-world application, and self-expression. Students commented on how the questions allowed them to show a deeper and broader level of understanding than pure memorization. Students claimed these questions made them "think of the topics as a bigger picture," "think deeper about the material," and "re-evaluate [their] understanding." Students remarked that it helped to "display [their] own understanding," "understand the concepts a bit better than before," and

"create an analogy that [they] can easily remember for meiosis." One student found the activities "extremely helped in understanding more difficult concepts." Another suggested that the activities caused them to "reflect more in a way that [they] hadn't thought of before." In addition, students claimed that this kind of activity helped them "think outside of the box." A number of students also commented on "intersectional" and "interrelated" aspects of the activity and indicated that it was "fun."

Twenty-five percent of the students revealed both positive and negative dimensions. On the positive side, they remarked that these activities "helped [them] learn faster and better," "overall helped them with thinking about the topics in a different way," and were "engaging and helpful in the understanding of genetics." They claimed that the activities involved critical thinking and expanded their understanding of the concepts. However, on the negative side, students perceived the imaginative AfL questions as unexpected and "kind of strange." A few students claimed that the imaginative AfL questions made them feel "kind of confused and [they] had to think a lot to come up with a reasonable answer." Others expressed a sense of unexpectedness stating, "we did not have [a] heads up" and "I was kind of confused and had to think a lot to come up with a reasonable answer." Lack of familiarity with imaginative AfL activities and applications of their cognitive tools may have resulted in some of the confusion mentioned in students' feedback.

Twenty-one percent of students shared negative feelings regarding this evaluation of their knowledge. They felt caught off guard, confused in their search for the right answer, and stressed to the point of feeling panicked. Overall, students still thought that this activity allowed them to "understand the content a bit better." One reason for these negative feelings may be the fact that in this course, imaginative AFL activities were not employed with the students prior to the test. Within such a context, in which imaginative AfL was not the norm, it is noteworthy that many students still considered it a positive experience for their learning.

2   Discussion (Fig. 1)

Creativity is considered "a hallmark of excellent adult education" (Knox, 2011, p. 98). We believe that the openness of our imaginative AfL tasks created space for our students to express their creativity. In both contexts, many students responded positively to engaging their imagination with course content. Our students felt that the imaginative AfL activities provided them some freedom for individual expression. The imaginative AfL activities also made students *feel*, and this is where the power of imagination for learning resides. The emotional response in thinking differently, in being unique, or in sharing course content in an unexpected or novel way supports students' abilities to remember content (Egan, 1997). Additionally, within the AfL cycle of feedback, the activity revealed students' understanding, and the instructor was able to provide immediate and specific feedback to students to support their learning.
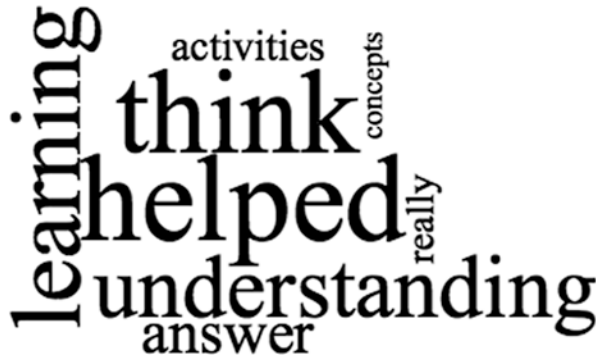
Fig. 1 Word frequency analysis. Top eight words from student feedback compiled by NVivo software

While students in the undergraduate course did not learn content using cognitive tools explicitly, the imaginative AfL questions supported their meaning-making by requiring expansive thought. In order to describe meiosis in terms of dramatic tension, for example, students needed to have some breadth/depth of knowledge; they had to think expansively and integrate knowledge to provide a suitable answer. We find the differentiating capacity of imaginative AfL questions to be a powerful pedagogical tool. Students could not rely on memorized answers. In requiring them to express understanding in a non-traditional way, we were able to pick out students' misconceptions.

Many students enjoyed the activities as they were refreshing and not typical of assessment in higher education. Of course, the novelty of the questions and the "unconventional" nature of this approach to AfL was also a source of negative feedback. This negative feedback shows the importance of students feeling "safe" and having a clear sense of how they will be assessed. In both learning contexts, being asked to respond in an unfamiliar way was perceived as a risk for some students.

Educators know that creating respectful and trusting relationships in the classroom is a key factor in how students will respond to feedback (Ajjawi et al., 2017; Carless, 2017b). Similarly, being clear with students about how they will be evaluated is a core principle of effective assessment and evaluation in all learning contexts (Carless, 2017b; Diaz-Lefebvre, 2006; Raine & Rubienska, 2008). Therefore, in order to create familiarity with imaginative AfL activities in the future, the questions employing cognitive tools could be introduced early in the semester and in a low-stakes context. For example, they could be used in practice tests or discussions so that students become familiar with these types of questions outside of formal assessment activities (Ajiawi et al., 2017). We also consider that using the cognitive tools of IE while teaching and, thus, enacting IE pedagogy could also increase the students' acceptance of imaginative AfL.

3 Looking Forward

As we continue to re-imagine education during and post the COVID-19 pandemic, we recommend all instructors in higher education continue to work to create learning-centered spaces in their classrooms. We need to strive to create opportunities for timely and specific feedback for students on their work so that they can use that feedback to grow. But we also urge instructors to consider engagement in their assessment of student learning, particularly during and after a crisis. Our study invites further exploration of ways to apply imaginative AfL in a broad spectrum of disciplines. After all, students do expect different approaches to teaching different disciplines, not only in regard to humanities versus sciences but also within sciences themselves (Mladenovic, 2019). Implementing AfL in general, and imaginative AfL in particular, in higher education, in a way that is beneficial to both students and their instructors requires time, effort, and adequate resources. Widespread professional development on best practices in AfL will be essential to help shift the culture of assessment and evaluation in higher education post-COVID-19.

Pandemics, like any other times of crisis, deeply impact peoples' perspectives, feelings, beliefs, assumptions, and values. They also remarkably transform our approaches and perceptions of teaching, learning, and assessment. A central premise of Imaginative Education is that all knowledge is human knowledge; it is a product of someone's hopes, fears, and passions. Post-pandemic, learners will benefit from pedagogy and assessment practices that use imagination as the key agent to conquer fears, inspire hopes, and educate passions: to make knowledge meaningful, lasting, and memorable. We invite you, reader, to join us in re-imagining assessment in higher education and thinking about varied ways in which cognitive tools can support meaning-making and emotional engagement in your courses.

References

Ajjawi, R., Molloy, E., Bearman, M., & Rees, C. E. (2017). Contextual influences on feedback practices: An ecological perspective. In D. Carless, S. M. Bridges, C. K. Y. Chan, & R. Glofcheski (Eds.), *Scaling up assessment for learning in higher education* (pp. 129–143). Springer.

Carless, D. (2017a). Scaling up assessment for learning in higher education: Progress and prospects. In D. Carless, S. M. Bridges, C. K. Y. Chan, & R. Glofcheski (Eds.), *Scaling up assessment for learning in higher education* (pp. 3–17). Springer.

Carless, D. (2017b). Students' experiences of assessment for learning. In D. Carless, S. M. Bridges, C. K. Y. Chan, & R. Glofcheski (Eds.), *Scaling up assessment for learning in higher education* (pp. 113–126). Springer.

Carless, D., Bridges, S.M., Chan, C.K.Y., & Glofcheski, R. (Eds.), (2017) *Scaling up assessment for learning in higher education*. Springer

Centre for Imagination in Research, Culture, and Education (CIRCE). www.circesfu.ca

Diaz-Lefebvre, R. (2006). Learning for understanding: A faculty-driven paradigm shift in learning, imaginative teaching, and creative assessment. *Community College Journal of Research and Practice, 30*(2), 135–137. https://doi.org/10.1080/10668920500433082

Egan, K. (1997). *The educated mind: How cognitive tools shape our understanding*. University of Chicago Press.

Egan, K., & Judson, G. (2016). *Imagination and the engaged learner: Cognitive tools for the classroom*. Teachers College Press.

Gamwell, P., & Daly, J. (2018). *The wonder wall: Leading creative schools and organizations in an age of complexity*. Corwin Press.

Greene, M. (1995). *Releasing the imagination: Essays on education, the arts and social change*. Jossey-Bass.

Immordino-Yang, M. H. (2015). *Emotions, learning, and the brain: Exploring the educational implications of affective neuroscience*. W.W. Norton & Company.

Judson, G. (2019). Imagination. In J. Wearing, M. Ingersoll, B. Bolden, H. Ogden, & T. M. Christou (Eds.), *Key concepts in curriculum studies: Perspectives on the fundamentals* (pp. 112–117). Routledge.

Knox, A. (2011). Creativity and learning. *Journal of Adult and Continuing Education, 17*(2), 96–111. https://doi.org/10.7227/JACE.17.2.9

Liu, E., & Noppe-Brandon, S. (2009). *Imagination first: Unlocking the power of possibility*. Jossey-Bass.

Mladenovic, I. (2019). *Science teaching that matters: Conceptions and experiences of first-year university students.* Unpublished doctoral dissertation, Simon Fraser University. Retrieved from http://summit.sfu.ca/item/19171

Paradis, B. (2019). *Lead with imagination: Regaining the power to lead and live in a changing world*. Forefront Books.

Raine, J. W., & Rubienska, A. (2008). The art and dilemmas of assessment: European perspectives on the assessment of practitioner learning and development through Master's-level programmes in public management. *International Journal of Public Sector Management, 21*(4), 417–437. https://doi.org/10.1108/09513550810880278

Robinson, K. (2017). *Out of our minds: The power of being creative*. Capstone.

Sambell, K., Brown, S., & Graham, L. (2017). *Professionalism in practice: Key directions in higher education learning, teaching and assessment*. Palgrave Macmillan.

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Faculty and Students' Perceptions of Simulation as a Learning Approach in Nursing Education: A Discussion in Light of COVID-19 and Physical Distancing Constraints

Rania S. Alayli

It wasn't raining when Noah built the ark.

Howard Ruff

1   Introduction

In nursing education, simulation has been recommended and used for years (Norman, 2012; Sowerby, 2015). Its use has increased and been supported based on a variety of factors such as the increased number of students enrolled in the nursing profession and difficulties faced by faculty to provide adequate supervision in clinical placements (Murray et al., 2010). Students require realistic hands-on training to equip them with the needed skills (Norman, 2012). Simulation offers effective evidence-based learning in a safe environment that resembles real-life patients and situations (Milkins et al., 2014; Moule, 2011; Sanford, 2010; Weller et al., 2012). It also fosters clinical judgment, confidence, and the provision of opportunities to work in teams and collaboration among students (Berndt et al., 2015; Brady, 2011; Norman, 2012). Simulations discussed here include such strategies as high-fidelity simulation, collaborative classroom simulation, and computer-based simulation.

This chapter reviews and discusses the current literature to shed light on how nursing faculty and students view simulation-based education. The contributions that simulation makes to nursing education and how the use of simulations may affect teaching and learning are considered essential. This is particularly important in light of the present situation of COVID-19. Physical distancing requirements

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have constrained clinical nursing education practice. What adaptations for more effective teaching strategies are needed in light of these changes and constraints?

As a nursing and health sciences educator in the Colleges of Health Sciences in the UAE, the main goal is to use the findings and recommendations related to simulations to modify/maintain the general nursing curriculum of education standards to support nursing students' clinical learning, promote patient safety, and offer satisfaction for the teaching faculty in fulfilling the curriculum outcomes.

2 Theoretical Background

Two related models – Benner's novice to expert model (1982) and the Kirkpatrick Model (1994) – have been considered as background.

2.1 Benner's Novice to Expert Model (1982)

Benner's model focuses on the improvement of learned skills through clinical practice and skills acquisition (Benner et al., 2009). Benner's model guides faculty about how to progress learners from a novice to a higher level of proficiency in skill acquisition (McClure, 2005). In a nursing education context, Benner offered a model that describes the gradual move of student nurses from basic to a more advanced form of skill acquisition. Nursing skills are improved and developed through a sequential pattern in which each level is a prerequisite for the next level (Arora, 2015). This is similar to what happens in the nursing simulation laboratories where student nurses practice required procedures. In the beginning, continuous support and feedback are needed. When the skill is repeated, the student performs better, and the need for support is decreased until the student masters that competence without cues. The model illustrates the link between the level of experience and simulator fidelity. The novice nurse learns more with low-fidelity simulators. However, a more experienced nurse needs sophisticated and higher-fidelity simulators (Aggarwal et al., 2010). Low-fidelity simulators are used to demonstrate a simple task – for example, an intubation head; whereas, high-fidelity simulators include a multifaceted scenario that may involve multiple mannequins that represent real patient scenarios (Munshi et al., 2015).

2.2 Kirkpatrick Model (1959; 1994)

Kirkpatrick's framework is used as a model for the evaluation of simulation in nursing education (Forest, 2016). It provides standards for curriculum evaluation with respect to the use of simulation as an integral part of its content. The first two of the

four levels of the Kirkpatrick Model can be applied to the simulation laboratory to assess the student's learning of nursing skills. The first level reflects the student's satisfaction and motivation to learn. As Rouse (2011) has noted if students are not satisfied, they will not be interested and inspired to learn. Regarding the second level of the model, the student in the simulation setting will learn new skills and procedures. Evaluation of the attainment of related objectives will be done right after the demonstration. The third and fourth levels can be assessed in the actual work setting to assess the change in student's behavior and to evaluate the simulation program as an effective method for the fulfillment of the curriculum outcomes.

3   Methodology

A systematic literature review was carried out through analysis of empirical studies. Evidence is an essential aspect in healthcare practices as they foster informed decision-making (ICN, 2012). Empirical studies provide the required evidence. The literature reviewed included studies that recognized simulation as an integrated model in the nursing curriculum.

3.1   Search Parameters

Search parameters included the years 2010–2017 to provide relevant current research literature written in the English language. The search terms were simulation in nursing education, nursing curriculum, nursing students' and faculty perceptions of simulation, simulation in nursing education, simulation-based education, learning experiences, and preparation of student nurses.

3.2   Inclusion and Exclusion Criteria

Both qualitative and quantitative empirical studies related to simulation in general nursing education for the preparation of nursing students at the baccalaureate level were included. Articles regarding faculty and students' perceptions of simulation were included. Articles about computer and anatomical simulation were excluded. Those related to other fields such as midwifery, nursing specialties, and other educational fields utilizing simulation such as engineering and information technology have been excluded as well.

3.3 Description of the Sample

The literature search resulted in 86 references associated with simulation as an integrated part of the nursing education curriculum. As per the exclusion criteria, 53 articles were excluded. With further analysis, 19 articles and 2 dissertations were eliminated. As a result, 12 articles were included in this systematic literature review. Each of the selected empirical studies identified faculty and students' perceptions of simulation in nursing education. The empirical studies reviewed are outlined in Appendix A according to the author, title, method, sample size, purpose, and main findings. Simulation techniques and methods identified in the studies include high-fidelity simulation, collaborative classroom simulation, and computer-based simulation. The findings and implications regarding the use of simulations in nursing education based on this review are discussed below in terms of the cognitive, psychomotor, affective, and social aspects of learning by nurses.

4 Findings

4.1 Cognitive Learning

Cognitive learning contributes to critical thinking, intellectual abilities, and reasoning (Chiang, 2014). During simulations, students link prior learned concepts through their involvement in learning experiences (Jeffries, 2007). Consequently, students' attitude to learning is modified from passive to interactive. Participants in the Doo and Lee study (2016) were able to integrate their prior knowledge from different subjects to serve the clinical skills and to make sound clinical judgments. This was also highlighted by Botma (2014), showing that simulation supports the filling of the theory and practice gap that is essential to provide holistic patient care. Simulation seems to support critical thinking, decision-making, problem-solving, and clinical reasoning abilities. These findings were linked to findings in studies by Baptista et al. (2016), Landeen et al. (2015), Barnard (2016), and Berndt et al. (2015). Participants in these studies asserted that simulations added to their cognitive capabilities and provided them with a suitable learning atmosphere which adequately prepared them for real clinical placement (Au et al., 2016). Berndt et al. (2015) student participants highlighted that the debriefing process after the simulation session promoted their sound judgment ability and prepared them to perform better in the next scenario.

4.2 Psychomotor Learning

Psychomotor skill learning (e.g., learning of assessing health and taking vital signs) in nursing involves skill acquisition through repeated practice in a simulation setting. Hansen and Bratt (2015) identified demonstration as an essential aspect to develop and determine competence. Student nurses must be able to demonstrate proficiency, as well as expected safe behaviors (Bensfield et al., 2012). This finding is consistent with the findings of Doo and Lee (2016) in which simulation learning enhanced students' abilities to respond faster and in a more efficient manner to emergencies when they were taught using simulation-based learning. Johannesson (2012) also found that simulation helped students to effectively learn skills for different situations and enhanced their clinical capabilities. Farra et al. (2013) found that simulation supports not only students' learning but also learning retention and decreases the time needed for the achievement of the required skills (Farra et al., 2015).

Other empirical studies showed concerns about the applicability and transferability of skills from simulation to clinical practice (Barnards, 2016; Teixeira et al., 2015). However, Kelly's (2014) student participants and Landeen et al. (2015) faculty participants reported that the knowledge and skills learned in a simulation are transferrable to clinical settings once the students have the opportunity to review, repeat, and practice the skills in the laboratory before doing them on real patients.

4.3 Affective Learning

This theme reflects satisfaction, self-confidence, stress and anxiety, and the motivation to learn during a simulation. An essential focus in nursing practice and education is self-confidence or self-efficacy as it represents the learner's ability to successfully perform a task within a specific situation (McCabe et al., 2016). Simulation-based learning is effective in increasing the learner's self-confidence (Baxter & Norman, 2011; Kang et al., 2013; Khalaila, 2014; Olejniczak et al., 2012). Omer (2016) and Baptista et al. (2016) reported that participants were satisfied and that their self-confidence improved with their learning through simulation. Their satisfaction was due to the pre-briefing session in which the expected outcomes were explained to them. Botma (2014) also showed that simulation is a successful strategy for preparing nursing students to be more satisfied, self-confident, motivated, and ready to perform in clinical settings. The participants in Doo and Lee's study (2016) conveyed that their anxiety and feeling of discomfort were due to not knowing how to perform new skills in an emergency setting and that only sufficient information and practice could resolve that uncertainty. In the same vein, Teixeira et al. (2015) found that students' anxiety was reduced throughout the course of study and that it was specifically reduced due to the debriefing after the simulation session.

4.4   Social Learning

Social learning includes students' collaboration, reflection, observation of peers, and communication. Simulation offers opportunities to learners to practice team-based skills in a safe environment, allowing collaboration (Norman, 2012) through which students are able to discuss interventions according to the patient's needs and to decide on the best practice to implement them (Berndt et al., 2015). In the debriefing session of the Flo et al. (2013) study, students expressed that they benefitted from peer observation and reflection, which enhanced their collaboration during the simulations. Although the teamwork portion of social learning cannot be fully achieved during the physical distancing requirements in place during COVID-19, virtual simulation should be considered as a temporary measure to fulfill the social aspect of learning. Through the use of many available technological solutions – such as Google Classroom, Uberconference, and Microsoft Teams – multiple learners are able to communicate, collaborate, observe, and reflect on the demonstration of the required task.

5   Discussion

Simulation plays a critical role in response to COVID-19 conditions that have been affecting countries worldwide. Limitation of the access to practice laboratories by nursing students due to physical distancing constraints during COVID-19 has resulted in modifications to nursing education programs. To overcome the challenges brought on by this situation, the Nursing Regulatory Bodies (NRB) have employed strategies to facilitate students' completion of the set curriculum. The emphasis was on the use of simulations to replace the requirement of the needed face-to- face teaching and clinical laboratory experiences. Also, the NRB allowed nursing programs to utilize up to 50 % simulation to replace clinical practice, and, in some circumstances, to substitute all hours of clinical instructions by simulation (NCSBN, 2020).

Simulations during COVID-19 have shown positive impact on different aspects of the learning environment. Mehl (2009) considered simulation as interventive as well as a diagnostic tool. As an interventive tool, it helps to identify and shape learning objectives and staff preparedness in response to certain situations, and as a diagnostic tool, it supports the analysis of workflow arrangements and processes. Similarly, Dieckmann et al. (2020) argued that simulation use in the COVID-19 situation prepares an organization to function quickly in similar circumstances. Also, it provides opportunities for collaborations between simulation facilitators and the teaching educators. Furthermore, simulation use in such critical situations provides policy makers and governing bodies with figures on the strengths, weaknesses, and the need for specific specializations in institutions.

6   Conclusion and Recommendations

The primary purpose of this review was to highlight nursing faculty and students' perceptions on simulation-based education as a means to achieve curriculum outcomes. Simulation appears to enhance students' cognitive, psychomotor, affective, and social learning. It thus offers students opportunities to integrate their prior knowledge, training of clinical skills, practice in a safe environment, clinical judgment, confidence, and collaboration opportunities. The findings also showed that simulation enhances faculty and students' preparedness to efficiently responding to similar emergency situations. Furthermore, during COVID-19, simulation has been found to have a positive impact on different aspects of the learning environment and is recommended to be used to replace the requirement for face-to-face teaching and clinical laboratory experiences. Additionally, simulation is considered as an interventive as well as a diagnostic tool for educational institutions. However, the results of the review displayed faculty and students' concerns about the transferability of the learned skills to real settings. Therefore, further studies to attempt to resolve these challenges are recommended. Further research studies are also needed to measure the effectiveness of simulation use in crisis conditions.

It can be concluded that simulation is an effective tool in nursing education to equip future nurses with the needed skills and practices. Also, simulation use can be considered of utmost importance to support academics in fulfilling nursing curriculum learning outcomes, especially, during times where physical distancing and the constraints such as those applied during COVID-19 are required.

References

Aggarwal, R., Mytton, O. T., Derbrew, M., Hananel, D. Heydenburg, M. Issenberg, B., MacAulay, C., Mancini, M. E., Morimoto, T., Soper, N., Ziv, A., & Reznick, R. (2010). *Training and simulation for patient safety*. http://qualitysafety.bmj.com/content/qhc/19/Suppl_2/i34.full.pdf

Arora, S. (2015). Integration of nursing theories in practice. *International Journal of Nursing Science Practice and Research, 1*(1). https://www.researchgate.net/publication/283319003_Integration_of_Nursing_Theories_in_Practice

Au, M. L., Lo, M. S., Wang, S. C., & Van, I. K. (2016). Nursing students' perception of high-fidelity simulation activity instead of clinical placement: A qualitative study. *Nurse Education Today, 39*, 16–21. http://www.sciencedirect.com/science/article/pii/S0260691716000265

Baptista, R., Pereira, F., & Martins, J. (2016). Perception of nursing students on high-fidelity practices: a phenomenological study. *Journal of Nursing Education and Practice, 6*(8), 10–21. http://www.sciedu.ca/journal/index.php/jnep/article/viewFile/8523/5532

Barnard, S. (2016). *Informing effective simulation pedagogy in nursing simulation*. http://academi-carchive.snhu.edu/bitstream/handle/10474/2922/sed2016barnard.pdf?sequence=1

Baxter, P., & Norman, G. (2011). Self-assessment or self-deception? A lack of association between nursing students' self-assessment and performance. *Journal of Advanced Nursing, 67*(11), 2406–2413.

Benner, P. (1982). From novice to expert. *The American Journal of Nursing, 82*(3), 402–407.

Benner, P., Tanner, C. A., & Chesla, C. A. (2009). *Expertise in nursing practice caring, clinical judgment & ethics* (2nd ed.). Springer.

Bensfield, L. A., Olech, M. J., & Horsley, T. L. (2012). Simulation for high stakes evaluation in nursing. *Nurse Educator, 37*(2), 71–74.

Berndt, J., Dinndorf-Hogenson, G., Herheim, R., Hoover, C., Lang, N., Neuwirth, J., & Tollefson, B. (2015). Collaborative classroom simulation (CCS): An innovative pedagogy using simulation in nursing education. *Nursing Education Perspectives, 36*(6), 401–402.

Botma, Y. (2014). Nursing student's perceptions on how immersive simulation promotes theory–practice integration. *International Journal of Africa Nursing Sciences, 1*, 1–5. http://www.sciencedirect.com/science/article/pii/S221413911400002X

Brady, D. S. (2011). Using quality and safety education for nurses (QSEN) as a pedagogical structure for course redesign and content. *International Journal of Nursing Education Scholarship, 8*(1), 1–18.

Chiang, V. (2014). On learning domains, advanced simulation technology, experiential learning, and reflection in nursing education. *Journal of Problem-Based Learning, 1*(1), 1–5. https://www.researchgate.net/profile/Vico_Chiang/publication/274949333_On_Learning_Domains_Advanced_Stimulation_Technology_Experiential_Learning_and_Reflection_in_Nursing_Education/links/552ccba20cf29b22c9c46b41/On-Learning-Domains-Advanced-Stimulation-Technology-Experiential-Learning-and-Reflection-in-Nursing-Education.pdf

Dieckmann, P., Torgeirsen, K., Qvindesland, S. A., Thomas, L., Bushell, V., & Langli Ersdal, H. (2020). The use of simulation to prepare and improve responses to infectious disease outbreaks like COVID-19: Practical tips and resources from Norway, Denmark, and the UK. *Advances in Simulation, 5*, 3. https://www.researchgate.net/publication/340703173_The_use_of_simulation_to_prepare_and_improve_responses_to_infectious_disease_outbreaks_like_COVID-19_practical_tips_and_resources_from_Norway_Denmark_and_the_UK

Doo, H. J., & Lee, Y. J. (2016). Perception of nursing students' experience of simulation based learning: An application of Q-methodology. *International Journal of Bio-Science and Bio-Technology, 8*(1), 313–328. http://www.sersc.org/journals/IJBSBT/vol8_no1/28.pdf

Farra, S. L., Smith, S., Lee Gillespie, G., Nicely, S., Ulrich, D. L., Hodgson, E., & French, D. (2015). Decontamination training: With or without virtual reality simulation. *Advanced Emergency Nursing Journal, 37*(2), 125–133.

Farra, S. L., Miller, E. K., Timm, N., & Schafer, J. F. (2013). Improved training for disasters using 3-D virtual reality simulation. *Western Journal of Nursing Research, 35*, 655–671.

Flo, J., Flaathen, E. K., & Fagerström, L. (2013). Simulation as a learning method in nursing education – A case study of students' learning experiences during use of computer-driven patient simulators in preclinical studies. *Journal of Nursing Education and Practice, 3*(8), 138–148. http://www.sciedu.ca/journal/index.php/jnep/article/view/1841

Forest, E. (2016). *Kirkpatrick model: Four levels of learning Evaluation*. Educational Technology. https://educationaltechnology.net/kirkpatrick-model-four-levels-learning-evaluation/

Hansen, J., & Bratt, M. (2015). Competence acquisition using simulated learning experiences: A concept analysis. *Nursing Education Perspectives, 36*(2), 102–107.

International Council of Nurses. (2012). *Closing the gap: from evidence to action*. http://nursingworld.org/MainMenuCategories/ThePracticeofProfessionalNursing/Improving-Your-Practice/Research-Toolkit/ICN-Evidence-Based-Practice-Resource/Closing-the-Gap-from-Evidence-to-Action.pdf

Jeffries, P. R. (2007). *Simulation in nursing education: From conceptualization to evaluation*. National League of Nursing.

Johannesson, E. (2012). *Learning manual and procedural clinical skills through simulation in health care education*. http://liu.diva-portal.org/smash/get/diva2:507532/FULLTEXT01.pdf

Kang, H. Y., Choi, E. Y., & Kim, H. R. (2013). Nursing student's experiences in team based simulation learning. *The Journal of Korean Academic Society of Nursing Education, 19*(1), 5–15.

Kelly, S. H. (2014). *Evaluation methods used in simulation: A survey of faculty and student perceptions in an undergraduate nursing program* [Online]. Available at: http://d-scholarship.pitt.edu/23513/1/ETD_Kelly_Susan_12-10-14_Revisions.pdf. Accessed 19 May 2017.

Khalaila, R. (2014). Simulation in nursing education: An evaluation of student's outcomes at their first clinical practice combined with simulation. *Nurse Education Today, 34*(2), 252–258. http://www.nurseeducationtoday.com/article/S0260-6917(13)00306-7/fulltext

Landeen, J., Pierazzo, J., Akhtar-Danesh, N., Baxter, P., Eijk, S. V., & Evers, C. (2015). Exploring student and faculty perceptions of clinical simulation: A Q-sort study. *Journal of Nursing Education, 54*(9), 485–491. https://www.healio.com/nursing/journals/jne/2015-9-54-9/%7Ba2885bad-2ac0-4758-b9eb-728cf33c7e28%7D/exploring-student-and-faculty-perceptions-of-clinical-simulation-a-q-sort-study

McCabe, D. E., Gilmartin, M. J., & Goldsamt, L. A. (2016). Student self-confidence with clinical nursing competencies in a high-dose simulation clinical teaching model. *Journal of Nursing Education and Practice, 6*(8), 52–58. http://www.sciedu.ca/journal/index.php/jnep/article/view/8453

McClure, P. (2005). *Reflection on practice*. http://www.practicebasedlearning.org/resources/materials/docs/reflectiononpractice.pdf

Mehl, K. (2009). Simulation as a tool for training and analysis. In P. Dieckmann (Ed.), *Using Simulation for Education* (pp. 139–151). Pabst.

Milkins, L., Moore, C., & Spiteri, J. (2014). *Simulation based education: Professional entry student education and training*. HETI: health education and training Institute.

Moule, P. (2011). Simulation in nurse education: Past, present and future. *Nurse Education Today, 31*(7), 645–646. http://www.nurseeducationtoday.com/article/S0260-6917(11)00092-X/fulltext

Munshi, F. M., Lababidi, H. M., & Alyousef, S. (2015). Low- versus high-fidelity simulations in teaching and assessing clinical skills. *Journal of Taibah University Medical Sciences, 10*, 12–15.

Murray, C., Grant, M. J., Howarth, M. L., & Leigh, J. (2010). The use of simulation as a teaching and learning approach to support practice learning. *Nurse Education in Practice, 8*(1), 5–8.

NCSBN. (2020). *Changes in education requirements for nursing programs during COVID-19*. https://www.ncsbn.org/Education-Requirement-Changes_COVID-19.pdf

Norman, J. (2012). Systematic review of the literature on simulation in nursing education. *Association of Black Nursing Faculty Journal, 23*(2), 24–48. www.abnf.net/gallery1.htm

Olejniczak, E. A., Schmidt, N. A., & Brown, J. M. (2012). Simulation as an orientation strategy for new nurse graduates: An integrative review of the evidence. *Simulation in Health care, 5*, 52–57.

Omer, T. (2016). Nursing students' perceptions of satisfaction and self-confidence with clinical simulation experience. *Journal of Education and Practice, 7*(5), 131–138. http://files.eric.ed.gov/fulltext/EJ1092418.pdf

Rouse, D. (2011). Employing Kirkpatrick's evaluation framework to determine the effectiveness of health information management courses and programs. *Perspectives in health information management.* https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3070232/#B31

Sanford, P. G. (2010). Simulation in nursing education: A review of the research. *The Qualitative Report, 15*(4). http://www.nova.edu/ssss/QR/QR15-4/sanford.pdf

Sowerby, H. (2015). Perceptions on the efficacy of simulation. *Open Journal of Nursing, 5*, 1123–1132. http://file.scirp.org/pdf/OJN_2015122916055487.pdf

Teixeira, C. R. S., Pereira, M. C. A., Kusumota, L., Gaioso, V. P., Mello, C. L., & Carvalho, E. C. (2015). Evaluation of nursing students about learning with clinical simulation. *Revista Brasileira de Enfermagem, 68*(2). http://www.scielo.br/scielo.php?pid=S0034-71672015000200311&script=sci_arttext&tlng=en

Weller, J., Nestel, D., Marshall, S. D., Brooks, P. M., & Conn, J. J. (2012). Medical education: Simulation in clinical teaching and learning. *The Medical Journal of Australia, 196*(9), 594. https://www.mja.com.au/system/files/issues/196_09_210512/wel11474_web_fm.pdf

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Leveraging an Essentials and Extension Assessment and Evaluation Model to Differentiate in Pandemic Learning

Christopher L. Ryan and Ian Fogarty

> *Education is the most powerful weapon which you can use to change the world.*
>
> *Nelson Mandela*

1 Introduction to the New Brunswick Context

Riverview High School (RHS) works within the New Brunswick (NB), Canada, mandate to provide inclusive education to approximately 1100 students, grades 9 to 12. Over the last 10 years, the province has supported teachers learning about Universal Design for Learning (UDL), professional learning communities (PLCs), and contemporary strategies around assessment and evaluation. RHS teachers leveraged this learning, creating the Essentials and Extension Model as described in section 2.1. This model facilitated a smooth transition for teachers and students during a stay at home order for COVID-19.

In response to pandemic learning in March 2020, the NB Department of Education and Early Childhood Development (EECD) modified policies around grades and reporting. All marks on high school student transcripts for the second semester were replaced with a code of *enrolled* or *credit*. *Enrolled* signifies that a student was in the course at the time of interruption. A student could earn a standing of *credit* if they completed the core curriculum outcomes of the course. Both designations would count toward students' graduation requirements.

While teachers at RHS spent years developing the Essentials and Extension Model of Assessment and Evaluation, many disciplines (physics, chemistry, and some math in particular) also developed an online presence to support face-to-face interactions. When time, instructional pace, and direct interactions became limited

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by isolation and lockdown, teachers had already done much of the design thinking and iterative practice required for a blended learning alternative. COVID-19 amplified the need for inclusion; and RHS students were able to use the model to personalize learning through mastering the essentials and supplementing their learning with extensions.

Because of the provincial policy around grades, students learned for the sake of learning and their next steps. At RHS, COVID-19 did not generate an innovation; rather the conditions surrounding COVID-19 highlighted the advantages of teaching sound strategies already in use.

1.1   School Closure and Student Support

New Brunswick closed its schools early in the pandemic and was one of the first provinces in Canada to announce that schools would be closed for the remainder of the school year. New Brunswick chose to emphasize social-emotional stability, providing mental health supports as the first support to students and families. New Brunswick understood the additional stress that families would feel. Eventual learning would be at a slower pace; parents becoming teachers would be stressful, and this situation would exacerbate conditions of inequity from social, economic, and technology perspectives.

Normally, schools support families in reducing inequalities and act as a stabilizing factor for students. Many educators recognized that there are many different student situations during the pandemic that have impacted student ability to learn. We have encountered students who have transitioned easily to the virtual world where home life supports of time, focus, and technology are abundant. We have also encountered situations, as described by DeWitt (2020), where students are working a job, taking care of younger siblings, or do not have the technology to be able to access the resources made available by teachers and the rest of the system. In line with the American Psychological Association (2020), we understand that periods of extended confinement and close-quartered environments augment levels of mental and physical harm in abusive homes.

In addition to worrying about academic development, now more than ever, during COVID-19 constraints, teachers had the additional task of filling social-emotional and mental health gaps created by the isolation. Teachers were first tasked with making weekly contact with students to the specific ends of supporting students and families' mental health. This is in line with Doucet et al. (2020) and their coined phrase – we need to support "Maslow before Bloom."

New Brunswick's use of *enrolled* and *credit* on transcripts, combined with the above concerns, meant that each high school student was required to weigh their personal situation with their academic expectations. With input and support from teachers, students were able to create a personalized learning plan to earn credit for courses they required for postsecondary. The enrolled/credit system allowed students to personalize where they would focus their time.

In addition to students personalizing their learning by prioritizing classes, they also changed how many classes they took at once. Some students chose to accept the "enrolled" designation allowing them to focus on just one or two classes. However, even high-performing, very engaged students chose to reduce their course load. In the transition to full online learning, students talked about time management and the need to focus. It seems that more time is needed in the online world to make progress, to reach a productive zone. In the face-to-face class, it is difficult to reach a flow of productivity in a 30-minute class; 60 minutes is better. In the online world, the time to reach productivity flow seems to be 1 and a half to 2 hours. Even engaged students find it challenging to maintain focus on the screen for more than 2–3 hours with an absolute maximum at 4 hours a day. This means high school students can probably only complete two courses at a time. We have observed this anecdotally via observation and conversation. Struggling students cut the number of courses down to one or two. Likewise, high-end students focused on a couple of courses at a time.

This situation is exemplified by Shannon (pseudonym), one of this semester's most dedicated students. When schools initially closed, Shannon attended the first physics online class, along with all her other ones. Quickly, she stopped attending physics. At first, this was disappointing. Knowing that the lectures were recorded and the deadlines were flexible, she chose to focus on math and psychology, completing them quickly. She then moved on to two other courses and, finally, completed most of the physics courses in the last 3 weeks. It appears to be universal for high school students that time management, focus, and screen time all point to the idea that two or three courses at a time might be manageable at once. Completing five traditional courses simultaneously online is unrealistic in most cases. The Essentials and Etension Model provides a pathway for students to follow different paths and still meet their academic goals.

2 Pre-COVID-19

Starting in 2006, ASD-East began organizing schools and teacher teams as professional learning communities (PLCs) as described by DuFour et al. (2006) and Hord and Educational Resources Information Center (U.S.) (1997). Parallel to the EECD, ASD-East worked with teachers to enhance their assessment and evaluation practices as described by Davies et al. (2008), O'Connor (2007), and Reeves (2002). These two areas of research influenced the development of the Essentials and Extension Assessment and Evaluation Model that has led to a transformational shift in the way students and teachers interact regarding learning.

Initial discussions focused on the questions of DuFour et al. (2006) helping teacher teams identify priorities in instruction and remediation. These questions are:

> What knowledge and skills should every student acquire as a result of this unit of instruction?
> How will we know when each student has acquired the essential knowledge and skills?
> How will we respond when some students do not learn?

How will we extend and enrich the learning for students who are already proficient? (p. 28)

Initial teacher reaction was that this was a daunting set of expectations until teachers also considered Reeves' (2002) work in thinking about essential skills and knowledge. Taking this mindset, teachers began building assessment and evaluation systems.

Reeves (2002) provides clarification by challenging teachers to define essential learnings by answering these questions about learning:

Does it have endurance? Do we really expect our students to retain the knowledge and the skills over time as opposed to merely learning it for a test?

Does it have leverage? Will proficiency in this standard help the student in the other areas of curriculum and other academic disciplines?

Does it develop student readiness for the next level of learning? Is it essential for success in the next unit, course, or grade level? (p. 283)

Eventually, many teachers at RHS and in ASD-East found that pairing Dufour's questions about student learning with Reeves' questions about essential skills and knowledge gave a concrete framework to discuss teaching, student learning, and assessment.

Teachers learned quickly that what was deemed essential was not necessarily "the easy stuff." Some of the essentials were very challenging. Similarly, much of the easy minutiae that would only be valuable to students who will be continuing in that field were deemed extensions. For instance, the understanding required to create ionic compounds is critical to understanding chemistry, and having success was deemed essential. Memorizing the ions is not essential but useful for those entering fields like chemical engineering. Students were given a list of ions for the essentials test so that they can demonstrate the higher-level understanding. On the extension test, the ions were removed as the focus is for students who will study chemistry in the future. This made it reasonable for students who needed only the credit and general understanding, while simultaneously challenging the elite student.

Teachers adopted the philosophy that the essentials were nonnegotiable for success in the next grade or course. All efforts would be made to ensure students attained a mastery level of learning in terms of the essentials. Students were required to redo assessments of any essential topic or skill until they proved it was understood. The first assessment strategy is usually a test, but subsequent attempts employ alternative strategies such as conferences, student-teacher conversations, and student-student conversations. Extension topics and questions adhere to traditional norms where students have one time-bound attempt in a traditional test setting. This distinction between essential and extension gives struggling students an abundance of time to demonstrate learning while holding high expectations for students who are pursuing further studies in that field.

This assessment model went through numerous iterations over a 6-year period before existing in the format presented below. The development of the model is first explained in Ryan (2016, 2017), and its usefulness in supporting students learning skills such as creativity is discussed by Fogarty and Ryan (Fogarty & Ryan, 2017).

It is important to note that this model was fully implemented in various courses and classrooms before the COVID-19 pandemic forced school closures.

The complete assessment and evaluation model is described in Tables 1 and 2 below. Teachers in PLC teams dissect curriculum to define outcomes as essential and/or extension. This process encompasses skills and content within the course in order to create an assessment and evaluation schedule. The components of typical assessments and evaluations are presented in the following tables.

At the same time, as this new paradigm was being adopted, teachers recognized that they both needed to differentiate instruction and allow students to personalize their learning in terms of time and content. Teachers at RHS began to develop online content, pre-recorded videos, example questions, and other material that allows students to focus on their learning needs while simultaneously allowing the teacher to spend time one-on-one or with small groups of students.

Table 1 Description of essential assessment and evaluation components

Essential	Content	Instruction is created and delivered built on the tenants of UDL and differentiation of instruction. This is often whole class instruction supplemented with asynchronous learning.	Formal and informal formative assessments are given (conversations, observations, assignments, and tests). These are marked as pass/fail. Students demonstrate Mastery learning correctly answering 100% of the questions to earn a pass.	Students are given feedback for all incorrect items. If students can only correct their response with significant aid or need re-teaching, they attend interventions to enhance their learning. Students are then re-assessed. This cycle can happen any number of times until students demonstrate mastery.	A final exam on essential content is given. Students must demonstrate retention of essential content to earn a credit.
	Skills	Skills are taught in conjunction with content.	Skills are reinforced in projects or activities such as labs.	Students receive mark-less feedback on their skill proficiency. Students are encouraged to address any deficiencies.	Some courses require essential skills to be demonstrated on specific learning tasks while others require students to pass a lab exam. Both are pass/fail.

Table 2 Description of extension assessment and evaluation components

Extension	Content	The instruction is tailored to the content being learned. Some content is delivered by direct instruction, some is delivered by technology, and some is directed by student interest. This can be modified based on teacher expertise and student engagement.	Students are assessed and given feedback in a traditional fashion. Evaluations are traditional and time bound with one opportunity for success.	Interventions happen most often in peer groups. Teachers are available for support but are often focused on essential work.	A final exam that only evaluates extension content is given. This exam is designed around the highest levels of Bloom's taxonomy (evaluating, creating, analyzing).
	Skills	Students select skills they want to improve on and, in conjunction with teacher recommendations, design a project that aligns with those skills.	Often involving projects (either research or experiential learning) students are given feedback on specific skills or activities pursuant to project completion. Assessment and feedback are continuous and are sourced from teacher and learner.		A final presentation or demonstration of learning including answering teacher questions. This may be a panel if involving multiple disciplines.

3   Pandemic Teaching in NB

The NB response to COVID-19 in terms of school closures was rolled out in three phases. An initial 2-week window was established where students and teachers were to act as if it were a "snow day" or temporary cancellation. This meant no expectation of teacher-student contact. The second phase emphasized the need to have mental health supports in place for students and families struggling with the pandemic situation. The third phase (about 3 weeks after schools were initially in a "snow day" mode) included a continuation of learning plan. This plan, as described by GNB (2020), outlined the expectations of teachers to connect with students and provide learning supports on a weekly basis. High school students would be able to work on courses and demonstrate their learning to earn credit. The third phase would be a modified return to school in September 2020.

When teachers were informed that school would be closing, many were confronted with the realization that it was a herculean task to move what they do every day, face-to-face, to the virtual world. What strategies and content transfer readily? How to provide personalized paths for classrooms with different aspirations and talents? Teachers that had adopted the Essentials and Extension Model had already done much of this thinking. Some had curated much of the digital content. Since blended learning had already been part of the everyday functioning of these courses, students transitioned easily. When students expressed confusion or stress, it was easy to communicate with them and advise them about different paths. Some were on the essentials path and others were on the extension path. An assignment was sent to the whole class designated as essential or extension, allowing students to prioritize their learning for their personalized future.

As previously indicated, many students reduced their normal course load from five to two or three. Midway through their grade 12 year, students are aware of where they are going and what they will probably be doing the following year.

The authors teach chemistry and physics. For some of our students, these are both the most important and least important courses they will take. For those students who are going into law, business, or journalism, perhaps these courses may not be critical, even though they may be learning transferable skills. For students who are pursuing sciences and engineering, these courses may be their most important in terms of content and skills. The ability to focus on a few classes during online learning allows students to personalize their learning. It also means that for some students, they are not distracted by all the expectations of traditional, face-to-face coursework.

Teachers using this model have also observed higher levels of student engagement during pandemic learning than in other courses. Anecdotal data from conversations with teachers and students shows that between 20 and 50% of students obtained a credit across NB high school courses, while courses at RHS, using the essentials model, saw a rate in the range of 30–85%. This is in line with Leadbetter's (2020) findings that while the average NB student engagement rate is well below 50%, other students enrolled in experiential learning programs can experience engagement rates in the range of 60% and up.

3.1 Reflections on Teaching and Learning in a Pandemic

Here are two stories of RHS physics students learning in the pandemic. Some students seemed to have just survived, while others thrived.

Dan (pseudonym) spent the first semester just getting by. He was in the middle of the class in terms of work ethic and performance. Once school was closed and he moved to the online world, things changed. He was one of the first students in extra online help and completed quizzes before deadlines. Also, he was inspired by the movement of 3D printed face shields. To contribute to this global initiative, he taught himself how to use advanced 3D modeling software and redesigned face

shields that had more flexibility, used 30% less plastic, and could be printed in the option of portrait or landscape position. In addition to his heightened participation in the project, his traditional work ethic improved, resulting in more extension goals being done well. Anecdotally, Dan benefited from the quiet space of being alone without the distractions of other courses, scheduled bells, and an environment filled with people all day long.

Amy (pseudonym) worked diligently throughout high school. She worked within a peer group who are high achieving and diligent while working with a smile. She attended weekly afterschool programs using 3D printers and soldering to solve real problems. When schools closed, she attended some lectures, completed some quizzes but gradually fell away despite multiple supports. Amy also had the opportunity for meaningful project work but did not engage. For her, bells, structures, and the social aspect of learning were major contributors to her success in traditional schooling. The lack of these items created a challenge for her, and she needed guided focus to succeed.

The Essentials and Extension Model provided a focus for Amy and allowed Dan freedom to explore a project which brought meaning and context to the academic work.

In 1665 Newton made large advances in science when Cambridge University was closed due to the plague precisely because he had the extended time to explore without the distraction of red tape and obligatory tasks. It appears as though the Essentials and Extension Assessment and Evaluation Model was custom made for this pandemic, providing a well thought out, tried and tested essential pathway for some students that decreased the stress and workload of students suitable for a slower self-pace and providing a reasonable workload for teachers. It also provided a pathway for those students who needed to be well prepared for their next steps. Learning became less about grades and hoops to jump through and more about being prepared for what comes next. For some, this provided space to explore areas that would not normally be covered in class. Some future engineers designed new 3D printed face shields that greatly reduced the amount of plastic. Other students designed contactless door openers. Still others made adapters to help prevent the mask straps from digging into essential workers' ears. This provided a real-world context for their extension projects and helped their community.

Without years of working in the Essentials and Extension Assessment Model, neither teachers nor students would have been prepared to move to the independent, varied paced of crisis learning online. In addition, teachers may have been so concerned with getting all of the traditional content delivered in this new format and students so concerned with getting what they think they needed, we might not have had the time and space to leverage the home environment to explore personal learning and use their learning to do good in the world.

It is only because of the development of the Essentials and Extension Assessment Model that students were supported with manageable chunks of content and skills, allowing them to personalize learning. It cannot be understated that this model was created by subject and pedagogical experts. This expertise is crucial in understanding both how to identify essentials and how to guide students in their personalization of learning.

Many jurisdictions are reducing the amount of curriculum. There is a worry that a random reduction will miss out on topics that have leverage or longevity. The process outlined by Ryan (2017) demonstrates the decade-long process undertaken to create and refine the Essentials and Extension Assessment Model. This left teachers and students using this model in our school in an advantageous position when pandemic learning became a reality.

4   Further Challenging Questions

One of the roadblocks to high school reform has always been about the grades that colleges and universities request. We are now in a situation where very few places will have grades that carry the same weight and authenticity that were previously relied on for ranking and admissions. If postsecondary institutions want to continue collecting tuition fees, they will need to deal with the gaps in content knowledge. Who will be a better engineer or scientist? The person who studies because grades were on the line and they were adept at writing tests that may not always represent the cognitive tasks of being an engineer or scientist? Or will it be the person who acted, who was diligent when they did not have to be, and who continued to learn the required knowledge but also used their creativity to do good in the world? Perhaps this brings to light the need to challenge systemic assumptions of standardized testing and credit hours, as highlighted by Brown et al. (2020). This also speaks to Cote et al. (2020) and their observation that high school grades do not necessarily translate to academic success.

Are education systems ready for what comes next? At the time of this writing (Summer, 2020), many factors will challenge collective assumptions of normal education. COVID-19 cases are still growing in many parts of the world. According to experts, a publicly available vaccine will be ready in mid-2021 (Gallagher, 2020). Many universities and colleges are now announcing plans to move to online learning (Canadian Press, 2020). Students entering university for their first year are worried about what their experience will be like both academically and socially-emotionally, leading many to ponder taking a gap-year. All stakeholders in the system are worried about the health and wellness balance between a full-scale return to normal and continued social isolation. The only thing that most people seem to agree upon is that school will be different.

Some schools and districts will operate online; some will operate in person requiring social distancing and bubble interactions; and others will operate in a blended model. In recent years, many jurisdictions have embraced the ideas of teaching global competencies alongside curriculum incorporating experiential or problem-based learning. Lectures seem to be more effective face-to-face where there can be student-teacher interaction. The same may not be true in an online environment.

We believe that these ideas should become the bedrock of pandemic learning. By using the Essentials and Extension Assessment Model as a framework for designing

learning experiences, teachers can adapt these ideas to create flexible environments to support personalized learning. Shannon can take the time she needs to manage a heavy course load – supporting her academic aspirations knowing that blended or online learning takes more time. Dan can spend time pursuing a passion that he did not know existed while ensuring that he has the essential learnings to pursue his chosen path. Amy can take on a manageable chunk of academics, leaving her time to seek the socio-emotional supports that she needs to not fall behind in her studies. Countless other students can be given the flexibility to support their families financially or by looking after siblings that would normally be in school.

References

American Psychological Association. (2020, April 8). *How COVID-19 may increase domestic violence and child abuse*. https://www.apa.org/topics/covid-19/domestic-violence-child-abuse

Brown, B., Alonso-Yanez, G., Friesen, S., & Jacobsen, M. (2020). High School redesign: Carnegie unit as a catalyst for change. *Canadian Journal of Education Administration and Policy, 193*, 97–114. https://journalhosting.ucalgary.ca/index.php/cjeap/issue/view/5213

The Canadian Press. (2020, May 12). Some Canadian universities say fall classes will be offered primarily online. *CBC News*. https://www.cbc.ca/news/canada/covid-universities-online-1.5565810

Cote, J. E., Grayson, J. P., Roberts, S., & Chen, L. H. (2020). Beyond HEQCO's skills assessments: Validation of a measure of students' academic capital and evidence of grade inflation in Ontario's high Schools and universities. *Canadian Journal of Education Administration and Policy, 194*, 16–38. https://journalhosting.ucalgary.ca/index.php/cjeap/article/view/69016

Davies, A., Herbst, S., & Reynolds, B. P. (2008). *Leading the way to marking classroom assessment work*. Connections Pub.

DeWitt, P. (2020, April 26). *6 reasons students aren't showing up for virtual learning*. Education Week. https://blogs.edweek.org/edweek/finding_common_ground/2020/04/6_ reasons_students_arent_showing_up_for_virtual_learning.html

DuFour, R., DuFour, R., Eaker, R., & Many, T. (2006). *Learning by doing: A handbook for professional learning communities at work*. Solution Tree.

Doucet, D., Netolicky, D., Timmers, K., & Tuscano, F. J. (2020, March 20). *Thinking about pedagogy in an unfolding pandemic: An independent Report on approaches to distance learning during COVID19 school closures*. Education International. https://issuu.com/educationinternational/docs/2020_research_covid-19_eng

Fogarty, I., & Ryan, C. L. (2017). Bringing assessment research to practice using an essentials model. In J. Cummings & M. Blatherwick (Eds.), *Creative dimensions of teaching and learning in the 21st century*. Sense Publishers.

Gallagher, J. (2020, July 8). Coronavirus vaccine: When will we have one? *BBC News*. https://www.bbc.com/news/health-51665497

Government of New Brunswick. (2020, April 22). *Memo: Continuity of Learning Plan*. https://www2.gnb.ca/content/dam/gnb/Departments/ed/pdf/K12/UpdateApril22020.pdf

Hord, S. M., & Educational Resources Information Center (U.S.). (1997). *Professional learning communities: Communities of continuous inquiry and improvement*. Southwest Educational Development Laboratory.

Leadbetter, R. (2020, June 15). *iHub questionnaire: Remote learning in NB during COVID-19*. https://docs.google.com/forms/d/1894CEnhnQspqGm53eZxuYvEWqFjS33VNQ_2lsw_rFBE/viewanalytics

O'Connor, K. (2007). *A repair kit for grading: 15 fixes for broken grades*. Pearson Assessment Training Institute.

Reeves, D. B. (2002). *The leader's guide to standards: A blueprint for educational equity and excellence*. Jossey-Bass.

Ryan, C. (2016). Filling an assessment literature gap: A systemic example of formative assessment in a high school physics course. In *Proceedings of Global Learn 2016* (pp. 52–64). Association for the Advancement of Computing in Education (AACE).

Ryan, C. (2017). *Two teachers' journey, one teachers' tale: An autoethnographic narrative of creating an assessment and evaluation system using a learning community framework*. Master's thesis, University of New Brunswick. UNB Libraries Scholar Research Repository. https://unbscholar.lib.unb.ca/

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Online Assessment and Feedback Practices: Virtually Narrowing the Distance

Pavlos Gkasis

> *Student-centered education comes to the forefront*
> *Pavlos Gkasis*

1 The Importance of Assessment and Feedback in the Learning Process

Assessment and feedback strategies are central to the learning process in higher education. Student development and progression are highly correlated with effective feedback delivery (Evans, 2013; Price & O'Donovan, 2006). Concrete assessment and feedback practices should be central to the learning process, and they need to be updated and developed constantly and at length. A common misconception that exists among students is the difference between feedback and grade (Duncan, 2007; Murtagh & Baker, 2009). What is, therefore, very important is to raise students' awareness that what is most important in this process is attaining the feedback and then the grade. It is the feedback that will help them improve and avoid the same mistakes in the future. The grade is nothing more than the verification of the level at which they are at that specific point in their studies. DeNisi and Kluger (2000) note how students' future performance is affected significantly by the feedback they receive. More specifically, Nelson and Schunn (2009) underline how feedback can be motivational, reinforcing, and informational.

In light of critical circumstances such as the recent COVID-19 outbreak and need for physical distancing that has resulted in the required transition from face-to-face delivery to online and remote synchronous and asynchronous delivery, educators need to consider how assessment and feedback will be most effective in virtual

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learning. With feedback being a central part of the learning process, it is imperative for educators to have a clear assessment and feedback strategy that will focus on improving future students' performance and enhancing the self-learning aspect of their education. This is how they will move closer to becoming self-regulated learners (Crimmins et al., 2016). This chapter aims to shed light on assessment and feedback practices that will enable educators to virtually narrow the distance that online or RSD modes of teaching inevitably create. Physical distancing is creating an artificial barrier between the educator and the learner. Nonverbal language is more difficult to be used, which means that generalized and personalized feedback sessions are less effective. Educators need, therefore, to utilize the learning management system (LMS) that their HEI uses in the most efficient way possible to convey the necessary feedback to their students. In order to achieve that goal, careful preparation of the assessment strategies is essential since some assessment types are difficult to work effectively in an RSD or online setting. For example, extensive use of quizzes or exam-based approaches is neither easy to control on the grounds of academic integrity nor to be assessed with the provision of complete and meaningful feedback.

The degree to which feedback will succeed in its purpose to help student learning starts with the effort that the instructor or course developer puts into the development of the assessment components. There needs to be a high degree of constructive alignment between the learning outcomes, the assessment strategies, and the feedback strategies. In general, we could say that a highly constructive approach is one that follows the lines of Crimmins et al. (2016), who recommend the written, reflective, and dialogic feedback (WRDF) model as a model that promotes the provision of appropriate, timely, and effective feedback. The WRDF model involves three stages in the feedback process. In the first stage, the educator provides written feedback to her/his students. Students then reflect on the feedback with the guidance of their instructor in the second stage. Finally, students and instructors engage in a dialogue in the first two stages. This has been proven by empirical analyses to improve the learning experience by making students more active, engaged, and having rapport with their instructors. For the WRDF model to work effectively, a significant allocation of time is needed on behalf of the instructors to arrange focus groups and one-on-one sessions. All the above should take place in the first two weeks after students receive feedback and with ample time (approximately three weeks) before their next assignment submission.

In addition, more efforts should be put into gradually applying more integrated computer-based provision of feedback to enhance and speed up the process of feedback. Additionally, when focusing on RSD and online modes of delivery, Sandars et al. (2020) highlight the importance of the LMS that an institution is using for achieving constructive alignment and efficient provision of assessment and feedback. Whether someone focuses on the on-campus mode of delivery, RSD, or online, the assessment strategy is the starting point, which will then feed into the feedback strategy. These two components of RSD and online teaching go hand in hand. Once the assessment has been adjusted, it is only then that someone can

examine effective feedback strategies. Assessment and feedback strategies need to take all the above into consideration, and instructors should give students enough flexibility, support, and care during the course's duration.

2 Face-to-Face Versus RSD and Online Assessment and Feedback

Sun et al. (2020) have presented very eloquently how instructors face the challenge of preparing interesting courses and materials. More specifically, they state: "… in the absence of face-to-face communication, teachers need to put greater effort into preparing for online courses, innovating and designing lessons that will improve the attention span of the students. It also requires teachers to patiently turn students from passive recipients to engaged learners through interactive question and answer sessions, tests, presentations and open discussions" (Sun et al., 2020, p. 687).

The underlying assumption of this chapter is that, in times of crisis, there may be no preexisting structure in place for the course to migrate immediately from the face-to-face to the online sphere. We are referring to an institution that is setting up a strategy for the transition to RSD or online delivery "from scratch." This is done to present the optimal possible strategies or (best practices) unbiasedly when transiting from an on-campus mode of delivery to RSD. This can, of course, be extended to the delivery of online courses, which face more or less the same challenges. A second assumption is that we need to take into consideration the fact that under the RSD mode, there may be an eventual transition back to the on-campus mode of delivery, so instructors should pursue assessment and feedback strategies that will allow for the smooth and seamless transition between the two.

The crucial word in the RSD or online mode of delivery and, especially in circumstances like pandemics, closures, and crisis situations, is *flexibility*. There are multiple issues that need to be taken into consideration. First, based on our experience, the delivery of the material is probably going to be slower. Technical difficulties faced by all participants (instructor and students) due to Internet bandwidth and hardware shortcomings lead to loss of time during an online lecture. Simultaneously, attention deficit and lack of use of camera feed are common problems in RSD lectures, which signify the lack of attention on behalf of students. This leads to more repetitions on behalf of the instructor to secure that the basic points have been presented and the learning objectives have been covered. Therefore, as instructors set up their learning outcomes and assessment, they need to take into account that they might need to decrease the length of the syllabus by up to a 20% to accommodate for the slower delivery of material through the RSD. This doesn't necessarily apply to the online mode since the latter is based mostly on students' individual efforts and self-discipline. Second, most, if not all students, might be faced with severe difficulties such as sickness, job loss, income loss, insecurity, and stress among others. Third, students could be facing some lack of the necessary technological infrastructure to be able to get the most out of the feedback provided.

Both on-campus and online modes have obvious advantages and disadvantages regarding assessment and feedback. In the on-campus mode of delivery, instructors shape their assessment in such a way to take advantage of the ongoing presence of students in the classroom. This entails quizzes, exams, live presentations, and group work. At the same time, probable disadvantages are the lower technological involvement of students, the stricter framework of how they are assessed, and absenteeism. As for feedback, when working on-campus, instructors are able to arrange generalized and personalized feedback sessions, which entail verbal and nonverbal feedback provision. This speeds up feedback provision significantly, and students perceive this as more complete (Getzlaf et al., 2009).

Online delivery also has its own advantages and disadvantages. One major advantage is timely feedback (Getzlaf et al., 2009). RSD and online methods of teaching push for both assessment and feedback provision to be conducted online. This enables speedier and more efficient use of both on behalf of the students. Although on-campus feedback can be done faster, online feedback is timelier and can happen immediately after the respective component has been submitted. This is a significant advantage compared to the on-campus mode where the instructor will have to wait for the next class in order to meet her/his students and arrange the feedback sessions. This could be up to a week. Another advantage is that online provision of assessment and feedback reduces the time needed for students to access both (Debuse & Lawley, 2016). After the successful completion of the assessment, feedback is readily available. Finally, one major advantage of the online transition is that due to the fact that it is in electronic form students can store it and add it to an e-portfolio that they can develop and review as they progress with their studies. This enhances the ownership of the work conducted on behalf of the student and also gives the opportunity for better self-reflection in the future. Ownership and self-reflection are the two main pillars of the WRDF model mentioned above. Quinton and Smallbone (2010) refer to the WRDF model as a trigger for students to reflect on their progress and, more importantly, to be used as a feed-forward tool for their future learning endeavors.

As for the feedback process, the existing literature identifies an additional element which is considered essential. This is the way that feedback is delivered to students. Feedback should be given within a week to help students fully integrate the feedback into their future submissions, whether these are essays, tests, or exams. Black and Wiliam (2009) explain that effective timing is vital for lecturers that want to ensure that students will appropriately link the feedback they receive with the material they are being taught during that period of time. This process may take place through two different routes. The first is a general feedback session, and the second one is a personalized feedback session. In the former, the lecturer provides general feedback to the group of students with respect to the overall performance in a piece of assessment. This involves solving exercises or providing students with indicative solutions and answers to their respective problems. In this way, every student has an opportunity to not only evaluate their performance but to identify where they stand in terms of the rest of the class. What follows is personalized feedback where the lecturer provides feedback on a one-to-one basis by addressing the

specific issues that each student is facing. This gives the opportunity for an inspection of the effort put forth by the student and also for a more personal approach that, according to the literature, is important for feedback to achieve its goal (Chew, 2014).

3 Best Practices

What are the best practices for assessment and feedback that the current literature identifies; and, how can an instructor distill and adjust these in order to use them in their course? These insights provide significant value to educators that are currently seeking to fine-tune and improve the efficiency of their online or RSD courses.

Bao (2020) proposes the following six strategies that can be pursued in situations that are imposing a change in the mode of delivery from on-campus to online. These include:

– Making contingency plans for unexpected situations
– Disaggregating material and creating smaller blocks to make it more accessible to students
– Accentuating how the instructor's voice is used to compensate for the lack of elements of body language in the online mode
– Getting support from teaching assistants,
– Promoting active learning
– Promoting self-learning

Getzlaf et al. (2009) focus more on feedback and report five major themes of effective feedback provision. They conceptualize these themes under two categories. The first has to do with the role that students will play and the importance of student involvement and individualization. The second category focuses on the role of the instructor, who needs to be positively constructive, provides gentle guidance, offers timely feedback, and uses feedback as a means to exhibit future orientation.

Giuliano (2020) reports five strategies for exercising flexibility in teaching during transitions, such as during the COVID-19 pandemic. These also touch upon assessment and feedback, including:

– A focus on online quizzes and assignments
– Reduction of workload should an online transition take place
– Assisting and supporting students by clarifying the course structure to avoid students getting lost
– Finding ways to curb the obvious problem of cheating on exams or in the delivery of assignments and learning activities
– Motivating students to pursue and earn extra credit, thereby improving their grades

Finally, Moorhouse (2020), along the same lines of Peachey (2017), promotes the use of annotated PowerPoint presentations with voice-over narration for online and RSD learning and promotes the use of discussion forums as another good

practice. He advises extensive use of breakout rooms through the Video Conferencing Software (VCS) that the institution is using. This gives the opportunity for instructors to synchronously assess their students and provide feedback immediately to the various teams.

There are specific pillars and best practices if the move to online and virtual learning is successful. The most important that is unearthed by all these studies is the importance of flexibility. Educators need to continually remind themselves that in situations like the one that COVID-19 has pushed, learning and teaching are extenuating. They may have severe and mostly negative impacts on the lives of their students. Things that are taken for granted when delivering a course on-campus might be an insurmountable obstacle for many of the students. One obvious example is student attendance *per se* in the lecture. There are numerous cases of students working mostly on a part-time basis to finance their studies, many of whom lost their jobs or experienced wage cuts due to the global slowdown caused by the lockdowns imposed in many countries. Educators need to constantly remind themselves that for some of these students, even attendance and continuation of their studies might be extremely difficult during these specific circumstances. Those students that will weather the storm are worthy of their instructor's respect and understanding.

Another pillar is the acceptance that all the criteria by which assessment and feedback are provided need to be adjusted to take these grave developments into consideration. Appropriate assessment and feedback strategies that take all these factors under consideration can significantly improve the effectiveness of course delivery, while they will also play a vital role in the retention efforts and success rates of many institutions. Finally, even more so now, student-centered education comes to the forefront since the distance created by the closure of campuses around the world poses a significant threat to the existence of many institutions and programs which need to convince students that the experience they will have in the online sphere will be virtually identical to the on-campus experience. Assessment and feedback strategies are highly affected by how educators adopt this mindset to bring the student to the center of the learning experience.

4   Conclusions

This chapter highlights the importance of constructively aligned assessment and feedback processes when transitioning to the online mode of delivery. It identifies best practices in structuring appropriate types of assessment and subsequent feedback provision strategies that will provide educators with a useful framework of the most important issues that need to be addressed. Although it does not "spoon-feed" the reader with specific effective solutions, it creates a strong theoretical foundation for how assessment needs to be structured to be useful in the online sphere and,

most importantly, how the structure of this assessment will enable educators to provide feedback that students will use to their advantage and in pursuit of their betterment and progression.

References

Bao, W. (2020). COVID-19 and online teaching in higher education: A case study of Peking University. *Human Behavior & Emerging Technologies, 2*, 113–115.

Black, P., & Wiliam, D. (2009). Developing the theory of formative assessment. *Educational Assessment, Evaluation and Accountability, 21*, 5–31.

Chew, E. (2014). "To listen or to read?" Audio or written assessment feedback for international students in the UK. *On the Horizon, 22*(2), 127–135.

Crimmins, G., Nash, G., Oprescu, F., Liebergreen, M., Turley, J., Bond, R., & Dayton, J. (2016). A written, reflective and dialogic strategy for assessment feedback that can enhance student/teacher relationships. *Assessment & Evaluation in Higher Education, 41*(1), 141–153.

DeNisi, A., & Kluger, A. N. (2000). Feedback effectiveness: Can 360 degree appraisals be improved? *Academy of Management Executives, 14*, 129–139.

Debuse, J. C. W., & Lawley, M. (2016). Benefits and drawbacks of computer-based assessment and feedback systems: Student and educator perspectives. *British Journal of Educational Technology, 47*(2), 294–301.

Duncan, N. (2007). Feed forward: Improving students' use of tutors' comments. *Assessment and Evaluation in Higher Education, 32*(3), 271–283.

Evans, C. (2013). Making sense of assessment feedback in Higher Education. *Review of Educational Research, 83*(1), 70–120.

Getzlaf, B., Perry, B., Toffner, G., Lamarche, K., & Edwards, M. (2009). Effective instructor feedback: Perceptions of online graduate students. *The Journal of Educators Online, 6*(2), n2.

Giuliano, T. (2020). *Five tips for flexible teaching during the COVID-19 pandemic*. American Psychological Association, https://www.apa.org/ed/precollege/psychology-teacher-network/introductory-psychology/flexible-teaching-covid-19

Moorhouse, B. (2020). Adaptations to a face-to-face initial teacher education course 'forced' online due to the COVID-19 pandemic. *Journal of Education for Teaching, 46*, 609–611.

Murtagh, L., & Baker, N. (2009). Feedback to feed forward: Student response to tutors' written comments on assignments. *Practitioner Research in Higher Education, 3*(1), 20–28.

Nelson, M. M., & Schunn, C. D. (2009). The nature of feedback: How different types of peer feedback affect writing performance. *Instructional Science, 37*, 375–401.

Peachey, N. (2017). Synchronous online teaching. In M. Carrier, R. M. Damerow, & K. M. Bailey (Eds.), *Digital language learning and teaching* (pp. 143–155). Routledge.

Price, M., & O'Donovan, B. (2006). Improving performance through enhancing student understanding of criteria and feedback. In C. Bryan & K. Cleggl (Eds.), *Innovative assessment in higher education* (pp. 100–109). Routledge.

Quinton, S., & Smallbone, T. (2010). Feeding forward: Using feedback to promote student reflection and learning – A teaching model. *Innovations in Education and Teaching International, 47*(1), 125–135.

Sandars, J., Correia, R., Dankbaar, M., de Jong, P., Goh, P., Hege, I., Masters, K., Oh, S., Patel, R., Premkumar, K., Webb, A., & Pusic, M. (2020). *Twelve tips for rapidly migrating to online learning during the COVID-19 pandemic*. *MedEdPublish*.

Sun, L., Tang, Y., & Zuo, W. (2020). Coronavirus pushes education online. *Nature Materials, 19*, 1–1.

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Achieving Success in Online Teaching and Learning: Strategies

Ali Sher and Arif Toor

No Interaction, No Education

Gunawardena, Lowe, and Anderson

1 Student Engagement in Online Delivery

Online education or online delivery of educational content refers to the learning that takes place via the Internet (Stern, n.d.). As two professors who teach postsecondary courses in business, we treat online education as including the delivery and assessment of educational content using an online learning platform and activities, as well as synchronous delivery and class time with students through a video conferencing program. We are discussing courses in which students have a class with the teacher and students interacting via video conferencing in real time, as well as have a space online to discuss questions and assignments asynchronously beyond class time.

The use of the Internet as a tool of information technology to deliver an educational product is growing rapidly (Seaman et al., 2018). Online courses are increasingly expanding in the higher education industry and will grow potentially at a faster rate. A survey of university and college deans reported 90% of the respondents pointed out their campus would be increasing online courses over the next decade (Sellingo & Chow, 2017). Over 21 million students attended US colleges in 2016, and one fourth of those students were enrolled in online courses (Seaman et al., 2018). This rapid growth of Internet technology has impacted education in such a powerful way that many institutions have started to invest heavily in these types of technology-based programs. The increased popularity and significant investments in online education have led to many questions including the following:

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What are key elements that affect learning and satisfaction within online education? It is important for educators like us to understand and address these key issues with online program delivery.

One of the biggest challenges faculty like us face in teaching online courses is whether students are engaged. Many students may be reluctant to share their video and self during classes via video conferencing. Student engagement is the extent to which the student actively engages by interacting with the course content, the other students in the course, and the instructor (Martin & Bolliger, 2018). In a traditional, face-to-face classroom, students and instructors can talk and see each other, whereas in online programs taught via remote synchronous delivery, students and instructors are physically separated from each other, and course communication is mediated through Internet communication tools. This physical separation creates barriers to communication as many nonverbal cues such as eye contact and facial expressions may be missed. In a traditional face-to-face learning environment, students' facial expressions usually provide a clue as to whether students are confused. However, in an online environment, if students are confused, there is no clue unless they choose to communicate about their confusion, as well as share their video. This criticism raises several questions: What is the nature and role of interaction in an online learning environment? What does interaction involve in online learning? What are the key strategies to improve student engagement? It is highly important to investigate the role of interaction dynamics within the online learning environment (Meyer, 2014).

A typical online course consists of additional weekly modules where the instructor posts material to supplement assigned readings from textbooks and articles. Students can access materials asynchronously 24 hours a day, seven days a week from any place of their choice. Questions are posted to a discussion forum, and students respond to the questions and each other. Other student tasks include exams and individual and group projects. Student-to-student and student-to-instructor communication is primarily through e-mail and the online course discussion forum and is asynchronous in nature. Students, in addition to e-mail and discussion forums, communicate with instructors and among themselves via a chat room built within the video communication tool. Much of the class communication – especially class handouts and assignments – are done through a learning management system (LMS) that allows the faculty to facilitate course interaction, instruction via discussion activities, and allows the faculty to publish course information and content conveniently. The LMS also provides a virtual classroom, e-mail, and discussion forums and assignments.

In this mode of delivery, synchronous live sessions supplement these asynchronous online activities each week and replace the usual face-to-face classroom lectures and activities. The synchronous sessions include PowerPoint presentations facilitated by the professor plus the use of breakout rooms in which students work on a number of learning activities such as problem-solving tasks, short cases, and discussion questions. The conceptual background related to student engagement in these synchronous and asynchronous learning activities is presented in the next section.

2   Conceptual Background

Interaction and communication have been considered the key to success in traditional education. Based on 50 years of educational research, Chickering and Gamson (1987) identified seven principles of good practice in undergraduate education that were known to be associated with effective learning. These principles included:

1. Encourage contact between students and faculty.
2. Develop reciprocity and cooperation among students.
3. Use active learning techniques.
4. Give prompt feedback.
5. Emphasize time on task.
6. Set high expectations.
7. Respect diverse talents and ways of learning.

The above principles can be applied to online education (Martin & Bolliger, 2018). Four of these principles, such as encouraging contacts between students and faculty, making use of active learning techniques, giving prompt feedback, and setting high expectation, emphasize the importance of communication and interaction between students and instructors, whereas developing reciprocity and cooperation among students emphasizes the importance of interaction among students.

Instructors can use the aforementioned principles to facilitate online courses that engage students. According to Martin and Bolliger (2018), "Engagement strategies are aimed at providing positive learning experiences including learning opportunities, such as participating in collaborative group work, , having students facilitate presentations and discussions, sharing resources actively, creating course assignments with hands-on components, and integrating case studies and reflections" (p. 206).

Moore (1993) contributed to the discussion of interaction by providing an important theoretical framework of three types of interaction. He suggested that there is a transactional distance in distance learning environments as instructors and learners do not interact in the same physical and temporal space. This distance may lead to learners and instructors misinterpreting each other's behaviors and may negatively affect the quality of the learning environment. In order to overcome potential shortfalls due to transactional distance, Moore (1993) argues that there are three types of interaction that play key roles in the learning process in a distance learning environment. Learner-instructor interaction provides motivation, feedback, and dialogue between student and instructor. Learner-learner interaction is the exchange of subject-related information between students. All these three types of interaction are facilitated through technology. These as summarized below will help instructors enhance engagement of and with students in their online courses:

(i) *Learner-content interaction*: It is the method by which students obtain information from the course materials by reading them. As a result of learner-content interaction, learning occurs, and learners achieve intellectual growth or

changes in perspectives. The content can either be in the form of text, audio or videos, tutorials, computer program, or online communication.

(ii) *Learner-learner interaction*: It is the exchange of information and ideas that occurs among students about the course in the presence or absence of the instructor. This type of interaction can take the form of group projects, or group discussion and other activities. The learner-learner interaction can foster learning through student collaboration and knowledge sharing. Learning occurs as learners exercise, verify, and improve their mental model through discussions and information sharing (Garrison, 2007). Group work allows for learner-learner collaboration to work on relevant projects to solve a problem related to the content. Learner-learner interaction can significantly encourage the development of student expertise in subject area.

(iii) *Learner-instructor interaction*: This refers to the interaction between the learner and the instructor. This can take the form of instructor delivering information, encouraging the learner, or providing feedback. In addition, this can include the learner interacting with the instructor by asking questions or communicating with the instructor regarding course activities. Thus, this type of interaction provides motivation, feedback, and student-instructor dialogue. The instructor provides the learner with an organized plan for mastering the course content, and he/she communicates with the learner throughout the learning process.

Besides defining the learning objectives, activities, and materials, instructors are also responsible for revising teaching methods and providing evaluation as their students progress in the process of learning. Further, they need to create an environment that is conducive and motivating for students. To accomplish these tasks, it is necessary to keep open the communication channels with the students.

Online students are often geographically isolated from the academic community. The burden on the instructor to facilitate interaction is thus even greater in the online classroom. Meyer (2014) suggests students appreciate those efforts which help improve the quality and effectiveness of the learning experience. It must be recognized that the importance of the instructor's role is not limited to direct interaction with students. An instructor also has significant opportunity to either foster or hinder the positive influence of other factors in the learning process, such as student interaction with other students.

Communication and interaction is critical in any form of education. Students and instructors must find ways to convey information, determine level of understanding, and create a workable feedback system. In a traditional face-to-face learning environment, students' facial expressions usually provide a clue as to whether students understand or are confused. Banna et al. (2015) suggest online technologies such as personal e-mail, chat room utilization, and discussion forums can improve this interaction.

If an instructor or institution desires to create a satisfying learning environment, they need to build learning environments that encourage both student-instructor and student-student interactions. They must encourage students to actively participate in

the course discussions; they need to provide feedback on students' work and inform them of their progress periodically and treat them as individuals. In addition, a learning environment is desirable that encourages shared learning experiences, builds a sense of community among students, and supports teamwork (Banna et al., 2015; Martin & Bolliger, 2018).

When designing future software for conducting online courses/programs, software designers should focus on designing features in the software that can enhance and improve interactions. Specifically, the software designer can concentrate on the ease of use and simplicity of future software so that people can interact more clearly and efficiently online. A course designer can improve student learning and satisfaction by building interactive activities in the course that can trigger rich and meaningful online discourse. This adds value to the role of the instructor in the online learning environment. An instructor can improve student learning and satisfaction by being responsive and interactive in style, by providing support and encouragement to each student, and by helping to build an online community of learners (Anderson, 2017). Some strategies and activities in enhancing student engagement in online delivery are presented in the next section.

3 Strategies and Activities in Online Delivery

Delivering content via online platforms has its own challenges which are unique to most professors who teach in traditional face-to-face settings. Most professors would require some sort of training to achieve the objectives of high student engagement in online teaching. Here are some strategies that have worked for us:

3.1 Understand the LMS

First and foremost, it is important for professors to understand the online platform that is being used to host and deliver the academic content. There are a variety of platforms available; however, Moodle is considered one of the most user-friendly systems. Other systems include *Blackboard*, *Canvas*, *Google Classroom*, *D2L*, *Knowledgehook*, *and TalentMS* to name a few. We suggest that professors should acquire appropriate training well in advance and spend a lot of time understanding the LMS before the start of their classes. Services of a mentor might also be helpful with this. In our case, we were offered a three-week training by our employer through our faculty development department. During this training, we were shown around the system, and we all were involved in activities that we will be doing as professors. It was a good shadowing experience that helped us not only conceptualize the learning management system but also prepared us to effectively interact with students in our own classes.

3.2   Connect with Students Early

It is important to connect with your students early and to provide comprehensive information. We should set realistic expectations through effective communication before the classes begin. This can be done in a variety of ways. For classes where remote synchronous teaching is to take place, professors may send early information via e-mail or class bulletins. This can be done as a welcome message that will include information about what the course is about and how it will be run. It should also include assessment information to set the expectations. Students, like the ones we have taught in traditional settings, will need a lot of guidance. We need to be proactive in providing the information that is helpful to our students. It is important to ensure that students understand what remote synchronous teaching is and what is expected of them during the term. Also, guidelines on how they can achieve success in this format of learning should be provided.

For classes that are designed to be taught as asynchronous, we should post multiple messages on the course bulletin. It is a good idea to begin with a welcome message that will inform students about asynchronous teaching methodology. This will help students understand what is expected of them throughout the term. It is a good idea to break the message down in multiple sections or write multiple messages, each with key points. Due to the lack of real-time interactivity, these students will often need more help than students that are being taught synchronously, and it is important that professors are mindful of this need.

3.3   Using a Variety of Ways to Connect with Students

It is a good idea to have more than one way to stay connected with students. Often you will notice that students are sharing challenges with you about one platform or the other. For example, they might not be able to access the LMS due to technical issues with the system or their own Internet service provider. In this case, the students will need to keep informed via alternative formats. Some of these are:

- University e-mail. This might be the most appropriate media as per the advice of many universities.
- Students' personal e-mail. This might be used if a university e-mail account is not available or student is not actively engaged via the university e-mail.
- Internet messaging groups. Many professors will make a dedicated Internet messaging group for students to interact with their professors. There are several messaging applications available; however, we have found WhatsApp to be most useful and familiar to most students.
- Course bulletins. This is used for group messages within the online course.
- Personal messages through the course page. Most LMS platforms have the capability to send personal messages to students. This is helpful to answer personal queries and to initiate communication that is addressed to an individual student.

When teaching classes synchronously, it is important to use a video conference system that is appropriate to all users. Once that technology is identified, it is also important that all users get familiar with the platform. This should be communicated with students well in advance, so they are completely onboard with what must be done by them. The following strategies might be helpful during the delivery of the content via video enabled platform(s):

- Connect students with the course sites where the content is hosted. Students should be advised to read through the content before class. In our case, we provide students with guidelines through advance postings that help them understand what is expected of them.
- Make sure that your own video is turned on. This will encourage students to do the same. It helps reduce their hesitation.
- Introduce yourself and the topic for the day.
- Call students by their names and ask them specific questions.
- Advise students to turn their cameras on. This will help you connect with them at a personal level.
- Ask students to use the mic option to speak to you and to the rest of their classmates during class.
- Inform students of multiple ways that they can use to connect with you during the class. This may include group chat messages, personal chat messages, class polls, and raising/lowering their hands.
- Share your screen showing your PowerPoint slides, relevant videos, and other resources with your students, and ask them to share theirs too.
- Design and facilitate learning activities that require students to create, synthesize, explain, and apply the content being taught.
- Use breakout rooms to encourage peer-to-peer discussions among students.
- Provide students a lot of opportunities to summarize and reflect on what they have learned.
- After class, follow up with reinforcing messages.

Here are a few suggested activities and examples that may help achieve better professor-student interaction in an online class:

- Improve interactivity by providing students opportunities to introduce themselves. You may like to structure their responses or give them an open field. Some of the guidelines that we provide to our students include tell me your name, your academic background, and why you picked this course. Alternatively, one may ask the classic question "tell us about yourself" to get the conversation started.
- Break the ice with interesting games. We often involve students in fun ice-breaking games. Here are a couple of suggestions:
  - Guess the favorite food: We ask students to pick any other student from the list and guess what their favorite food might be. This can get interesting when you circle back to them to see if the guess was correct. We have found this to generate some interesting moments and laughs.

- – Show and tell: We ask students to bring an interesting article to show to the rest of the class. We then ask students why they feel it is interesting and what makes it special as follow-up questions. This game does not only break the ice but also improves student to student interaction.
- – Read and share: We give students a piece to read and then explain to the rest of the class. They can be asked to read a journal article, a newspaper story, or/ and parts of a book. We find this activity very helpful in improving professor to student and student to student interaction in our classes.
- Include class presentations and group work in your syllabi. This will help students improve their teamwork skills and presentation skills that will boost their confidence. We often see some students emerge as natural leaders of their groups and that helps us direct the class accordingly.
- Provide collective and individual feedback. It is a good idea to share positive feedback with the group and points of improvements during one-on-one meetings.

4   Conclusion

As more and more courses and programs are offered online, care should be taken to make certain that the interactions of learner, instructor, and content are successful. It is imperative that students should be provided with what is important to learning: interactions with faculty and other students. As Gunawardena et al. (1997) put it: "No interaction, no education." The online learning environment presents challenges for students and instructors alike. However, it is our experience that planning from the beginning for the academic term provides opportunities as well. By focusing on student engagement, we have identified strategies for sound pedagogy that have increased engagement for students in our online courses.

References

Anderson, T. (2017). How communities of inquiry drive teaching and learning in the digital age. *North Contact*, 1–16.

Banna, J., Lin, M.-F. G., Stewart, M., & Fialkowski, M. K. (2015). Interaction matters: Strategies to promote engaged learning in an online introductory nutrition course. *Journal of Online Learning and Teaching, 11*(2), 249–261.

Chickering, A. W., & Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education. *AAHE Bulletin, 39*(7), 3–7.

Dixson, M. D. (2015). Measuring student engagement in the online course: The Online Student Engagement scale (OSE). *Online Learning, 19*(4), n4.

Garrison, D. R. (2007). Online community of inquiry review: Social, cognitive, and teaching presence issues. *Journal of Asynchronous Networks, 11*(1), 61–72.

Gunawardena, C. N., Lowe, C. A., & Anderson, T. (1997). Analysis of a global online debate and the development of an interaction analysis model for examining social construction of knowledge in computer conferencing. *Journal of Educational Computing Research, 17*(4), 397–431.

Martin, F., & Bolliger, D. U. (2018). Engagement matters: Student perceptions on the importance of engagement strategies in the online learning environment. *Online Learning, 22*(1), 205–222.

Meyer, K. A. (2014). Student engagement in online learning: What works and why. *ASHE Higher Education Report, 40*(6), 1–114. https://doi.org/10.1002/aehe.20018

Moore, M. J. (1993). Three types of interaction. In K. Harry, M. John, & D. Keegan (Eds.), *Distance education theory* (pp. 19–24). Routledge.

Seaman, J. E., Allen, I. E., & Seaman, J. (2018). *Grade increase: Tracking distance education in the United States*. Retrieved from: https://onlinelearningconsortium.org/read/grade-increase-tracking-distance-education-united-states/

Sellingo, J., & Chow, S. (2017). *The state of innovation in Higher Education: Insights from a survey of college and university deans*. Retrieved from: https://georgetown.asu.edu/sites/default/files/academy.2u_survey.pdf

Stern, J. (n.d.). *Introduction to online teaching and learning*. Retrieved from: http://www.wlac.edu/online/documents/otl.pdf

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AFL Students' Perceptions of the Use of an Interactive Digital Platform to Enhance Reading Strategies: An Activity Theory Perspective

Hany Fazza

> *It was an interactive experience, especially because you could see who was online and everyone was working on the document together, so I liked the fact that it was interactive.*
>
> *A research participant*

1 Introduction

Following the spread of COVID-19, Qatar government suspended in-person instruction at public and private educational institutions as a precautionary measure, which necessitated online classes to guarantee instructional continuity. This has led the educational community to seek alternative digital applications for both instructors and students.

This unprecedented educational setting has revealed challenges that persist when AFL teachers apply new technology, including but are not limited to (1) rapid advancement of foreign language educational technologies, (2) unavailability of digital tools for AFL teachers and students, and (3) insufficiency of integrating new digital pedagogical tools. Perusall provides a reliable option for synchronous and asynchronous AFL instruction. This study used Perusall as a collaborative digital platform, enabling instantaneous peer and instructor feedback and motivating students to discuss assignments online.

Reading is a sophisticated cognitive activity that affects other language skills (Al-Moghrabi, 2015). It enables learners to "obtain information about real world from various contexts" (Arthi & Srinivasan, 2018, p. 40; Alfassi, 2004). However, AFL learners face challenges with new texts. One challenge is the complex

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linguistic structure of Arabic, a derivational language with a lexicon composed of about 10,000 3- or 4-letter roots. These roots are created by adding affixes to each root according to nearly 120 patterns (Shaheen & Ezzeldin, 2014). Another challenge is the writing system, as it is read from right to left (Singhal, 1998; Hansen, 2008, 2010). Additionally, the literature highlights that when teaching Arabic, there is more emphasis on vocabulary, grammar, and rules than the learning process itself (Alhaqbani & Riazi, 2012).

AFL learners need to use bottom-up comprehension strategies that focus on linguistic parts and forms to interpret text by separating the base roots of new vocabulary. They also need to utilize a top-down strategy to construct meaning from context. According to Carrell (1983, p.35), students can apply this strategy by employing prior knowledge, or "schemata" of real-life situations, to predict word meaning.

This paper investigates the use of a collaborative online platform to enhance Arabic reading abilities by raising learners' awareness of reading strategies, namely, bottom-up, top-down, and schemata. It also seeks to determine whether collaborative reading, in conjunction with this digital tool, will enhance AFL learners' reading skills and increase their learning autonomy.

2   Theoretical Framework

This study uses the Cultural Historical Activity Theory (CHAT)–the second generation of activity theory based on Vygotsky's AT (Lei, 2008; Lin & Yang, 2011). Engeström's (1987) model of CHAT is based on the interaction of six main features as shown in (Fig. 1): subject (the AFL learners participating in the activity), object (the outcomes of the activity, which is the acquisition of Arabic reading strategies),

Fig. 1 The mediational structure of an activity system. (Adapted from Cole and Engeström (1993), p.8, Figure 1.3)
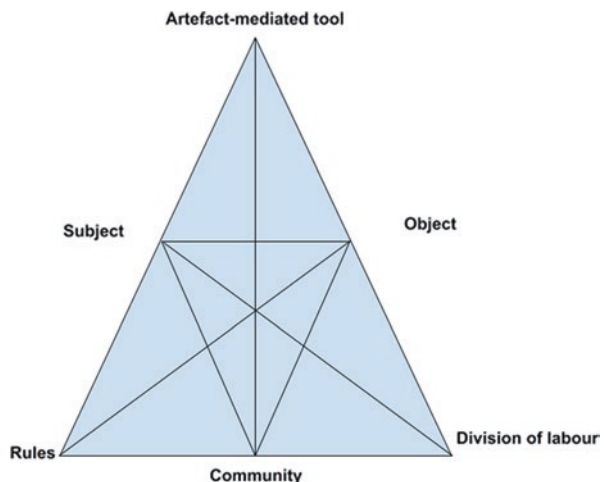
mediating tools (Perusall), rules (annotations, comments on the reading strategies), community (the students' interactions with each other and the teacher), and the division of labor (Cole & Engestrom, 1993; Jonassen & Rohrer-Murphy, 1999).

Lofthouse and Leat (2013) and Barab et al. (2002) see these components of human activity, in terms of language learning, as dynamic because they involve continuous interaction with other people. Therefore, AT is helpful to better grasp human activity, and it is a robust framework that helps analyze human sociocultural and sociohistorical activity (Jonassen & Rohrer-Murphy, 1999).

CHAT visualizes contextual factors that shape interaction between students and Perusall. As Bennett et al. (2015) mention, AT focuses on how social activities within the same environment interact and create learning opportunities. Moreover, CHAT helps to analyze how technology affects educational change (Yu, 2014; Hardman, 2005; Bellamy, 1996).

3 Literature Review

The integration of technology into education has generated considerable research on the importance of its pedagogical effectiveness (Bakia et al., 2009; Nor et al., 2013). Technology redefined learning and literacy rates in the 21st century, Benson and Chik (2010), which resulted in more educators incorporating it into teaching second languages (Kasper, 2003).

3.1 CALL and Reading Skills

Most 1990s research was limited to drill-and-practice exercises with the help of CALL, in which reading and writing were the most frequently developed skill areas (Liu et al., 2002). This was introduced using audiovisual tools to support reading comprehension (Chun & Plass, 1997; Hult et al., 1990). Since then, research has focused on metacognitive awareness of reading strategies via technology (Rajab et al., 2017; and Crum, 2017). However, most studies on using technology to improve L2 reading skills were conducted without reference to their AFL pedagogical applications.

Recently, research has linked technological capacity and access to CALL to improved reading, writing, speaking, and listening skills (Raporu, 2015). For example, Hess (2014) studied the impact of using e-readers and e-books in the classroom on 9-10-year-olds in the USA. When e-books were used in daily reading, there was a significant improvement in reading assessment scores. Furthermore, Peña-López (2015) found a positive correlation between technology usage and increased reading proficiency.

3.2   Interactive Platforms and Reading Skills

Numerous studies on reading in L2 courses have focused on English as a Foreign Language (EFL) strategies for online reading. For instance, Hamat et al. (2010) and Noor (2011) proposed an interactive English Language Literacy System to bolster students' online reading comprehension. Similarly, several studies centered on EFL digital reading strategies, but not general reading strategies (Huang et al., 2009; Huang, 2014; Girón García, 2016; Poole, 2011; Chen, 2015; Park & Kim, 2011).

Two studies have examined the effect of collaborative reading mediated by Perusall. Miller Lukoff et al. (2018) conducted a quantitative study involving 74 undergraduate students in an introductory physics course, using Perusall to examine the effects of pre-class student collaboration. They employed Vygotsky's 1978 social constructivist theory to explore the exchange of knowledge. They sourced data from in-class performance and Perusall's grade book, and they concluded that Perusall functions efficiently as a social learning platform, even for delivering content outside classrooms and developing online learning communities. These results conflict with Debski's (2002) that computer-supported collaborative learning is not settled and still unclear.

Another study, Liberatore (2017), investigated the dual use of textbooks with Perusall to increase student interaction beyond the classroom environment. It consisted of ten graduate participants studying fluid mechanics over one semester. Liberatore adopted a mixed-method approach with no explicit theoretical framework. Perusall again proved useful in encouraging students to complete assignments.

In sum, there is little information about using technology to improve L2 Arabic reading skills. Additionally, there is a gap in the literature regarding using digital tools, like Perusall, to investigate the application of reading to AFL–the focus of the current study.

4   Research Questions

This study addresses the following main research questions:

QR1: How much does the annotation platform enhance AFL learners' reading comprehension via peer support?
RQ2: How much does the division of labor enhance AFL learners' reading strategies, using the annotation tool/platform?

5   Research Design

5.1   *Context and Participants*

The study involved ten students completing their second semester of non-native Arabic at an American university in Qatar during three weeks of asynchronous online classes in a part of the 2020 spring semester. All of them passed the internal first-level Arabic exam according to the standard guidelines of the American Council on the Teaching of Foreign Languages (ACTFL, 2012). In the second level, the participants need to learn how to read long passages without requesting any help or referring to the textbook, which, for these students, is "Al-Kitaab." Before the study, all the students were taught a derivation system for approaching new vocabulary.

5.2   *Data Collection and Analysis*

Qualitative data were collected via semi-structured interviews to answer the two research questions regarding Perusall's effect on AFL learners' reading strategies through peer feedback and the division of labor. Students' perspectives were audio-taped and transcribed. All interview questions were guided by the study's objectives, which were framed by CHAT. Interview data were imported into NVIVO, enabling visualization, analysis, and organization of the raw data.

Another data source was the think-aloud protocol, which effectively collects data about students' onscreen reading strategies (Elshair, 2002). Students were asked to read a new passage on a computer, employing reading strategies they have learned to identify and explain word and sentence meaning.

The researcher grouped the data into six main themes that emerged from the interviews: awareness of Arabic reading strategies, power of peer support, better reading skills, community of learning/teacher presence, and mastering Perusall, which emerged from the think-aloud protocol.

Later, the researcher utilized the components of the CHAT framework: subject, mediating artifact, object, rules, community, and division of labor as a starting point to identify the themes from the compiled data, as shown in (Fig. 2). The observations reported below in the results section are generated from this data analysis by creating relationship codes for each CHAT element.

5.3   *Tool Description and Usage*

Perusall is an interactive, web-based tool that allows students to annotate static reading texts (Lepek etal., 2018). Students reply to each other's comments and questions, and Perusall ranks the responses in terms of helpfulness according to an "upvote" system.
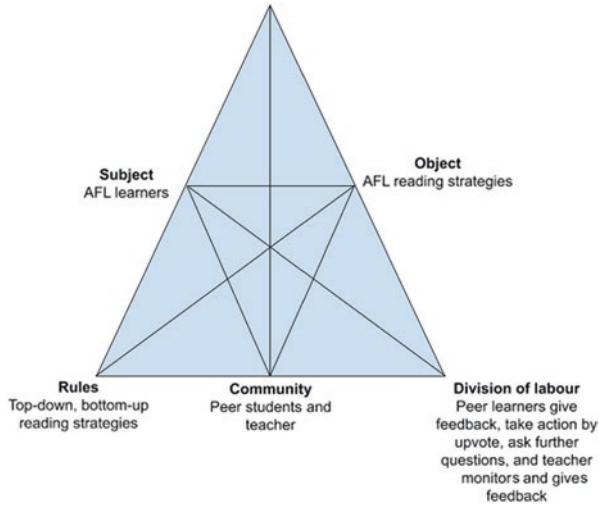
Fig. 2 The *Perusall* activity system elements

Perusall functions as an asynchronous response system. It allows one to make comments in line with the text, Liberatore (2017), and set reminders and deadlines for students. It synthesizes an automated "confusion report" to identify the passages students find most challenging. The platform is not yet able to recognize the Arabic script, so all reading assignments were uploaded in PDF format, and students used Perusall's image annotation tool.

Participants were asked in week one to practice reading Arabic texts using Perusall to acclimate to the tool, and the researcher interfered with the discussion thread to guide the participants and demonstrate how to annotate. Researcher interference was later limited to answering students' questions about the platform. Participants were assigned six readings, ranging from one to two pages, three of which were authentic texts ranging from one to two pages. The other three were semi-authentic short stories (14–20 pages) created with an educational purpose in which the vocabulary was carefully selected to match their competency level. The length and depth of each reading assignment were intentionally varied, as well as the number of required comments, so the study would adapt to the different types of texts. Almost 200 comments were posted from the entire class for each short story, and 20 comments for the short texts. Students were asked to comment on new vocabulary, explain how they found the meaning, detail which strategies they used to discover this meaning, comment on each other's annotations, and ask questions.

6 Findings

In the end, students evaluated the effectiveness of the reading tool in enhancing their Arabic reading comprehension and reading strategies during semi-structured individual interviews.

6.1 Awareness of the Arabic Reading Strategies

Most interviewees expressed increased recognition of the relevant Arabic reading strategies with the help of Perusall. Data revealed that students preferred specific reading strategies, varying from top-down strategies that construct textual meaning from context to bottom-up strategies that combine the derivation system strategy with the prior knowledge strategy to identify the meaning of difficult words. Familiarity with similar languages was repeatedly brought up by participants acquainted with languages like Urdu or Turkish. Despite differing student preferences, all participants demonstrated an awareness of the three reading comprehension strategies. Five students found the derivation system helpful, while the rest preferred using context and prior knowledge. The following quote illustrates students' preferences:

> Context is important. Judging by what the other words of the sentence are referring to, it is easy to crack the new word.

6.2 The Power of Peer Support

Students expressed appreciation for peer feedback in enhancing their reading comprehension. The results presented positive views on peer coaching. Each participant expressed a distinct opinion, but the overall impression was that Perusall helped them to engage with a text and made their reading of longer texts more efficient. Interestingly, participants cooperatively read three semi-authentic texts alongside three authentic short texts over three weeks, while students at the same elementary/intermediate low level typically read significantly less material, at a shallower level, during the same amount of time. The comment below indicates how Perusall enhanced AFL learners' reading comprehension.

> It was an interactive experience, especially because you could see whoever was online and everyone was working on the document together.

6.3 Better Reading Skills

Students stated how their reading skills have improved after using the interactive features of Perusall, realizing that they could identify word meaning quicker than before. Even without a control group, the results can be compared to other data. Also, the researcher was able to identify the strategies students used when first reading a text. Almost all participants found that Perusall improved their reading skills and made reading more interesting. For example, an interviewee said,

> I definitely see an improvement in my reading speed. How? The meanings of words show up in my mind faster than before.

6.4   Mastering the Platform

The screen-recording segment of the think-aloud interviews indicates that all students were comfortable using Perusall. They were able to navigate the tool effectively and clearly explain how they navigated unknown words without peer comments. All students expressed Perusall's usefulness. However, there were suggestions for tool improvement.

> It was easier online because online you have it recorded, and you can always go back and check it.

6.5   Division of Labor Community: Rule Relationship

6.5.1   Community of Learning

The second research question asks about the extent to which division of labor influences AFL learners' reading comprehension. In light of the CHAT framework, the answer will be through examining the participant community and how labor was organically divided. Numerous participants expressed a preference for working with peers. There was a sense of belonging to an educational community, as everyone assumed a certain role. In this study, the students and the teacher's roles were as follows: the instructor gave oral and written instructions, the students read the text on Perusall, gave feedback, and responded by upvoting the answers or asking further questions. This sense of belonging to a community was mediated by rules that everyone followed. Ultimately, this indicates that Perusall helped students raise their awareness of Arabic reading comprehension strategies with peer assistance.

6.5.2   Teacher's Presence

Although the instructor is essential for administering feedback, I also observe the learning process as a researcher, which necessitates that my presence is kept to a minimum. Many students stated that the teachers' involvement generated anxiety when they were aware that they were being monitored and that they preferred when their peers corrected their mistakes. As an interviewee put it:

> I felt like you not being there was actually better because it was more of an independent thing we were doing.

Conversely, some students appreciated instructor feedback, particularly when given after they had finished annotating the texts. Participants also suggested a clearer delineation of roles, perhaps stated in the instruction page of the activity (i.e., reader, group leader, coordinator). For example, an interviewee said:

> I identified students whose way of thinking is helpful for me, and I tried to follow.

7 Discussion and Implications

Previous studies about developing reading skills in Arabic or other languages, as first or second languages, highlighted the importance of teaching vocabulary and improving literacy skills, reading strategies, and metacognitive awareness (Noor et al., 2011; Hamat et al., 2010; Alfassi, 2004; Park & Kim, 2011; Alhaqbani & Riazi, 2012). Comparing the findings with those of other studies, such as Benson and Chik (2010), confirms that using technology in classrooms has a positive impact on literacy and teaching and learning reading strategies digitally (Huang et al., 2009; Huang, 2014; Girón García, 2016; Poole, 2011, Chen, 2015; Park, & Kim, 2011).

These results corroborate Peña-López's (2015), which found a positive correlation between technology usage and increased reading proficiency. Furthermore, the results are consistent with Debski's (2002), which found that technology supports collaborative learning.

An investigation of the effect of digital tools on the efficacy of bottom-up and top-down reading strategies, both in general and AFL settings, was lacking from literature; this gap is what the current study has explored and analyzed.

This study explored the use of Perusall to enhance AFL students' reading comprehension. This was done by raising L2 Arabic learners' awareness of the bottom-up and top-down reading comprehension strategies and utilizing students' background knowledge. This study also engaged students in learning by giving and receiving feedback from peers. The findings demonstrate that students engaged in reading activities and became proficient in applying Arabic reading strategies. Additionally, they were able to develop an online learning community where they supported each other in pursuing their AFL goals. Moreover, the study revealed that the intermediate-level students were able to read longer texts than predicted by the ACTFL (2012) reading standard guidelines.

8 Conclusion

This study investigated the use of Perusall in a class of elementary-high/intermediate-low level AFL students attending an American university in Qatar. The results show that the platform effectively scaffolded learning of Arabic reading strategies and raised students' awareness of reading strategies. The data indicated that students formed a cohesive learning community in which they supported each other by exchanging feedback, leading to success at reading longer texts than typically expected of L2 students. This study bridges the gap between AFL curricular research and research into technology as a pedagogical tool. It concludes that digital tools can increase curricular efficiency, as evidenced by the Perusall platform and its effects on students' reading capabilities.

References

Alfassi, M. (2004). Reading to learn: Effects of combined strategy instruction on high school students. *The Journal of Educational Research, 97*(4), 171–185.

Alhaqbani, A., & Riazi, M. (2012). Metacognitive awareness of reading strategy use in Arabic as a second language. *Reading in a Foreign Language, 24*(2), 231–255.

Alexandria, V. A. (2012). American Council on the Teaching of Foreign Languages. American Council on the Teaching of Foreign Languages (ACTFL)/National Council for.

Arthi, M., & Srinivasan, R. (2018). Influence of reading comprehension strategies on english language teaching at the tertiary level. *Reading, 2*(3), p 40.

Bakia, M., Means, B., Gallagher, L., Chen, E., & Jones, K. (2009). *Evaluation of the enhancing education through technology program*. US Department of Education. Office of Planning, Evaluation and Policy Development. Policy and Program Studies Service.

Barab, S. A., Barnett, M., Yamagata-Lynch, L., Squire, K., & Keating, T. (2002). Using activity theory to understand the systemic tensions characterizing a technology-rich introductory astronomy course. *Mind, Culture, and Activity, 9*(2), 76–107.

Bellamy, R. K. (1996). Designing educational technology: Computer-mediated change. In *Context and consciousness: Activity theory and human-computer interaction* (pp. 123–146). The MIT Press.

Bennett, D., O'Flynn, S., & Kelly, M. (2015). Peer assisted learning in the clinical setting: An activity systems analysis. *Advances in Health Sciences Education, 20*(3), 595–610.

Benson, P., & Chik, A. (2010). New literacies and autonomy in foreign language learning. In M. J. Luzon, M. N. Ruiz, & M. L. Villanueva (Eds.), *Digital genres, new literacies and autonomy in language learning* (pp. 63–80). Cambridge Scholars Publishing.

Carrell, P. L. (1983). Some issues in studying the role of schemata, or background knowledge, in second language comprehension. *Reading in a foreign language, 1*(2), 81–92.

Chen, L. W. C. (2015). Taiwanese EFL learners' perceived use of online reading strategies. *IAFOR Journal of Education, 3*(2), 68–80.

Chun, D., & Plass, J. (1997). Research on text comprehension in multimedia environments. *Language Learning and Technology, 1*(1), 60–81. Available: http://llt.msu.edu/vol1num1/chun_plass/default.html

Cole, M., & Engeström, Y. (1993). A cultural-historical approach to distributed cognition. In *Distributed cognitions: Psychological and educational considerations* (pp. 1–46). Cambridge University.

Crum, C. E. (2017). *Influence of technology on english language learners' vocabulary, reading, and comprehension*.

Debski, R. (2002). Technology and second language learning through socialization. In S. Naidu (Ed.), *Learning and teaching with technology: Principles and practices* (pp. 129–146). RoutledgeFalmer.

Elshair, H. M. (2002). *The strategies used by students to read educational websites and their relation to website usability and text design.* Doctoral dissertation, University of Pittsburgh.

Engeström, Y. (1987). *Learning by expanding: An activity- theoretical approach to developmental research*. Retrieved September 23, 2003, from http://lchc.ucsd.edu/mca/Paper/Engestrom/expanding/toc.htm

Girón García, C. (2016). Teaching and learning EFL successfully through an online environment: An experimental study with "Legal English" students. *Journal of Electronics and Communication Engineering Research, 3*, 01–11.

Hamat, A., Nor, N. F. M., Azman, H., Bakar, N. A., & Noor, N. M. (2010). I-ELLS: A research-based design for an online interactive literacy system. *International Journal of Education and Information Technologies, 4*(3), 165–173.

Hansen, G. F. (2008). *Visual word recognition in Arabic*. Syddansk Universitet. Center for Mellemøststudier.

Hansen, G. F. (2010). Word recognition in Arabic as a foreign language. *The Modern Language Journal, 94*(4), 567–581.

Hardman, J. (2005). Activity theory as a potential framework for technology research in an unequal terrain. *South African Journal of Higher Education, 19*(2), 378–392.

Hess, S. A. (2014). Digital media and student learning: Impact of electronic books on motivation and achievement. *New England Reading Association Journal, 49*(2), 35.

Huang, H. C. (2014). Online versus paper-based instruction: Comparing two strategy training modules for improving reading comprehension. *RELC Journal, 45*(2), 165–180.

Huang, H. C., Chern, C. L., & Lin, C. C. (2009). EFL learners' use of online reading strategies and comprehension of texts: An exploratory study. *Computers & Education, 52*(1), 13–26.

Hult, S., Kalaja, M., Lassila, O., & Lehtisalo, T. (1990). HYPERREADER- An interactive course in reading comprehension. *System, 18*(2), 189–198.

Jonassen, D. H., & Rohrer-Murphy, L. (1999). Activity theory as a framework for designing constructivist learning environments. *Educational Technology Research and Development, 47*(1), 61–79.

Kasper, L. (2003). Interactive hypertext and the development of ESL students' reading skills. *The Reading Matrix, 3*(3), 15–22.

Lei, X. (2008). Exploring a socio-cultural approach to writing strategy research: Mediated actions in writing activities. *Journal of Second Language Writing, 17*(4), 217–236.

Lepek, D., Radl, S., & Khinast, J. (2018). Using Perusall to Enhance Student Learning of Particle Technology at Graz University of Technology. Poster session presented at World Congress on Particle Technology, Orlando, United States.

Liberatore, M. W. (2017). Annotations and discussions of textbooks and papers using a web-based system (Wo. rk in Progress). In *2017 ASEE Annual Conference & Exposition*.

Lin, W. C., & Yang, S. C. (2011). Exploring students' perceptions of integrating Wiki technology and peer feedback into English writing courses. *English Teaching: Practice and Critique, 10*(2), 88–103.

Liu, M., Moore, Z., Graham, L., & Lee, S. (2002). A look at the research on computer-based technology use in second language learning: A review of the literature from 1990–2000. *Journal of Research on Technology in Education, 34*(3), 250–273.

Lofthouse, R., & Leat, D. (2013). An activity theory perspective on peer coaching. *International Journal of Mentoring and Coaching in Education, 2*(1), 8–20.

Miller, K., Lukoff, B., King, G., & Mazur, E. (2018, March). Use of a social annotation Platform for Pre-class reading assignments in a Flipped introductory Physics class. In Frontiers in education (Vol. 3, p. 8). Frontiers.

Nor, N. F. M., Azman, H., & Hamat, A. (2013). Investigating students' use of online annotation tool in an online reading environment. *3L: Language, Linguistics, Literature, 19*(3), 87–101.

Park, H. R., & Kim, D. (2011). Reading-strategy use by English as a second language learners in online reading tasks. *Computers & Education, 57*(3), 2156–2166.

Peña-López, I. (2015). *Students, computers and learning. Making the connection*. OECD.

Perusall. (2020, July 27). https://perusall.com

Poole, A. (2011). The online reading strategies used by five successful Taiwanese ESL learners. *Asian Journal of English Language Teaching, 21*, 65–87.

Rajab, A., Rahman, H. A., Wahab, S. R. A., Nor, F. M., Zarina, W., Zakaria, W., & Rajim, W. Z. (2017). Metacognitive reading strategies among undergraduates. *International Journal of Information and Education Technology, 7*(7), 548–551.

Raporu, İ. H. (2015). *Literature review on the impact of digital technology on learning and teaching*. The Scottish Government.

Shaheen, M., & Ezzeldin, A. M. (2014). Arabic question answering: systems, resources, tools, and future trends. *Arabian Journal for Science and Engineering, 39*(6), 4541–4564.

Singhal, M. (1998). A comparison of L1 and L2 reading: Cultural differences and schema. *The Internet TESL Journal, 4*(10), 4–10.

Yu, S. (2014). *Understanding Chinese EFL students' participation in group peer feedback of L2 writing: A socio-cultural and activity theory perspective*. The Chinese University of Hong Kong (Hong Kong).

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Navigating the Shift from Language Instructor to Instructional Designer: How Foreign Language Pedagogy Can Adapt in the Age of E-Learning

Gianluca Pedrotti, Zachary Sporn, and Laura Capitani

> *My love is thine to teach. Teach it but how, and thou shalt see how apt it is to learn. Any hard lesson that may do thee good.*
>
> *William Shakespeare*

1 Background

COVID-19 has disrupted traditional models of education, forcing a reconsideration of how instruction and assessment are delivered at every level. Universities, schools, and other institutions had to implement distance learning solutions without adequate time to prepare (Burgess & Sievertsen, 2020). The abrupt shift from classrooms to an online environment has been a challenge for all affected, including school directors, curriculum coordinators, and language instructors (UNESCO, 2020). As economists Simon Burgess and Hans Henrik Sievertsen (2020) note: "Teaching is moving online, on an untested and unprecedented scale. Student assessments are also moving online, with a lot of trial and error and uncertainty for everyone." Unfortunately, the potential consequences of resulting "learning loss" among affected student cohorts could be lasting (Educational Endowment Foundation, 2020). However, innovative remote and distance learning solutions can potentially mitigate negative effects.

Language teachers focusing on student-centered and communicative approaches to foreign language (L2) instruction are grappling with online teaching platforms, where to find quality digital resources, and how to deliver engaging instruction in an

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unfamiliar environment. Many are novices at online teaching and lack expertise, institutional support, financial means, and training to successfully implement digital learning tools. We propose a model to which language instructors could adapt existing curricula and teaching modalities in response to challenges posed by the current crisis by describing how to integrate effective fundamentals of communicative language teaching with the vast array of language learning applications, online teaching platforms, learning management systems (LMSs), and other digital tools at teachers' disposal. We conceptualize this shift as a change in mindset and skill set, from that of a language teacher, in the traditional sense, to that of an instructional designer who helps learners develop oral proficiency in an L2 by marshaling digital tools to create engaging learning experiences for students in and outside the virtual classroom.

2 Scalable and Adaptable Models for Language Courses in the Age of Remote Learning

Crises like the COVID-19 pandemic occur suddenly and unexpectedly—the paradigm shift in education necessitates adaptation and flexibility. "It will be impossible for every faculty member to suddenly become an expert in online teaching and learning in this current situation, in which lead times range from a single day to a few weeks" (Hodges et al., 2020, para. 12). As Hodges et al. (2020) describe, educators and students alike must recognize that, in an emergency scenario, new courses are developed in response to a crisis to, at best, provide continuity. Consequently, online courses emerging from crises differ in structure from those which could be developed given more room to experiment, resources, and time. They describe "emergency remote teaching" (ERT) as:

> [...] a temporary shift of instructional delivery to an alternate delivery mode due to crisis circumstances. It involves the use of fully remote teaching solutions for instruction or education that would otherwise be delivered face-to-face or as blended or hybrid courses […] The primary objective in these circumstances is not to re-create a robust educational ecosystem but rather to provide temporary access to instruction and instructional supports in a manner that is quick to set up and is reliably available during an emergency... (Hodges et al., 2020, para. 13)

In this challenging moment, foreign language teachers and students can benefit from innovative pedagogical approaches to ERT. Utilizing existing solutions or adapting consolidated online or app-based courses to the new reality enables a faster response to sudden gaps in the delivery of language education post-COVID-19. One way forward for foreign language education is developing scalable and easily adaptable models for courses that institutions and educators can rely on during and after this crisis.

Integrating technology and synchronous instruction via live video chat, language teachers can adapt techniques from the disciplines of instructional design and communicative language teaching. Foreign language teachers are able to marshal

various digital resources to help students attain conversational proficiency in their target language. This new teaching practice is aided by curating, collecting, and creating digital resources catering to students' diverse needs, goals, and interests.

3   Case Study: A Blended Learning Italian Course

We present a model for beginner-level language course suitable for novice language learners, or those at levels A1 and A2 according to the Common European Framework of Reference of L2 proficiency (Council of Europe, 2017). Maastricht University has offered the course "Web-based interactive Italian" (Capitani, 2020) since 2013. A public university in the Netherlands with a large international student population, Maastricht University, offers bachelor programs in Dutch and English. Typically, undergraduate students take Italian as a language elective for which they receive credit and certificates stating their proficiency level; they're motivated to learn Italian for practical communication and professional reasons.

"Web-based interactive Italian" combines individual instruction via video conferencing platform Skype, along with interactive online activities in a hybrid model. The main syllabus is composed of Babbel's Beginner Courses (Lesson Nine GmbH, 2020), as well as exercises and custom material hosted on online applications such as Quizlet, which the instructor uploads to an LMS. Several studies conducted by independent academic researchers have found that Babbel enables learners to effectively develop oral proficiency and explicit linguistic knowledge in an L2 after short periods of dedicated use (Bradley et al., 2018; Loewen et al., 2020; Van Deusen Scholl et al., 2019; Vesselinov & Grego, 2016). Although the course syllabus is primarily based on lessons provided by Babbel, a subscription-based language learning platform, the structure, and the modality of the course can be easily adapted to free open educational resources and tools such as H5P or LearningApps. Teachers can access these user-friendly tools, which require no programming expertise, to create gamified learning and review activities and quizzes similar to those Babbel offers, which can then be uploaded to an LMS and made accessible to course participants to use autonomously.

The course follows principles of the flipped classroom (Bergmann & Sams, 2012), which has been linked to improved student L2 learning outcomes in several meta-analyses (Akçayır & Akçayır, 2018; Cheng et al., 2018). The model combines elements of traditional language pedagogy with aspects of the blended learning approach as defined by Graham (2006, p. 5): "Blended learning systems combine face-to-face instruction with computer-mediated instruction." However, in our model, the "face-to-face" instruction takes place online. Two meta-analyses examined dozens of peer-reviewed journal articles on the effectiveness of blended and hybrid L2 learning models combining face-to-face instruction with digital learning media and apps; they showed that mixing synchronous and asynchronous instruction can be even more effective than traditional, face-to-face learning (Hamilton, 2018; Mahmud, 2018).

The courses are structured in three phases repeated at biweekly intervals. In the first phase, students complete assigned Babbel lessons in the mobile app autonomously. Babbel enables ubiquitous learning, anywhere or anytime. Following the flipped classroom model, students independently practice and revise vocabulary and grammatical structures, learn about Italian culture, and train listening, reading, speaking, and writing skills.

In the second phase, students reinforce what they've learned with a range of supplemental material, created by the instructor and provided as hyperlinks on an LMS. In practice, this means that apart from the syllabus of Babbel lessons, students use additional resources to consolidate their learning such as digital flashcards, games and quizzes, and instructor-designed activities on the "online post-it board" Padlet, as well as curated online newspaper articles, interviews, and videos.

In an emergency scenario, these first two phases provide self-directed, asynchronous materials allowing students to continue studying independently, while schools and universities temporarily close, mitigating disruption to their language learning. This provides course facilitators time to organize online sessions, a new course plan, and prepare for the next phase. The first two phases of learning via Babbel and other asynchronous activities enable a gradual transition to the new reality.

In the final phase, learners are ready for an intensive 30-minute lesson with their tutor via synchronous video chat. In this session, they synthesize and solidify the skills they developed during the first two phases by practicing speaking skills with a teacher-interlocutor. They also receive personal feedback on their oral performance and homework. The instructor provides tailored lessons focused on each learners' unique challenges to offer a personalized learning experience. So far, all online sessions were 1:1; the model, however, can be scaled and adapted for online groups. In group sessions, conferencing tools facilitate separate "breakout rooms" where students do pair work and have discussions in small groups as in a physical classroom.

Flipping the classroom, providing asynchronous interactive activities and online material means students can develop their language skills, even in the absence of face-to-face instruction. Finally, in this online flipped classroom, language teachers have more time to dedicate to struggling students, differentiating online interactive activities and creating smaller "working groups" during class sessions.

4 Communicative Language Teaching Strategies in the Virtual Classroom

When moving from traditional teaching to an online environment, instructors need to reflect on how some methods are challenging to replicate in the context of a virtual classroom. Classroom and printed materials developed over years of teaching praxis will have to be adapted. Moreover, the shift from a traditional classroom to an online classroom requires expertise, technical know-how, and time that not every

language instructor may possess (Sun, 2011). When introducing the model proposed in the case study above, facilitators may encounter challenges in adapting to the dual roles of the instructional designer and course facilitator, as well as counseling students on how to study effectively in this new paradigm. We propose some conceptual and pedagogical solutions to potential problems.

An effective transition in mindset from that of a language instructor to an instructional designer in the context of L2 pedagogy will make use of communicative language teaching (CLT) techniques for video conferencing platforms. This involves both selecting resources and designing speaking tasks that effectively develop learners' communicative competence in an L2.

Communicative language teaching (CLT) has been widely viewed as the "dominant paradigm" in foreign language teaching for decades (Kumaravadivelu, 2006). CLT focuses on meaning, rather than grammatical form; class activities are organized to expose learners to input in the L2 and provide the chance to interact with each other. To have learners communicate effectively in the foreign language, facilitators use a wide range of strategies such as group and pair work, games and role plays, and task-based activities.

Concerns may arise due to the unfamiliarity and cumbersomeness of a new learning dynamic: the virtual classroom. In student-centered classrooms, the facilitator makes use of tested pedagogical strategies to encourage students to interact and speak freely. For example, the facilitator might arrange desks in a classroom to facilitate speaking activities. Hosting students in a virtual classroom requires facilitators to reimagine speaking practice according to the new digital paradigm, while still ensuring that students actively participate.

Following the principles of the communicative approach, learners should be given contextualized everyday situations in which they can practice their speaking skills in an authentic way:

> [CLT] is based on the concept of communicative competence by which learners are expected to possess the ability to understand a language and be able to use it for the purposes of effective communication. Ultimately, in order for learners to learn how a language is used in real-life situations, the teaching-learning environment has to be organized in such a way that it closely reflects, as much as possible, the real-life situation outside the classroom. (Sekiziyivu & Mugimu, 2017, p. 8)

In an online learning environment, synchronous video chats and practice sessions can be an effective way to replicate real-life situations. On Zoom, for example, teachers use "breakout rooms," private video conferencing rooms where learners practice a lesson's target language in small groups or pairs without feeling the pressure of speaking in front of the facilitator or the entire group. Breakout rooms are a "safe" space to talk with a peer or do task-based activities in small groups.

Moving the lesson online does not mean abandoning best practices which language facilitators rely on in the classroom. Based on the authors' experiences, some activities work fine in an online environment, while others have to be reimagined to succeed. To enhance students' communicative competence, language facilitators organize activities where learners interact with each other to exchange information and solve problems (Wesche & Skehan, 2005, p. 208). In a traditional environment

as well as in an online setting, information gap activities are an excellent example of how learners can work on their speaking practice while using the learning language for real and motivating conversations. Learners work together to exchange information through communication to fill in "gaps" in information that one participant does not have by obtaining the information from other participants who do have the information.

Breakout rooms allow teachers to recreate scenarios which are similar to our new reality remote work. The pandemic has shown that video conferencing is a powerful instrument to shorten distances and alleviate feelings of isolation engendered by the lockdown. Video conferencing platforms can host speaking activities that emulate informal chats among friends or colleagues, for example.

Such activities can be easily and intuitively adapted according to a lesson's topic, target language, and relevant communicative goals. Role plays focus on interaction between course participants and reproduce possible authentic real-life scenarios: they start off by using authentic instructional materials such as videos or listening comprehension tasks as input typical of the CLT approach (Sekiziyivu & Mugimu, 2017).

Course facilitators can meaningfully integrate target language and vocabulary practice relevant to the current crisis into these online activities, empowering students to express personal meaning while using communicative structures relevant to their predicament. During the lockdown, online shopping and delivery services have boomed; role play exercises set in restaurants or shops might no longer feel realistic and authentic in an online lesson but can still be creatively reimagined. Instead, students might learn the major vocabulary and syntactic structures to order a pizza online or to make a complaint about a package. In all these activities, teachers work as a facilitator. They prepare the authentic material beforehand, organize the pairs for the breakout rooms, and assign roles.

5   Bridging the Interpersonal Gap

Body language, facial expressions, and communicative gesturing are not readily available in virtual learning spaces. Another challenge of an online course is that learners are more distracted, prone to lose motivation. Learners likely will not have the same ability to socialize or establish a bond with other learners and their teacher.

In a classroom setting, especially if the L2 is the lingua franca, students often arrive and begin chatting before the teacher. Even brief inconsequential moments of socialization play a role: connections are established which contribute to a relaxed atmosphere that improves learners' willingness to communicate and interact during the lesson. In an online setting, when students join the online class session, the facilitator is already present. Taking a few moments of class time to chat and socialize is advisable. Depending on the students' level, facilitators can spend the first few minutes of class "checking in" with students, asking how and what they are doing during lockdown or if anything keeps them from being mentally present. In a

beginner-level class, in which students lack sufficient oral proficiency to express their feelings in their L2, the facilitator needs to find creative ways to encourage an open atmosphere; showing personal photos, hobbies, or sharing anecdotes can engage students and make them less self-conscience when they are asked to speak from personal experience.

During an online lesson via video conferencing, the teacher's physical dimensions are reduced to their face. Looking into the camera, having a relaxed smile, and a patient, calm attitude in the face of technical problems are key.

Finally, during an online lesson, there might be moments of uncomfortable silence, and managing these is imperative to maintain a productive atmosphere in the classroom. Students might not understand the task they are asked to complete and feel uncomfortable asking the teacher for clarification; they might not have heard properly or might not know the answer. When interacting via videoconferencing tools, students might need to switch their microphones on and off, depending on the size of the class. This can take a few seconds, prolonging the pause between the facilitator's or other students' questions. These silent interruptions are disruptive to learners insecure in their speaking skills. Facilitators can alleviate any awkwardness by filling gaps in the conversation.

6   Conclusion

The methodology and modalities of the "Web-based interactive Italian A1-A2" (Capitani, 2020) allow L2 instructors to react promptly in a crisis and offer learners continuity of instruction in the face of school closures or other disruptions. Teaching online does not mean reinventing the wheel but rather adapting experiences to the new setting. Established best practices of traditional face-to-face classes such as a well-structured lesson plan, communicative teaching techniques, and learner-centered instructional strategies may all be successfully adapted to the online environment. In this model, teachers consider students' entire learning journey, offering possibilities for independent self-study supported by live instruction. A mixture of asynchronous and synchronous online language learning can also unlock learner autonomy, facilitating learners to explore the L2 and its culture far beyond the 90-minute lesson and fostering their independence.

References

Akçayır, G., & Akçayır, M. (2018). The flipped classroom: A review of its advantages and challenges. *Computers & Education, 126*, 334–345. https://doi.org/10.1016/j.compedu.2018.07.021

Bergmann, J., & Sams, A. (2012). *Flip your classroom: Reach every student in every class every day*. ISTE.

Bradley, L., Al-Sabbagh, K., & Vigmo, S. (2018, February). *Mobile language learning for integration– A case study of Babbel as a complementary tool* (Rep.). Retrieved July 8, 2020,

from Babbel website: https://press.babbel.com/shared/downloads/studies_research/sfi-final-report.pdf

Burgess, S., & Sievertsen, H. H. (2020, April 1). *The impact of COVID-19 on education*. Retrieved July 07, 2020, from https://voxeu.org/article/impact-covid-19-education

Capitani, L. (2020). *Italian web-based and interactive course* [Course description]. Retrieved from https://www.maastrichtuniversity.nl/education/course/italian-web-based-and-interactive-course-0

Cheng, L., Ritzhaupt, A. D., & Antonenko, P. (2018). Effects of the flipped classroom instructional strategy on students' learning outcomes: A meta-analysis. *Educational Technology Research and Development, 67*(4), 793–824. https://doi.org/10.1007/s11423-018-9633-7

Council of Europe. (2017). *Common European framework of reference for languages: Learning, teaching, assessment—Companion volume with new descriptors*. Retrieved from https://rm.coe.int/common-european-framework-of-reference-for-languages-learningteaching/168074a4e2

Education Endowment Foundation. (2020). *Impact of school closures on the attainment gap:Rapid Evidence Assessment*. Education Endowment Foundation. Retrieved July 14, 2020, from https://educationendowmentfoundation.org.uk/public/files/EEF_(2020)_-_Impact_of_School_Closures_on_the_Attainment_Gap.pdf

Graham, C. R. (2006). Blended learning systems: Definition, current trends and future directions. In C. J. Bonk & C. R. Graham (Eds.), *The handbook of blended learning: Global perspectives, local designs* (pp. 3–21). Pfeiffer.

Hamilton, V. R. (2018). *Blended learning and second language acquisition in the classroom*. Graduate Research Papers. 337. https://scholarworks.uni.edu/grp/337

Hodges, C., Moore, S., Locke, B., Trust, T., & Bond, A. (2020, March 27). The difference between emergency remote teaching and online learning. *Educause*. Retrieved July, 2020, from https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning

Kumaravadivelu, B. (2006). TESOL methods: Changing tracks, changing trends. *TESOL Quarterly, 40*(1), 59–82. https://doi.org/10.2307/40264511

Lesson Nine GmbH. (2020). *Babbel* (Version 20.59.0) [Mobile application]. Retrieved from App Store: https://apps.apple.com/de/app/babbel-sprachen-lernen/id829587759

Loewen, S., Isbell, D. R., & Sporn, Z. (2020). The effectiveness of app-based language instruction for developing receptive linguistic knowledge and oral communicative ability. *Foreign Language Annals.* https://doi.org/10.1111/flan.12454

Mahmud, M. M. (2018). Technology and language–What works and what does not: A meta-analysis of blended learning research. *Journal of Asia TEFL, 15*(2), 365.

Quizlet Inc. (2020). *Quizlet* (Version 5.3.1) [Mobile Application]. Retrieved from App Store: https://apps.apple.com/de/app/quizlet-karteikarten-lernen/id546473125

Sekiziyivu, S., & Mugimu, C. M. (2017). Communicative language teaching strategies for German as a foreign language in Uganda. *Journal of Language Teaching and Research, 8*(1), 8–15. https://doi.org/10.17507/jltra.0801.02

Sun, S. Y. H. (2011). Online language teaching: The pedagogical challenges. *Knowledge Management & E-Learning: An International Journal, 3*(3), 428–447.

UNESCO. (2020). *National education responses to COVID-19: Summary report of UNESCO's online survey*. United Nations Educational, Scientific and Cultural Organization. https://unesdoc.unesco.org/ark:/48223/pf0000373322. Accessed 21.06.2020.

Van Deusen-Scholl, N., Lubrano, M., & Sporn, Z. (2019, July 25). *Measuring Babbel's efficacy in developing oral proficiency* (Rep.). Retrieved July 8, 2020, from Babbel website: https://press.babbel.com/shared/downloads/studies_research/Measuring-Babbels-Efficacy-in-Developing-Oral-Proficiency.pdf

Vesselinov, R., & Grego, J. (2016, September). *The Babbel efficacy study* (Rep.). Retrieved July 8, 2020, from Compare Language Apps website: http://comparelanguageapps.com/documentation/Babbel2016study.pdf

Wallfisher Inc. (2020). *Padlet* (Version 128.0) [Mobile Application]. Retrieved from App Store: https://apps.apple.com/de/app/padlet/id834618886

Wesche, M. B., & Skehan, P. (2005). Communicative, task-based and content-based language instruction. In R. B. Kaplan, W. Grabe, & M. Swain (Eds.), *The oxford handbook of applied linguistics*. Oxford University Press.

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Writing and Reading Fiction Behind the Lines: Creative Learning on the Home Front

Alexandra Pett

> *War and flu. Separate causes, similar losses. Deafness, even baldness. On the home front it was clear that hundreds, even thousands of men and women had become bald because of the Spanish flu … She was sick of war. Sick of papers filled with rumor, speculation, opinion, every word written by people who were safe. War was a nightmare they were trapped inside.*
>
> *Frances Itani*

1   Thinking and Social Isolation

In late summer, 2020, we are now experiencing the effects of several months of social distancing and isolation that have affected home life and students' education. However, there are clear benefits beyond the sense of contributing to public and personal health agendas. For students, social isolation provides an opportunity to read as a route to learning to write. Writers have always needed solitary space for composing and editing; readers can use the home as a place of reflection, development of thinking, and the delight of using fiction to imagine new world views and ponder important social issues.

Reading fiction has traditionally been viewed as a way of finding order and control in a chaotic universe. The act of reading can create a safe space "without having to necessarily self-disclose or limit the focus of reflection to one's own personal lived experiences" (Guthrie & Holloway, 2019, p.140). Moreover, educators tell us that "critical reflection amongst adult learners may be fostered by examining the processes in reading and writing fiction" (Guthrie & Holloway, 2019, p. 133). In fact, as writers and readers, we inhabit a "mental space created by enforced physical

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inactivity or social isolation … that might not occur if a person is otherwise preoc-
cupied with activities and socially engaged" (Kearsley, in Guthrie & Holloway,
2019, p. 140).

The problem of this isolation, however, is setting up a plan for meaningful learn-
ing that will not be estranging but will instead lead to connectedness to others. Since
writing and reading are part of a recursive cycle of experiences, pursuing one will
lead to the imagined other. The purpose of this discussion, then, is first to demon-
strate the value of writing and reading fiction in developing reflection and critical
thinking, and then to consider options for online writing and reading among stu-
dents in undergraduate courses. Overall, increasing vocabulary and use of words
will lead to a greater understanding of the language around the issues of COVID-19.
Why, for example, do we see a pandemic like a war? Why and how do we use his-
torical events, such as both world wars, as a way of understanding experiences in
being shut in to prevent the spread of a virus? Why is the sense of space important
in wellness and disease? How does our sense of the Spanish flu in l918 continue to
impact our understanding of trauma and recovery? These research questions have
sparked my interest in exploring ways that writing and reading fiction under threat
of COVID-19 differ from other learning ventures of the past and are also a continu-
ation of some of the same issues of engaging students in critical thinking, reading,
and writing. For example, critics of war literature have questioned the reporting of
casualties and deaths. Judith Butler (2010), a feminist scholar, begins a ground-
breaking study of the way that wars are framed by commenting that "… there are
situations when counting clearly does not count … ." She asks us to consider whose
lives count and whose do not. Even if we have not had the illness of COVID-19, we
are mentally, physically, and emotionally affected by its source, spread, and treat-
ments. In student writing, the COVID-19 pandemic appears as a game-altering
force, yet how we define it remains to be expressed.

2   Writing and the Body

Generally, we regard writing as a way to express and heal anxiety. Nevertheless,
writing emerges from the body and is created within it. While writing and reading
may seem intellectual pursuits, the reality is that both involve the body. There is a
long history of philosophers interested in mind and body connections in reading and
writing. Merleau-Pontry (1945), for example, comments on the role of the body:
"… like an arm that reaches or an internal organ that functions, the text created by
a writer is both an extension and a part of the body" (quoted in Guthrie & Holloway,
2019, p. 128).

Other educators emphasize the need to explain reflection in terms of "a learning
dialogue between our implicit embodied experience and conceptual aspects of our
consciousness" (Jordi, 2011, p. 181). Reflection is more than the mind looking back
on what has happened; instead, it intakes in the present moment and the day-to-day
living, moment by moment, with the shifts in consciousness that may start in the

gut. Moreover, teachers of creative writing use the functioning of a body as akin to the structure and format of a short story or any other kind of fiction. For example, Brooks (2011) states that "… comparing a well-told story to a healthy human being becomes an effective analogy to better understand the interdependency of the parts and the delicate balance of chemistry and biomechanics that allows the body—and a story—to move, to thrive, and to grow" (Brooks, 2011, p. 15-16). Brooks identifies six key competencies in learning to write an effective story: conflict, character, theme, structure, scene execution, and writing voice (p. 23). His theory is that the more a developing fiction writer demonstrates these skills, the better the writing process will become, and, eventually, the stories will show the mastery of them.

Another approach to physicality and writing is to focus more on what is happening in the body as a writer finds a topic. In a way, this is "writing with the body" instead of against it. Drawing on earlier work by Eugene Gendlin (1981) on focusing and creative visualizations, Sondra Perl (2004) provides tapes and questions for students in writing courses. She asks students to notice and attend to their bodies as they make choices about what to write and what form to adopt. She refers to "felt sense" as "an aspect of our experience that often accompanies us when we are involved in a creative act" (2004, p.1). Here is a summary of the timed writing exercise and the questions that she poses for students. First, students relax and then write; they ask: "How am I right now? Is there anything in the way of my writing today?" Further to that, they ask themselves: "What's on my mind? What am I interested in? Is there anything else I am interested in?" Then they make a list of potential writing topics. The next step is to compose a list of topics, followed by reaching for one that seems to draw attention. To get going, writers consider what they already know about the topic. They pause to consider what particularly seems at the heart of their interest in the topic. From there, the writers go on to wait patiently until a word, phrase, or image arises. They also focus on their physical responses. They continue to ask what is hard about the writing, what seems missing, and what is necessary to complete the writing about the topic. Finally, they decide on a form that seems right for what they want to say. They may want to consult expert advice on whether to choose fiction or poetry or drama (Minot, 1998).

Perl's approach strikes me as useful at a time when we are reading and seeing a complex analysis of the origins of COVID-19 and speculation on cures. We read stories of those who are trying to heal from the illness. At the same time, we are acutely aware of the physicality of illness as we read accounts of how the COVID-19 virus takes hold of a human being. Social media increases the fear and the sensationalism of statistics. Putting that aside, when we turn to fiction, we encounter a world ordered by the writer. The structure of the story in that world allows readers boundaries in which to consider unexpected and uncontrollable events. On the one hand, reading and writing provide distance and escape; on the other hand, they lead to confrontation with loss.

Moving from the writer to the reader, students may find the reader-response approach useful as a different way to read fiction than what their teachers have asked for in the past (McCormick et al, 1987). If we return the fiction to the reader

(and not the critic), then they may start to ask their own questions. Those questions form the basis for an inquiry that propels them through the text. Overall, that facilitates a reading process of prereading, reading, responding, and writing.

3   Reading and the War Front/Home Front

Since the start of the panic over COVID-19, those who read fiction on a regular basis have reported that their reading habits have changed (Boyagoda, 2020). Some have said that they were too stressed to read at all (*Why it's hard to read during COVID-19,* 2020, a,b). They are aware of lack of focus (Mental Health, 2020). They are confused by the use of war language and military metaphors. Overall, however, reading changes our own life experiences and is clearly linked to transformative learning. Two experts tell us: "Transformative learning is reflected in fiction and … fiction portrays life journeys that include transformative experiences" (Lawrence & Cranton, 2015, Preface). Readers learn ways to give form to their feelings and ideas simultaneously as they are exploring those transformative moments in their writing.

A leading Canadian novelist and short story writer, Francis Itani, has written several novels about small-town Ontario and World War I. Her best-known war fiction, "Deafening," charts the journey of a Canadian stretcher carrier, Jim, and the experiences of his wife, Grania, a young deaf woman who contracts the flu, goes into a coma, and almost dies. In the process of suffering from the virus, Grania changes while her husband is away. She loses her red hair, the talisman of her sexuality and vitality. Ironically, the war creates a double disability for her. In part, her transformation is caused by a psychic sense of connection to the war that Itani suggests in alternating narratives – one, Grania's life at home, and the other, Jim's life as a medic amid trenches and combat. While she suffers from influenza, Jim reaches a breaking point when his best friend, Irish, gets killed. In her recovery from the flu, Grania realizes "Thunder, in her body" (Itani, 2003, p. 333). Later, she is aware of "the soldiers returning, the ones who had been deafened during the war. War and flu. Separate causes, similar losses" (p. 371). Home is now a front, like the combat zone in the country created by war.

The origin of trauma may originate in fears about reaching a breaking point and not being able to go on as a soldier or not being able to go on with life. Jim's friend, Irish, asks him: "Do you ever wonder about your breaking point? … What it might be'" (p.325). Jim believes that those soldiers who are most afraid of dying are the first to die. He takes comfort in a nonsense verse composed by his grandmother as a strategy to detach from the leveling effect of the armies as a "massive, well-oiled machine" (p. 326). Irish and Jim feel the armies' advance in the last 100 days of war as unbalancing. Ironically, in the unrelenting part of the war, Jim, too, loses all sanity; he runs through the trenches uttering strange words and eventually telling an officer in charge that his name is Chin, Grania's name for him. At the same time, Grania goes through four stages in her recovery. First, as she moves out of the coma, she has a sense of thunder in her body. Second, she begins to hear people around her

talking about how ill she has been. Third, she can hear the battlefield noise as she herself is with Jim, pulling him out of war and into a safe space. The fourth stage of recovery occurs in fragments. She has moments of awakening in which her body connects with Jim's experiences. In a way, readers also recognize that this is part of the "aha" process that occurs to writers as they locate the shift in the body and know what to write.

Many students may see themselves at the breaking point during the lockdowns, during the testing, and with the family. Amidst conflicts at home, the frustration of being alone and facing curriculum and technology that is new, as well as the fears of contracting the disease, reading this novel may prove comforting. In this fiction and others, Itani addresses both life during war and a pandemic and then subsequent events. Itani, herself both nurse and novelist, documents the changes in people's lives during the war in Europe and the flu epidemic that followed. Those who had fought in the war were viewed as a threat to society when they came home, and those who survived the virus were physically and mentally altered. Those who were once strong are now disabled. Overall, the need for solidarity and social conformity to consolidate the war effort and "fight" the disease led to anger – many being regarded as victims and injured soldiers as casualties when they could no longer fight or work.

4   Writing and Finding Voice

A first step in seeing what kinds of writing might work for those in shutdown or isolated with the pandemic and related issues is to consider the value of freewriting. This writing without structure can be timed or can be free fall or exploration, without initial direction or in response to an image or idea or observation. A basic technique in composition classes, it is useful for recovering artists of all kinds (Cameron, 1992). Now is the time also to revisit the work of Peter Elbow (*Writing Without Teachers, l998)* and other commentators such as Natalie Goldberg (1986) on the role that inner reflection and finding words can play in overcoming fears of writing.

In my experience as a college and university instructor, three experiences in teaching English courses illustrate possibilities for writing assignments. Beginning fiction writers enjoy reading very short stories called sudden fiction. They first read several examples and then start experimenting with flash fiction, mini short stories that are plot-driven and begin just before the climax of a conflict, both visually and emotionally apparent (Terrayo, 2018). In my own case as a facilitator of online learning, I wrote a one-paragraph short story and then invited others to do the same. Using video conferencing software such as Zoom and Teams, students can exchange stories, talk about their experiences in composing, and then write to each other about what they thought was effective in the writing and what could be improved. They pose questions for each other and ask for missing information about the characters' backstory and motivations in discussion forums or journals.

My second example of creative writing came to me in designing a course in workplace fiction. I decided to ask participants to write a short story or a series of linked journal/diary entries that focus on an incident in a particular job. The event might be departure, exit, violence, bullying, harassment, moral conflict, or improper behavior. The story should have conflict and moments of insight as character development. Overall, the story should demonstrate the six core competencies explained in Brooks' handbook for creative writing (2011).

The results of this writing have amazed me because I witnessed the development of voice and enthusiasm for writing and reading. In 5 years of using this creative assignment, I have witnessed students' own traumas at work and have seen a side to their learning that I had not experienced in the discussions or other writing in the course. Of course, the assignment this Spring has taken on a different dimension because the workplace has become a home space. Writing about COVID-19 and working at home now predominate, but some use the opportunity to look at occupations, such as service workers in restaurants and retail, grocery story assistants, home deliverers, factory line work, and flight attendants. Having to smile when they would like to scream, workers today experience the conflict of confused identity as they try to hide their emotions (Ciulla, 2000, p. 123). Overall, social isolation at work has added to the feelings of emptiness and alienation that exist in some jobs and under lockdown.

A third attempt to include creative writing in course assignments is geared to composition students with limited writing skills. I ask for a 500-word think piece about the world after COVID-19. What would this world look like? What social structures would have disappeared? What losses would be evident? What signs of new power arrangements would be visible? What would be the gains or lessons learned? Further, I ask for a selfie as in a character sketch of what the writer thought he/she would be like after a vaccine has been located. Would the writer still be in the same relationships, seek the same kind of employment, or have the same life goals?

5 Writing and Trauma/Recovery

Writing and reading can develop empathy to understand the suffering of others (Jarvis, 2012). They can also be healing for an individual in search of emotional healing from trauma. We already associate COVID-19 with people coming together to overcome a common threat, such as a war in which there are antagonists and protagonists. There are some events like COVID-19, however, beyond the ordinary that we deal with alone. Trauma survivors live in a numbed zone between past and present realities, never having experienced the event that caused the emotional and physical pain, forever reliving suffering without knowledge of what happened (Caruth, 1996). Those around them do not know the facts and must resort to imagination to fill in the gaps. Both reading and writing around the COVID-19 pandemic will take us to traumas past and present. Such work will lead us to challenge the

norms of our culture and reassess the meaning of solitary life and being in a community, for ourselves as writers and readers, and for all those who seek to explore change, learn to think differently, and grow as human beings.

References

Boyagoda, R. (2020, April 11). *COVID-19 has changed the way we read*. GLOBEANDMAIL.COM.

Brooks, L. (2011). *Story engineering: Mastering the 6 core competencies of successful writing*. Writer's Digest Books.

Butler, J. (2010). *Frames of war: When is life grievable?* Verso.

Cameron, J. (1992). *The writer's way: A spiritual path to higher creativity*. Putnam.

Caruth, C. (1996). *Unclaimed experience: Trauma, narrative, and history*. John Hopkins UP.

Ciulla, J. B. (2000). *The working life: The promise and betrayal of modern work*. Three Rivers Press.

Elbow, P. (1998). *Writing without teachers*. Oxford University Press.

Gendlin, E. T. (1981). *Focusing*. Bantam.

Goldberg, N. (1986). *Writing down the bones: Freeing the writer within*. Shambhala.

Guthrie, P. A., & Holloway, S. M. (2019). Learning to be critically reflective: Exploring fiction writing and adult learning. *Studies in Continuing Education, 40*(2), 133–148. https://doi.org/10.1080/0158037X.2017.1415875

Herleau-Ponty, M. (1945). *The phenomenology of perception*. Routledge.

Hirchberg, S. (2020a, April 15). *The impact of COVID-19 on reading*. Book Net Canada.

Hirchberg, S. (2020b, May 5). *The impact of COVID_19 on reading, part 2*. Book Net Canada.

Jarvis, C. (2012). Fiction, empathy, and lifelong learning. *International Journal of Higher Education, 31*(6), 743–758.

Jordi, R. (2011). Reframing the concept of reflection: consciousness, experiential learning, and reflective learning practices. *Adult Learning Quarterly, 61*(2), 181–197.

Lawrence, R. L., & Cranton, P. (2015). *A novel idea: Researching transformation learning in fiction*. Sense Publishers.

McCormick, K., Waller, G., & Flower, L. (1987). *Reading texts: Reading, responding, writing*. Heath.

Mental Health. (2020, July 13). Why it is hard to read during COVID-19. *World Economic Forum*.

Minot, S. (1998). *Three genres: The writing of poetry, fiction, and drama*. Prentice-Hall.

Perl, S. (2004). *Felt sense: Writing with the body*. Heinemann.

Tarrayo, V. N. (2018). Beauty in Brevity: Capturing the narrative structure of flash fiction by Filipino Writers. *Journal on English Language Teaching, 8*(2), 36–56.

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No One Wants to be a Host of Ghost Sessions: Techniques to Improve Student Engagement and Active Participation

Adnan ul Haque

> *Learning is not the product of teaching. Learning is the product of the activity of learners.*
>
> *(John Holt, n.d.; cited from Nomishan, 2014)*

1 Background

Often students ask me:

"Professor how do I focus on my studies"?

"Are there any specific hours I should study or when is the best time?"

"How do I score 80% or 90%"?

I respond: "There is no definite nor best time… no set pattern, but you can focus when you pay attention to class discussions and concentrate on learning then. Focus on learning and grades will automatically come. Numbers and grades might fade in the journey, but learning will last…"

The pandemic has not only forced students to change their learning styles. It has equally challenged the teaching faculty to revisit and change their existing styles and patterns. Among those teachers, I needed to modify my style of teaching to facilitate the students as we shifted to remote synchronous delivery in virtual classrooms. Some of the challenges that became visible with the COVID-19 crisis were:

How to engage and involve students in class sessions?

How to modify and transform the in-class learning activity to motivate students in video conferencing classes?

How to deal with shy and less confident students behind the webcam and avoid having "ghost students" (virtually present but physically absent) in online classes?

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How to ensure the *pareto efficiency* principle in teaching: "making one party better off without making someone worse off" (Servatius, 2011)?

According to Pondelíková and Pecníková (2020), interactive textbooks could be effective in creating materials (tools) to support innovation, which would give students a higher degree of autonomy in developing their opinions. However, the present practical choices and approaches used in my virtual classes with General Education and Business students show other approaches are important too. Textbooks alone, or even combined with instruction, could not facilitate autonomy in expressing opinions for all types of students.

1.1   Starting a Session to Build Confidence

Often, I repeat to students in class, the words of John Holt (n.d): "Learning is not the product of teaching. Learning is the product of the activity of learners" (cited from Nomishan, 2014). This reflects that the learning is a product of learners' active involvement. Furthermore, Confucius (551 BC) said: "I hear and I forget. I see and I remember. I do and I understand" (Ornbo et al., 2008). This is a foundation for my practical teaching and involving students in the learning activities.

The first and foremost thing is to ensure a student has the confidence to speak up. The creativity of students could only be blocked by hesitation in participation (Tharayil et al., 2018). Hence, the first step is to assure students break the shackle of shyness. In other words, say "bye-to-shy." I often say and repeat in these sessions: "There is no right or wrong answer. Say anything you feel. Be opinionated rather than having no opinion." This helps in improving students' confidence level and reducing the fear.

1.2   Creative Transformation in Learning Activities

Now comes the next step – how to encourage students to remain engaged and active during the entire virtual class sessions. As mentioned earlier, COVID-19 has compelled me to change my learning activities. For on-campus classes, I had fully developed all my practical teaching activities for instruction of my undergraduate General Education Studies students. Some of these activities required students to work in small groups to form creative chains from paper while using tape and scissors – using no verbal communication and working in a synchronized manner to ensure there was collaboration within the team while competing with other groups. Another activity was to encourage students through motivation by reward and to give chocolates or sweets to students for writing three different sentences about the same event or incident. But these two activities specifically needed a replacement in my COVID-19 Zoom classroom.

1.3 Collaboration Versus Competition (Real Versus Fake Challenge)

I decided in my virtual classroom to keep the creativity aspect alive. Several of these creative activities are outlined below. I started by using a collaboration versus competition activity where students team up to writing challenge statements based on the lesson for other competing groups.

1.4 Sample – Collaboration Versus Competition (Fig. 1)

The major goal is that, within the team, each student produces two statements as a contribution toward a team effort in reviewing facts and knowledge from the Communications course content. The following are the instructions for the activity:

- Maintain a specific ratio while writing real or fake statements. Total ten questions (ensuring 40:60; 50:50; or 60:40 ratio of real and fake statements).
- Questions must be related to Unit 1 and 2 subject material.
- Total of four teams with a random challenge between any two teams first, followed by the remaining teams.
- Any member can answer the challenge statement – collaborate as a team against the competition. However, your video should be turned on so that we can see you to ensure fairness.
- Five seconds is the total time for responding to questions.
- Bonus marks are awarded to the challenging team for any incorrect answer by the responding team.
- A group lead submits the answer sheet.

This activity is fun for the class. It has been inspired by the quote from Lionesses of Africa (2018): "competition makes us faster, collaboration makes us better." During this challenge activity, students study the unit details and try to outclass opponents by verifying the content knowledge. All group members are active and willing to turn on their webcams to ensure they do not lose marks.

2 Storytelling from Images (Collaborative Learning Cycle)

Another activity that I have found works effectively to keep students engaged is this storytelling activity-based on images (Fig. 2).

The "bye-to-shy" approach is very much visible in this activity. This learning activity was previously done in the physical class with students standing at the front. One student started to create and tell a story from the pictures. When I clapped my hands, the next student needed to continue from the same spot where the earlier one

Team Name: _____   BBA Section: _____

Name of Team members:

1. _____   2.   _____

3. _____   4.   _____

5. _____   6.   _____

Real or Fake words/sentences/statements: Give a challenging word to other competing teams. You have 15 minutes to compile all questions and submit answer sheet.

Example 1: **DIAGONAL COMMUNICATION** is a channel-based communication. REAL or FAKE? It is a purpose-based communication. (Fake).

3 V's of COMMUNICATION stands for visual, vocal, and verbal. REAL or FAKE? Correct answer (REAL).

Example 2: **VISION à VISUALIZE FUTURE**. (Real).

EYE CONTACT is VERBAL COMMUNICATION. (Fake).

NOTE: Do not write all fake or all real. It must be minimum 40% (**Real or Fake,** depending on your choice)

	Words/Sentences	**Real or Fake**
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
	Thank you	

Fig. 1 Sample of collaborative vs. competition class learning activity (adapted and improved with own innovation)

had left off. Students do know that if they do not participate in the class activity, there will be no grades awarded, thus, the motivation to take the challenge and perform in front of the class. It works in improving their level of confidence to a large extent. Note: On-campus in the physical classroom, each student was given a different ink color to write their sentence on the board.

Fig. 2 Sample – storytelling from images (my own illustration of the class activity)

In the virtual classroom, the theme and instructions remain the same; however, now the students are required to make the images their virtual backgrounds in their Zoom screen. It helps to be familiar with the Zoom features, particularly how to add a virtual background by saving an image to your computer and uploading it to your zoom room as a virtual background.

Students then team up to demonstrate collaborative learning through images. The theme of this learning activity is storytelling through collaboration. The instructions for the activity are:

- Groups consist of four to five students who are assigned to a breakout room for 20 minutes. They discuss the story and write it down while in their breakout room groups. They prepare the story from the images, using either straight or reverse engineering. The straight approach is to go in a straight line and form a "zigzag" (example sequence of images: 1, 2, 3…7, 8, 9), whereas reverse engineering is to start from the last image and to reach the first image (example sequence of images (9, 8, 7….3, 2, 1). The order of images should not be changed.
- Each group member contributes one or two sentences to the image and continues to develop the story.
- Each group has approximately five minutes to present the story.
- When there is a clap of hands, the storyteller changes. A clap could be randomly at any point; thus, all group members develop the storyline collaboratively and prepare for continuation.
- A group lead submits the answer sheet containing the moral of the story and text at the conclusion of the activity. This activity is collaborative writing by continuation.

This technique was inspired by a quote from Cecil B. DeMille (n.d): "the greatest art in the world is the art of storytelling" (cited in Kozlovic, 2012). The idea of

this activity is to ensure that everyone gets a chance to perform; not a single student dominates the group. Again, the idea requires us to make someone better off without making anyone worse off. This activity also helps in eliminating the chance of "ghost students" hiding behind a turned off video. It is clear from the start that only those students who participate in the group task will be graded. I do ensure that I call out students' names during the class and ask students to share their views. In the breakout rooms, all students are individually asked about the story theme and what changes they would like to include. This activity helps improve students' abilities to speak in front of the class.

2.1 Case-Based Scenarios: Applied Drama and Role-Play

Other effective activities for virtual classrooms involve drama and role-play via case-based scenarios such as the scenarios below (Fig. 3).

Other effective case-based learning scenarios and role-play examples I have used in the Zoom classroom are:

This activity plays an essential role in eliminating "free riders" and "ghost students" in the Zoom class sessions. Students know that they have a role to play and therefore cannot skip the activity. Students team up to demonstrate how they would deal with the situation and resolve a problem through applied drama. The theme of this class activity remains problem-solving and decision-making by acting and finding a solution to existing problems. The instructions for the activity are as follows:

- Groups consist of four to five students who discuss and prepare the role-play in 20 minutes.
- These groups prepare their dialogues and PowerPoint slides to explain the different scenes.
- After preparing for 20 minutes, each group has approximately five - eight minutes to present the applied drama. Students perform the role-plays to demonstrate creative solutions to challenges occurring in the professional business environment.
- Group(s) must conclude with a strategy for problem-solving and decision-making.
- A group lead submits the answer sheet containing their strategies and each player's contributions – the collaborative learning cycle is thus discussed and explained.

This creative learning activity is inspired by a quote from Tony Robbins: "identify your problems but give your power and energy to solutions" (cited from Zakari, 2018). This activity improves the problem-solving and decision-making skills of the group. They also gain the confidence to perform in front of the class and remain active in the session. The students learn skills for performing in pressure situations.

Scenario: Theme 1

In your organization, the workload has increased while the Operations supervisor has sent an email:

> *Hi,*
>
> *I am done with you and your organization. You can find a replacement yourself. I would prefer to stay at home rather than returning to this terrible place.*
>
> *TC.*
>
> *John*

Before you can think of anything, there is a knock on the door.

Administrative Head: I have very bad news. Catherine is absent again.

You: And what is the excuse?

Administrative Head: Severe migraine as always. Will not be able to come.

You: So, who is on the front desk to cover her?

Administrative Head: I am there, but you know I must work on files before the auditor arrives at 12 PM.

You: I will attend then. Meanwhile, can you ask HR to provide me the details of the candidates we are expecting for interviews?

Administrative Head: Certainly, I will.

Knock on the door!!!

Marketing Head: Hi, Steve rang …their car bumped into private property. Luckily, both are safe but will be in the hospital for concussion tests. However, we are short of two salespersons.

You: Any more good news?

Marketing Head: That is all.

The candidates for the interview then arrive.

Building on the scenario (step-by-step): What would you do? Which task would you do and why? Develop your plan and role-play it to demonstrate how you can improve the existing situation.

Note: You have to role-play the entire scene, including interview results. How would you manage a call between interviews and inform us of the results? Ensure you have a good catchy title for this case-based learning.

Fig. 3 Sample 1 – case-based learning through role-play (my own class learning activity).

Scenario/Theme 2

A. You have just entered the office and are greeted with the news of losing one of your oldest clients to a rival firm. Your advert and promotion company has been in deep water for a while. The finance team has continuously informed us that the budget is tight. Some employees are not motivated to work because they have as yet only received two months of salary. Most of those employees were working on the creative team.

You call the general manager to find out what is going on. You are informed that the clients are not happy because the content of the advert and promotion are not satisfactory.

You must **Develop** new communication strategies for your clients to communicate their product to the audience.

You ask to arrange a meeting with the creative team's most important members (some of them are not happy). **Do a role-play** showing what the problem is and how you will convince them to work for you.

B. You heard a conversation between the Head of Marketing and their subordinates. They feel they are being ignored and isolated. They saw you, but you do not acknowledge them as you walk past.

The Research and Development team has approached you now, suggesting that your channels of communication are not effective. You must use more dynamic social media interactions to promote clients' products. Their suggestion is: The Marketing and Creative teams must work together.

Now, what would you do? Ideally, you will call the Head of the Creative team and Marketing to work together. The Head of Finance also knocks on the door with some more discussion and dreadful news.

Remember, money is not the only motivator in the world.

Demonstrate in the role-play how you will convince each of the parties involved to collaborate. The role-play should also show us the end results; and what your strategic approach is during the entire play.

Note: You have to role-play the entire scene and inform us of the results. Ensure you have a good catchy title for this case-based learning.

Fig. 3 Samples 2 and 3 – case-based learning through role-play (my own class learning activities)

2.2 Additional Learning Activities

There are many other activities that I use in our online sessions with my General Education Studies BBA students to improve their participation and active involvement. Further examples include this popular activity: Students are given a random image to develop their own innovations – a product or a service. They pitch an advertisement for their innovation in 30 seconds trying to convince the audience to buy or invest in their ideas. They learn the use of Pathos, Ethos, and Logos as part of persuasive communication techniques through this activity. The idea is to "create something you wish existed."

Another activity is to ask students to pick one person in the class randomly. Often students select their friends. Then they are asked to debate a topic in a healthy and constructive manner. The idea is to ensure students do not become a "one-trick pony," that is someone who can only discuss and repeat one opinion or point of view. Topics could be Twitter vs. Facebook for business or traditional methods of marketing still have/do not have room in the digitalized world. The goal is to discuss various points of view – that is, "every coin has two sides."

Another important aspect of this activity-based teaching is to use a demo style of teaching. I give a hypothetical scenario and assign roles to the students and then ask them how they will act/react/resolve a situation in the professional work environment. There is always humor added. The roles for the students are always changed. By calling out their names and giving them challenging scenarios, I often find students actively engage in the session and find innovative solutions to the scenarios and improve their communication skills as well as their problem-solving and teamwork.

3   Conclusion

Bringing students out of their comfort zone and challenging them to show their creativity help them in improving their learning curve. Their knowledge, skills, and abilities improve. As mentioned in this manuscript, different activities focus on various goals. However, all activities are designed to ensure students do not feel isolated, bored, disengaged, and emotionally disconnected from the lecture and class in the virtual classroom. Student confidence improves significantly due to participation in such creative learning activities. They share their views and turn on their webcams without their initial hesitation that others will judge them. Creative learning activities have worked for students in developing their innovative thinking in resolving problems. It has been the reason for higher attendance in our online sessions. It has not dropped below 75% in any session. Not only has the student engagement increased. Their grades have improved in different courses. At times, I receive thank you emails from students long after their course has ended telling me that they have learned both structural and creative approaches. They improve their creative abilities for both academia and work.

To ensure students are emotionally connected to their subject matter, activities such as the above may be used. It is essential that students are given the responsibility and autonomy to do things in their own way. Teaching is according to the rule of *pareto efficiency*: make someone better off without making anyone worse off (Servatius, 2011). This is central to my engaging and active teaching/learning approach.

References

Kozlovic, A. K. (2012). *Scripture Filmmaker Cecil B. CeMille: Biblica, Religious or Spiritual?* KINEMA Issue, Spring. Retrieved from: https://openjournals.uwaterloo.ca/index.php/kinema/article/view/1276/1642

Lionesses of Africa. (2018). *The Pride of Africa's Women Entrepreneurs - Competition makes us faster, collaboration makes us better.* Retrieved from: https://www.lionessesofafrica.com/the-edit-daily/2018/10/26/competition-makes-us-faster-collaboration-makes-us-better

Nomishan, D. A. (2014). *Education in Nigeria - Reflections and global perspectives*. Library of Congress, ISBN: 9781499041958.

Ornbo, J., Sneppen, C., & Würtz, P. F. (2008). *Experience-based communication*. Springer. ISBN: 9783540787112.

Pondelíková, I., & Pecníková, J. (2020). *Inovatívne Metódy Na Univerzite Súčasnosti A Rozvoj Digitálnej Identity Študentov (Innovative Methods at the university today and the development of digital identity of students)*. In *Linguistic, literary and didactic Colloquium l-7, non-conference reviewed collection of papers* (pp. 66–77). Z-F Lingua. ISBN 978-80-8177-076-0.

Servatius, P. (2011). *Network economics and the allocation of savings – A model of peering in the voice-ove-IP telecommunications market*. Springer.

Tharayil, S., Borrego, M., Prince, M., Nguyen, K. A., Shekhar, P., Finelli, C. J., & Waters, C. (2018). Strategies to mitigate student resistance to active learning. *International Journal of STEM Education, 5*(1), 7.

Zakari, D. (2018). *600 Powerful quotes from top motivators Tony Robbins, Zig Ziglar, Robert Kiyosaki, John C Maxwell, Jim Rhon… to lift you up*. Google Reads.

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Using Gamification to Promote Students' Engagement While Teaching Online During COVID-19

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> *Gamification is the process of using game thinking and game dynamics to engage audiences and solve problems.*
>
> *Gabe Zichermann*

1   Introduction

The outbreak of the COVID-19 pandemic has forced many educators to move rapidly from traditional teaching to online teaching (Alexander et al., 2020). Numerous students have commenced learning their school subjects at home since the explosion of the global epidemic (Drane et al., 2020). At the outset of this crisis, teachers and educators encountered various challenges, which they have attempted to tackle by using diverse technological tools for teaching students online (Qadir & Al-Fuqaha, 2020), although they may not be accustomed to doing so. The most challenging task for teachers around the world has been to maintain student engagement with the activities that they are posting in the platforms for their students. Teachers struggle to find solutions to engage students in the teaching materials. One recommended technique to promote student engagement is to use gamification as a formative assessment tool to ascertain that students are engaged in online teaching (Woods et al., 2020). Gamification or gamified learning means using some elements of a game such as scoring, badges, and leader boards in the activities in nongame tasks to facilitate learning (Buckley & Doyle, 2017; Zainuddin, 2018).

In traditional face-to-face teaching, teachers can use gamification to enhance perceived motivation (Zainuddin, 2018), increase students' engagement (Zainuddin

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et al., 2019), promote learning performance (Lin et al., 2020), and develop self-efficacy skills (Rachels & Rockinson-Szapkiw, 2018). This can be attained easily as students are in the classroom and teachers can control the situation in the classroom. Conversely, teachers tend to have a challenging task while they are teaching students online. To solve this problem, online teachers have suggested using an innovative and engaging method, a clicker app called Quizizz!, as a gamified assessment tool employed online to assess students' performance after each task to make sure that students are engaged with the learned materials (Woods et al., 2020). In this regard, Hung (2017) investigated the effect of clickers in flipped classrooms with and without clickers. The study indicated that students who used the clickers app outperformed the group who did not use clickers with a large effect reaching .866.

Using gamified assessment in online learning can improve cognitive aspects. It can also promote noncognitive skills such as motivation, satisfaction, and acceptance. Zainuddin et al. (2019) conducted a study to examine the effects of gamified e-quizzes on students' performance and engagement. The researchers found that gamified assessment has a large impact on students' engagement and learning. Similarly, Zainuddin (2018) found that a gamified flipped classroom has a noticeable effect on students' perceived motivation regarding competence, autonomy, and relatedness. However, this chapter scrutinizes more closely the potential benefits of gamified assessment pertinent to students' engagement while teaching lessons online. Furthermore, the gamified assessment discussed in this chapter is formative – that is, it is considered as an assessment for learning in that students are given feedback about their answers after they respond. Black and Wiliam (2009) specify five features of formative assessment or assessment for learning. Teachers can elicit some important facts about students' performance of the learning activities. In addition to having competition among students, which increases motivation, gamified quizzes provide immediate feedback, which can help students learn from their mistakes.

Another crucial point to consider lies in distinguishing between two terms in the literature: "gamification" or "gamified learning" as distinct from "game-based learning." For example, Hung (2017) employed *Kahoot!,* which contains gaming mechanics such as leader boards and scoring to enhance students' learning. This type of learning is considered gamification because it employed game elements in the educational context. On the other hand, game-based learning is using commercial or noncommercial games that were designed for the sake of learning specific or various skills. For instance, *Minecraft!* is an application that is designed to play games for pleasure, but it can also be utilized to learn different skills such as designing, speaking, and reading – learners can use it at their own pace to improve these skills outside the classroom as well.

This chapter and findings about gamification are important for teachers and administrators during and after COVID-19 for several reasons. The first point is that students may obtain higher scores in the learned materials in the exams because of gamification. Thus, it is beneficial to provide gamification to increase their academic achievements. The second matter is that students seem disengaged while learning online and they need different techniques to increase their engagement.

The suggested methods of gamification are conducive to increasing students' engagement. The third point is that the Sultanate of Oman and the world are heading toward utilizing technology in every aspect of the educational system in the post-COVID-19 era (Verawardina et al., 2020). It is, therefore, crucial to bring such approaches into our schools now while teaching blended or online learning.

1.1 Objectives

The main objective of this chapter is to provide immediate solutions to the lack of student engagement by using gamification online as a formative assessment tool. Students can thereby develop in many aspects while learning the materials. First, gamification as a formative assessment tool and activity can increase the students' learning achievements. Second, it can influence students' engagement positively. Therefore, it is recommended that teachers adopt such techniques while teaching online to develop motivation, skills and knowledge among their students.

1.2 Significance

The suggested techniques are significant in the following ways. The first important aspect is that gamification as formative assessment might provide strategic ways to promote students' engagement in both Omani schools and outside Oman. It might also assist teachers in using gamification as an assessment tool when teaching their subjects online. Furthermore, this chapter provides insights to curriculum designers and supervisors about the importance of integrating gamified assessment into educational systems. In addition, it may inspire researchers to conduct more studies about gamified assessment in online teaching during the post-COVID-19 era. Finally, it provides a contribution to global education about the usefulness of using gamified assessment.

2 Conceptual Framework

The ideas presented in this chapter are extracted from three diverse theories in the literature. The first and most dominant framework is the gamification framework proposed by Werbach and Hunter (2012). Werbach and Hunter (2012) posit three main concepts that are necessary for the structure of gamification. These concepts are dynamics, mechanics, and components. Dynamics are defined as the general umbrella that encompasses the other elements of the framework – these are specifically the objectives and the goals of the whole program such as emotions, progression, and constraints (Werbach & Hunter, 2012). Mechanics are elements that are

responsible for applying dynamics in gamification. These could be of various types such as challenges, competition feedback, and rewards. The third element relates to the components where participants in the gamification gain points through playing, including such rewards as badges, collections, points, and leaderboards. It is suggested that these components are the most responsible aspects that encourage participants to engage in the process (Tan & Hew, 2016).

The second theory that this chapter draws on comes from the theory of formative assessment (Black & Wiliam, 2009). Black and Wiliam (2009) postulated five strategies to conceptualize formative assessment. The first strategy is to clarify and share learning outcomes and criteria for the students to ensure success. This strategy can be applied in gamified assessment in that, when teachers intend to manipulate this technique, they should provide students with the objectives of that assessment so that they have a clear idea about the purpose of the activity. The second strategy that is pertinent to this chapter is that teachers should organize effective discussion, which offers evidence of the learned materials that have been taught online. Teachers can employ this strategy in the online gamified assessment when they finish the assessment. They should provide pair or whole-class discussions online so that they assure that students understand and reflect on what they are being taught. Another strategy that can be implemented in gamified assessment is that teachers should provide feedback that helps students monitor their progress. The technique that I propose in this chapter assists students in discovering their weaknesses and strengths because as soon as students answer the questions, feedback is provided about why that answer may be wrong.

The last background construct for this chapter is student engagement, which is highly influenced by gamified formative assessment (Tan & Hew, 2016; Zainuddin et al., 2019). Students' engagement is comprised of three main components – behavioral, emotional, and cognitive (Fredricks et al., 2004). Reeve and Tseng (2011) expanded this conceptualization of engagement by adding agency engagement as an essential component in this framework. Behavioral engagement is defined as effective involvement in the academic and learning activities demonstrated by effort, on-task attention, and persistence. Cognitive engagement is defined as an investment in learning psychologically and a passion for exerting effort beyond the required and a willingness to engage in a challenge (Fredricks et al., 2004). This type of engagement includes using sophisticated and strategic strategies and using self-regulation skills. Emotional engagement describes the feelings of students toward the learning environments – for example, happiness, boredom, and interest (Fredricks et al., 2004). The last component of student engagement is called agency engagement. Reeve and Tseng (2011) define it as students' "constructive contribution into the flow of instruction they receive" (Reeve & Tseng, 2011, p. 1) by asking questions and expressing opinions and preferences. These components of engagement have major effects on students' academic performance while learning online using gamified assessment (Fredricks et al., 2004; Tan & Hew, 2016; Zainuddin et al., 2019). This conceptual framework and their contributions to student engagement are outlined in Fig. 1.
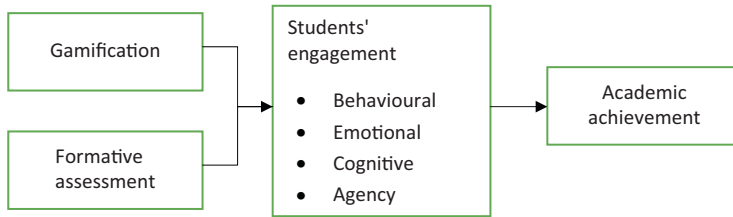
Fig. 1 Relationship between gamification, formative assessment, engagement, and achievement

3 Research Methods and Instruments

The study adopted a qualitative approach in which the respondents answered five main questions in unstructured online interviews. Appendix 1 contains the five questions that were used to obtain data regarding gamification and students' engagement while teaching online using the Google classroom platform. The questions were posted online using Google Forms app® and the participants could answer the questions freely.

3.1 Participants

The sample was 13 English language teachers who work in the Ministry of Education in Oman. They were randomly chosen to participate in the study according to their desire. All of them were expert teachers who had between five and 15 years of experience. All of these teachers had experienced using the Google Classroom platform to teaching but for a short time.

3.2 Local Contexts and Issues

During COVID-19, which specifically disrupted education beginning on the 15th of March, 2020, the Ministry of Education in the Sultanate of Oman, one of the middle eastern countries, decided to close all schools. The Ministry was somewhat ready to use online teaching, but the sudden breakdown obliged the Ministry to wait for 1 month. On the 15th of April, 2020, the Ministry of Education decided to start teaching online using the Google Classroom platform, starting with Grade 12. Upon learning of the required transition to online teaching, teachers began recording video clips that conveyed the Grade 12 syllabus and lessons. Students were perplexed about how to study online because it was the first time they had experienced this type of teaching. Many teachers noted that Grade 12 students did not engage in the teaching process in the beginning; then Grades 11, 10, and 9 students were

respectively added to the online learning using the same platform. Teachers faced the same problems as we will see later in this chapter, as elaborated in the interviews with 13 teachers.

3.3   Data Collection and Findings

To obtain a clear idea of the issues, 13 teachers teaching English from different parts of Oman were interviewed to uncover insights about teaching online and how they tackled the problems that they experienced. Interviewees were selected randomly for this small-scale research. Some of these teachers had utilized gamification while they were teaching face-to-face. The study was conducted after the teachers had experienced teaching online for one month. The first question that these teachers were asked was "Do you think that engaging students in the learning process is a challenge that might face English teachers when teaching online?" As illustrated in Fig. 2 below, about 70% of the interviewees emphasized that engaging students in the process of learning online is a challenge that could face teachers; 30% responded "maybe." However, none of the interviewees reported that students' engagement is not a challenge. Solutions should be provided to tackle this problem. Similarly, 70% of the interviewees also confirmed that students did not engage with the teaching resources when they were taught using Google classrooms.

The teachers explained various reasons for the problem of lack of student engagement, including lack of motivation, weak Internet, not receiving feedback from teachers, lack of previous practice, and lack of digital knowledge of how to use the platform. Figure 3 summarizes the reasons for the lack of engagement in the Google Classroom platform.

Furthermore, before we asked the teachers about their opinions about using gamification while teaching online, we inquired about their suggestions for increasing students' engagement, as depicted in Fig. 4. Three of the teachers maintained that
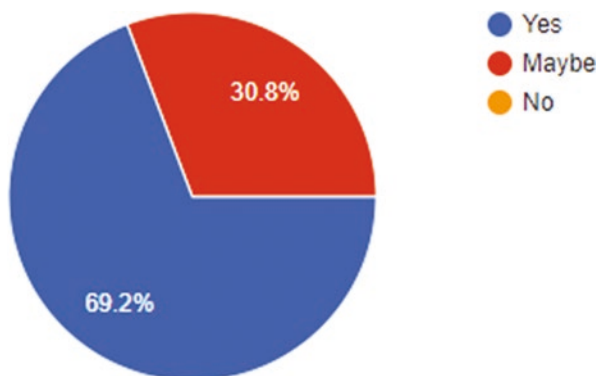
Fig. 2 Teachers' opinions about student engagement
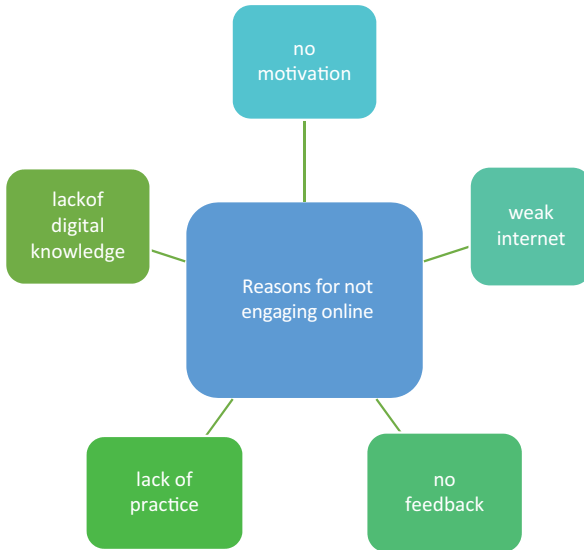
Fig. 3 Reasons for not engaging in online learning
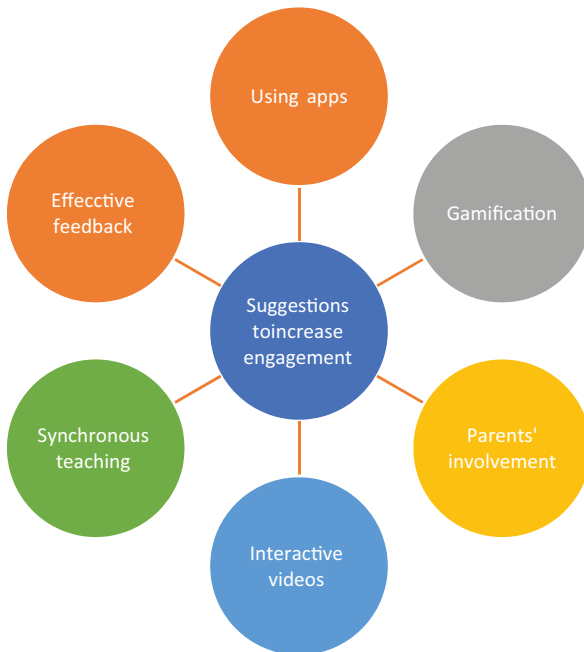
Fig. 4 Teachers' suggestions for increasing students' engagement

games and gamification are the most powerful tools to facilitate students' engagement. Other teachers suggested that instructors should use educational apps to promote engagement in online teaching. In addition, although some teachers created video clips with the help of their supervisors and posted them in the Google Classroom platform, some interviewees proposed that these video clips should be more interactive and contain gamified tasks and activities.

Another suggestion made by the teachers is that parents should play a more active role and be involved in the teaching and learning process. Parents should have the role of monitoring and managing their children as their teachers could not have sole responsibility for engaging them in the online teaching. The last two suggestions offered by the teachers were to include synchronous communication via video conferencing classrooms and effective feedback in the online teaching experience. These suggestions are related in that if teaching is synchronous, students will probably gain immediate feedback from their teachers (Black & Wiliam, 2009).

A significant part of the interview was when teachers conveyed their views about gamification and what positive substantive merits gamification can promote. The first positive feature that was proposed by the interviewees is that of students' engagement. Nearly half of them claimed that gamification could increase students' engagement as one of them said, "using gamification is a very strong tool that would make students more engaged in learning**."** Another theme that is derived from the interviews is that gamification can make the learning process interesting. An example from the interviews is this point made by one of the teachers: "Games can make the lesson more fun and interesting." Teachers also posited that competitive tasks and breaking the routine could leverage the students' motivation toward learning online. One of the teachers pointed out that "using games makes learning English attractive and enjoyable for most of the students and gives them a strong motivation to study hard." These were the most insightful concepts that were contributed by the interviewees. They show teachers' perspectives on how pertinent gamification and games can be for effective online teaching. Using gamification is not only beneficial in the case of emergencies but can also be utilized by e teachers in post emergencies. Figure 5 summarizes the most important benefits that can be gained by using gamification expressed by the teachers.

4 Implications and Recommendations

The purpose of this chapter is to clarify the challenges that have existed while teaching online during the pandemic and to explore the significance of gamification and gamified formative assessment in increasing students' engagement. To address these purposes, 13 teachers were interviewed, and some themes and patterns were inferred. Implications that emerged from the preliminary findings include (1) teachers should adopt using gamification while teaching online during the pandemic and after it because it enhances student engagement, and (2) policymakers should encourage school administrations and supervisors to implement gamification in
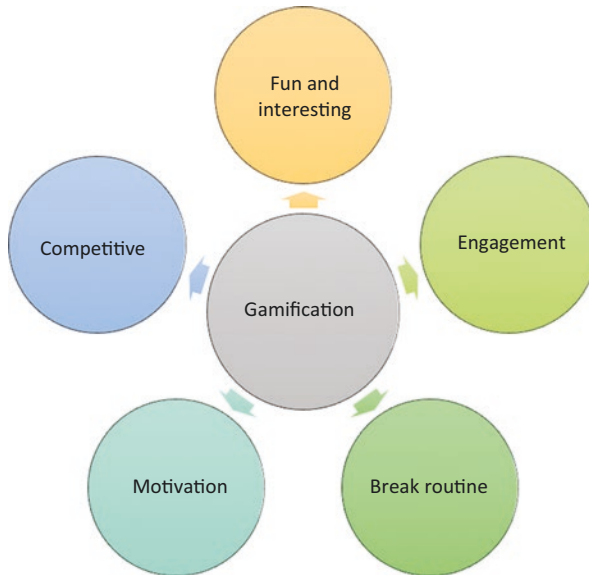
Fig. 5 Benefits of gamification as proposed by the teachers

student learning activities as a major source of assessment while teaching online to keep students tuned in and engaged.

Equally important, some recommendations could be highlighted as a result of this chapter. With the paucity of research about gamification for online teaching, scholars and researchers are invited to conduct more empirical research to investigate the role of gamification and gamified assessment on students' engagement and motivation while learning online. Moreover, as the sample of the current study was merely male teachers, further studies should be conducted with female teachers to gain a comprehensive understanding of the perspectives of both genders regarding the importance of using gamification during online learning. We envision the pandemic and this study as leading to more research and insights about gamification as a means to the engagement of students in online learning.

Appendix 1

I am conducting research about how to make students more engaged with the teaching materials when learning online during COVID-19 pandemic and after it. Would you please help me answer the following questions (for English teachers teaching grade 9–12):

1. Do you think that engaging students in the learning process is a challenge that might face English teachers when teaching online? The respondents can choose one of these three answers: Yes, maybe, and no.

2. Do you think that students were engaged when they learned English during COVID-19 pandemic using Google Classroom platform? Why or why not?
3. What do you suggest to make students more engaged with the teaching materials?
4. If I would suggest that you, as a teacher, can use gamification while you are teaching online during the COVID-19 pandemic and after it, do you think that would make students more engaged? Why or why not? (Gamification is using game elements in nongame context such as using Kahoot, Socrative, Quizizz.)
5. Do you have any other comments related to students' engagement and gamification?

References

Alexander, N., Gibbons, K., Marshall, S., Rodriguez, M., Sweitzer, J., & Varma, K. (2020). Implementing Principles of Reimagine Minnesota in a Period of Remote Teaching and Learning: Education Equity in the Age of COVID-19. *Minneapolis Foundation. Retrieved from the University of Minnesota Digital Conservancy, http://hdl.handle.net/11299/212407*

Black, P., & Wiliam, D. (2009). Developing the theory of formative assessment. *Educational Assessment, Evaluation and Accountability, 21*(1), 5–31.

Buckley, P., & Doyle, E. (2017). Individualising gamification: An investigation of the impact of learning styles and personality traits on the efficacy of gamification using a prediction market. *Computers & Education, 106*, 43–55. https://doi.org/10.1016/j.compedu.2016.11.009

Drane, C., Vernon, L., & O'Shea, S. (2020). The impact of 'learning at home'on the educational outcomes of vulnerable children in Australia during the COVID-19 pandemic. *Literature Review prepared by the National Centre for Student Equity in Higher Education, Curtin University, Australia.*

Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of educational research, 74*(1), 59–109.

Hung, H.-T. (2017). Clickers in the flipped classroom: bring your own device (BYOD) to promote student learning. *Interactive Learning Environments, 25*(8), 983–995.

Lin, C.-J., Hwang, G.-J., Fu, Q.-K., & Cao, Y.-H. (2020). Facilitating EFL students' English grammar learning performance and behaviors: A contextual gaming approach. *Computers & Education, 152*, 103876. https://doi.org/10.1016/j.compedu.2020.103876

Qadir, J., & Al-Fuqaha, A. (2020). *A student primer on how to thrive in post-COVID-19 engineering education.* https://doi.org/10.35542/osf.io/eupdm

Rachels, J. R., & Rockinson-Szapkiw, A. J. (2018). The effects of a mobile gamification app on elementary students' Spanish achievement and self-efficacy. *Computer Assisted Language Learning, 31*(1-2), 72–89.

Reeve, J., & Tseng, C.-M. (2011). Agency as a fourth aspect of students' engagement during learning activities. *Contemporary Educational Psychology, 36*(4), 257–267.

Tan, M., & Hew, K. F. (2016). Incorporating meaningful gamification in a blended learning research methods class: Examining student learning, engagement, and affective outcomes. *Australasian Journal of Educational Technology, 32*(5), 19–34.

Verawardina, U., Asnur, L., Lubis, A. L., Hendriyani, Y., Ramadhani, D., Dewi, I. P., … Sriwahyuni, T. (2020). Reviewing online learning facing the Covid-19 outbreak. *Talent Development & Excellence, 12*, 385–392.

Werbach, K., & Hunter, D. (2012). *For the win: How game thinking can revolutionize your business.* Wharton Digital Press.

Woods, A., Pettit, S. K., & Pace, C. (2020). Quaranteaching in the Time of Covid-19: Exemplar From a Middle Grades Virtual Classroom. *Becoming: Journal of the Georgia Association for Middle Level Education, 31*(1), 3.

Zainuddin, Z. (2018). Students' learning performance and perceived motivation in gamified flipped-class instruction. *Computers & Education, 126*, 75–88.

Zainuddin, Z., Shujahat, M., Haruna, H., & Chu, S. K. W. (2019). The role of gamified e-quizzes on student learning and engagement: An interactive gamification solution for a formative assessment system. *Computers & Education*, 103729. https://doi.org/10.1016/j.compedu.2019.103729

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The Quality of Teaching During the COVID-19 Era and Beyond

Naghmeh Babaee and Shahab Ghandhari

Teaching is the greatest act of optimism.

Colleen Wilcox

1   Literature Review

Missing classes can negatively impact students' skill growth during a pandemic (Burgess & Sievertsen, 2020). Also, while homeschooling can provide valuable learning opportunities for students, they are unlikely to replace formal education (Burgess & Sievertsen, 2020). The extent to which families can assist their children with education depends on their availability, resources, and noncognitive skills and subject matter knowledge (Oreopoulos et al., 2006). Furthermore, some exams have been administered online, which is a new experience for students and teachers and can "have larger measurement error than usual" (Burgess & Sievertsen, 2020, para. 12).

From a social justice perspective, teaching and learning during the COVID-19 outbreak can perpetuate inequalities between students from advantaged and disadvantaged backgrounds. The Canadian Radio and Telecommunications Commission (2019) discovered that only 69% of Canadians in the first income quintile, who earn less than 33,000 annually, had access to the Internet at home in 2017 compared to 94.5% in the fifth quintile, who earn more than $132,909 annually. Furthermore, only 63% of Canadians in the first income quintile have access to a home computer, compared to 95% of those in the fifth quintile. Therefore, students from first income

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quintile families are more likely to struggle with accessing the Internet and computer compared to those in the fifth quintile.

Similar challenges exist in Europe. 6.9% of children live in homes with no access to the Internet, and 5% of them have no appropriate place to complete assignments (Guio et al., 2018). Students living in these conditions struggle to continue their studies remotely, while those from a higher socioeconomic backgrounds shift to online education without encountering housing and Internet challenges (Van Lancker & Parolin, 2020). Many instructors have adapted their teaching, assessment, and classroom management techniques to facilitate remote learning for students. This chapter discusses two instructors' experiences with remote teaching during the pandemic.

2 Theoretical Framework

This study has been informed by constructivist theories of learning. Constructivism implies that the learners are constructors of their own knowledge, which is created by interacting with their sociocultural environment (Vygotsky, 1978). Constructivism assumes that learners learn by connecting new information to old through the context where new information is acquired and learners' attitudes and beliefs impact learning (Bada, 2015).

This study has also been informed by the experiential learning theory proposed by Kolb (1984). This model includes the following assumptions: (1) learning is a process, (2) learning is driven from experience, (3) learning requires the learner to resolve conflicts through dialogue, (4) learning carries a more holistic view, (5) learning requires the individual to interact with their environment, and (6) learning creates knowledge (Kolb, 1984; pp. 25–38).

The authors design teaching and learning activities according to constructivist and experiential learning theories. They review past lessons and provide the class with prerequisite information to assist them with learning new knowledge; then, they have the students complete task-based activities to discover new information. After that, the authors encourage the students to apply new knowledge to real-world situations. Although the previously classroom-based activities were modified to suit the new online environment, the principles of constructivist and experiential learning theory, including activating the students' prior knowledge and assigning task-based activities and pair and group work, were followed in online classes.

3 The Study

3.1 Research Design and Methodology

This study presents two qualitative case studies, each detailed by one of the authors. According to Yin (2003), a case study design is used when (a) the focus of the study is to answer "how" and "why" questions, (b) the researcher cannot manipulate the

participants' behavior, (c) the researcher aims to cover contextual conditions because they believe they are relevant to the phenomenon under investigation, or (d) the boundaries are unclear between the phenomenon and context. This study aims to answer how and why the COVID-19 pandemic has impacted postsecondary education by describing and reflecting on the teaching and learning activities without manipulating students' behaviors. The study investigates online education within the pandemic context because the shift to remote learning has occurred as a result of the pandemic, and the context and the phenomenon (teaching and learning) are inseparable.

3.2   Data Collection Procedure and Analysis

Data were collected by the authors taking descriptive and reflective field notes and analyzing the educational activities and classroom management techniques used during spring 2020 classes. The first author reflected on teaching four synchronous General Education courses in the undergraduate Bachelor of Business Administration program at Coastal University (a pseudonym). Synchronous courses refer to courses delivered via remote synchronous delivery with virtual classes in Zoom each week. The second author reflected on teaching two asynchronous Interior Design courses in the Bachelor of Art in Interior Design program at Global College (a pseudonym). The asynchronous courses refer to the weekly lessons delivered fully online with asynchronous resources, PowerPoint slides, lecture notes, discussion forums, activities, and assignments. The institutions' name and course titles have been changed for confidentiality, and codes have been used to refer to them. The alphabetical letters, GE and ID, allude to the course titles. GE stands for General Education courses delivered via remote synchronous classes in Zoom each week, and ID refers to Interior Design (ID-Studio 1 and 2 classes) delivered completely asynchronously online. The authors wanted to compare and contrast the teaching experiences and findings related to synchronous and asynchronous online delivery.

While the researchers were collecting the field notes and educational documents, they would meet weekly to discuss their teaching experiences. This process began in April and ended in June 2020. The notes were color-coded based on major reoccurring themes, and the emerging themes were identified at our last meeting.

4   Results

4.1   Synchronous Classes

The synchronous GE studies lectures and classes were delivered via Zoom using PowerPoint slides. The students were assigned pair work, group work, and discussions in the breakout rooms during classes via Zoom video conferencing. Students

also watched videos individually, answered discussion and comprehension questions, and read articles individually and collectively.

To assess student learning, the instructor asked students to answer comprehension and discussion questions in the breakout rooms while the instructor joined the rooms one at a time to monitor their participation. She also asked them comprehension, application, and critical thinking questions in the Zoom room and had them complete reflective papers and research projects at home.

The instructor created class policies, including assignment submission guidelines and classroom behavior and Zoom netiquette, and posted the documents on the class discussion forum. She explained the guidelines in the first session to clarify instructor expectations and course objectives. She also reminded the students frequently about netiquette, attendance, and assignment submission. Naghmeh would join the breakout rooms during discussions to monitor students' participation.

4.2 Asynchronous Classes

Short lectures were delivered biweekly in the ID1-Studio class, and lecture slideshows were uploaded on the learning management system. The instructor also raised a discussion question on the online forum, the students answered it, and the instructor commented on their responses. A sample discussion question was "How would you define home? Refer to your readings for descriptions of home vs. house."

Assignments were due weekly and biweekly in ID1-Studio. They consisted of a concept statement, client introduction, images, drawings, and schematic design. Comments were made by the instructor in writing and by drawings, for example, "There is no clear distinction between programmatic and design concept." In later stages of design development in the course, a sample comment included: "Bulkhead is also extruded out which gives it a visible appearance. Is this intended? Explain."

To record attendance and participation in ID1-Studio, the students were asked to complete an activity and submit the answer. This involved answering a question raised by the instructor about the discussed topic that week, and students were asked to comment on or summarize the concept. The instructor then commented on the posts. This activity counted as student attendance and participation.

The ID2 Software lectures were recorded, and their links were provided weekly for students. In the lectures, the instructor introduced Command and demonstrated its use and purpose. The video recording showed the computer screen accompanied by the instructor's voice.

Assignments were due weekly or biweekly in ID2 Software. Submissions consisted of drafting, applying building information, modeling concepts and techniques. Assessment criteria were given for each assignment. They were detailed and related to the discussed commands during the week. Comments were given in writing, for example, "Visibility parameters were not set up correctly in the dynamic block."

The ID2 Software students were asked to summarize the commands they had learned during the week and explain their application to record their attendance. Questions such as "Why would we use attributes in blocks?" were discussed and explained.

5   Opportunities

5.1   Synchronous Classes

While in large face-to-face classes, the instructor had a hard time remembering the students' names, whereas in the online classes via Zoom, she could identify them by their names posted in the corner of their video screen from the beginning of the term. Calling the students by their first names added a personal touch to the instructor-student interaction.

Shifting to online education prevented the disruption of teaching during the pandemic. The curricula were delivered, the weekly topics were covered, and exams were administered as planned. Synchronous classes positively impacted the instructor-student relationship because they were able to virtually interact with each other, make eye contact, and clarify unclear ideas during class. Naghmeh's students were asked to log into the Zoom classroom with their official names, and this facilitated identifying them. Also, the students were able to interact with each other in small groups or pairs in the breakout rooms, which provided a safe space for those who felt uncomfortable sharing their views in the main room and offered all the students an opportunity to participate in discussions.

5.2   Asynchronous Classes

ID1: In the design studio online, students were unaware of each other's progress. As a result, they felt no peer pressure and could perform in a more relaxed learning experience.

ID2 Software students were able to watch the lectures at their convenience. They could also complete the weekly exercises at their own pace. This was a major advantage over face-to-face classes for design software. In the face-to-face classes, some students learned and performed the activities quickly, whereas other students were struggling to keep up with the instruction pace.

6   Challenges

6.1   *Synchronous Classes*

One challenge pertained to classroom management. In the first session, the instructor's students in the four classes were given a set of policies to follow throughout the quarter. One of these policies pertained to attendance, according to which students needed to turn their video camera on during class and write their official full name as the display name. Some students in GE 1, 2, 3, and 4 logged in, entered the Zoom classroom, and turned off their cameras. The instructor constantly reminded them to turn on their cameras. Two students in GE4 asked whether they could keep the camera off because they were eating lunch. The instructor insisted they should turn the camera on; one student did, while the other one asked whether he could join the class in 5 minutes. The instructor accepted this to save class time and resume lecturing to avoid keeping the rest of the class waiting.

Students who lacked a private digital device sometimes used another person's laptop, and the Zoom display name showed the laptop owner's name rather than the student's. The instructor would ask the student to revise their display name, and in some cases, the student was unable to do so. This made recording attendance challenging for the instructor.

Finding a quiet space for Zoom classes was sometimes also challenging for students who shared their place with roommates. Background noises and roommates' presence would distract them and prevent them from fully engaging in discussions. These would also distract the instructor when the student's microphone was on. In an instance in GE4, a student and their roommate were captured on camera chatting with each other, and the student was asked to move to a more private space. He mentioned that he lived in a crowded place, and his roommates continued chatting with him. He became distracted, and the instructor removed him from the class. This incident distracted the student, instructor, and probably other students and interrupted the lecture.

Having the students participate in the discussion in the breakout rooms was sometimes challenging. In some cases in GE2 and GE4, as sometimes the instructor found the students chatting and lying down instead of discussing the given topic.

6.2   *Asynchronous Classes*

ID1-Studio students were unaware of each other's progress and did not spontaneously encounter each other; rather, they mainly interacted with the instructor. The instructor played a more prominent role as he was the only source for critique, compared to face-to-face classes. Also, the students needed to be comfortable with online learning tools. In a similar face-to-face design studio, students were expected to work in the college's material library and select finishes. They would examine the

finishes closely and use multiple senses such as vision and touch to select them. This was in contrast to the online experience where students were able to only use digital images. The previous classroom experience resulted in a more comprehensive learning experience.

ID2 Software class students contacted the instructor by email when they had a question. This delayed solving their problems, as opposed to face-to-face classes where the instructor was available for answering questions immediately in class.

7 Discussion

This chapter exemplifies synchronous General Education (GE) and asynchronous Interior Design (ID) courses that were previously offered face-to-face before the pandemic and were adapted to synchronous remote delivery and asynchronous online delivery, respectively, during the COVID-19 pandemic at two Canadian higher education institutions. In synchronous classes, the instructor would use Zoom for giving presentations, and in asynchronous classes, the instructor would record lectures or upload PPT files for students' reference. In both methods, the instructors clarified the classroom policies for students to ensure a productive educational experience. Assessment in both methods was least affected by the shift to online teaching as instructors could comment on students' assignments outside class time as both types of courses required that assignments be submitted via online assignment boxes.

Online teaching provided new opportunities in teaching. In synchronous classes via Zoom, students could be moved to breakout rooms for small group work. This enhanced the participation of those who felt uncomfortable participating in larger groups. In asynchronous classes online, there was no peer pressure, and in the asynchronous ID2 Software, the students could complete the tasks at their own pace.

Online teaching presented challenges alongside the opportunities. Lacking a private study space, interacting with roommates, and engaging in irrelevant activities during class time sometimes distracted the students and disrupted the synchronous lectures and discussions. Internet disruption affected both synchronous and asynchronous methods, while the former was affected more. In asynchronous classes, the students did not spontaneously interact with each other to exchange ideas and peer feedback, and the instructor's role was more prominent compared to face-to-face classes: he delivered the lectures via video and PowerPoint, answered the students' questions, and critiqued their works. Also, the multisensory experience of the design process was reduced to one dimension in online delivery, and the students had to adapt to working with online resources. In the face-to-face remote synchronous classes, the instructor was conveniently available for troubleshooting, whereas in asynchronous classes, the students needed to contact the instructor via email in case of problems. Despite the challenges, the instructors adapted to the situations caused by the pandemic, maintaining that "Teaching is the greatest act of optimism" (Colleen Wilcox).

Some of the opportunities and challenges described here demonstrate the advantages and disadvantages, as well as the social inequities in learning perpetuated by the pandemic. Other studies have revealed social inequalities caused by the pandemic in Europe (Van Lancker & Parolin, 2020). The study herein reveals that the pandemic has had similar consequences in Canada. Online teaching requires access to computers and the Internet, which for students from lower-income families is challenging. Students who had privacy while attending synchronous classes benefited more from the instruction, while those who shared their residence were often distracted and were unable to participate as much as others.

8   Recommendations

To teach synchronous and asynchronous classes, instructors need to post course/ program policies which clarify instructor expectations, attendance requirements, assignment submission expectations, classroom management rules, and other class details. This document could be shared with the class in the first session. Clarifying these expectations can lessen students' emotional burden, particularly during the potentially stressful time of a pandemic and other crises. "

Since delivering long lectures can tire the instructor and students, the instructor needs to give several short breaks during the synchronous class and also facilitate students completing individual, pair, and group activities. This can enhance autonomous and collaborative learning for the students.

Since students might lack high-speed Internet, personal digital devices, and a private study space to access synchronous lectures, instructors should provide alternative learning options such as posting the lecture files on the learning management system, as well as be available for one-on-one support during office hours.

In asynchronous classes, given students have different communication preferences, instructors should consider communicating with students through various ways such as chat, audio or video calls, and email.

Despite challenges, as professors we maintained our belief in "Teaching as an act of optimism." We were able to adapt our teaching and courses to effectively transition and support our students in their General Studies remote synchronous courses via Zoom and asynchronous online Interior Design courses. Our main recommendation is to "teach with optimism." COVID-19 has been a time of challenge but an opportunity for growth as well.

References

Bada, S. O. (2015). Constructivism learning Theory: A paradigm for teaching and learning. *Journal of Research & Method in Education, 6*(1), 66–70. https://pdfs.semanticscholar.org/1c7 5/083a05630a663371136310a30060a2afe4b1.pdf

Burgess, S., & Sievertsen, H. H. (2020). Schools, skills, and learning: The impact of COVID-19 on education. *Vox EU*. https://voxeu.org/article/impact-covid-19-education

Canadian Radio and Telecommunications Commission. (2019). https://crtc.gc.ca/eng/publications/reports/policymonitoring/2019/cmr.htm

Ferrel, M. N., & Ryan, J. J. (2020). The Impact of COVID-19 on Medical Education. *Cureus, 12*(3), e7492. https://doi.org/10.7759/cureus.7492

Guio, A. C., Gordon, D., Marlier, E., Najera, H., & Pomati, M. (2018). Towards an EU measure of child deprivation. *Child Indicators Research, 11*, 835–860.

Impacts of the COVID-19 pandemic on post-secondary students. (2020). *The Daily*. https://www150.statcan.gc.ca/n1/daily-quotidien/200512/dq200512a-eng.htm

Kolb, D. A. (1984). *Experiential learning: Experiences as a source of learning and development*. Prentice-Hall.

Learning disruptions widespread among post-secondary students. (2020). *Statcan COVID-19: Data to insights for a better Canada*. https://www150.statcan.gc.ca/n1/pub/45-28-0001/2020001/article/00015-eng.htm

Measuring COVID-19's impact on higher education. (2020). *ICEF*. https://monitor.icef.com/2020/04/measuring-covid-19s-impact-on-higher-education/

Oreopoulos, P., Page, M., & Stevens, A. (2006). Does human capital transfer from parent to child? The intergenerational effects of compulsory schooling. *Journal of Labor Economics, 24*(4), 729–760.

Sahu, P. (2020). Closure of Universities due to coronavirus disease 2019 (COVID-19): Impact on education and mental health of students and academic staff. *Cureus, 12*(4), e7541. https://doi.org/10.7759/cureus.7541

Van Lancker, V., & Parolin, Z. (2020). COVID-19, school closures, and child poverty: A social crisis in the making. *The Lancet Public Health, 5*(5), 235.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). Sage.

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Reflective Inquiry on Early Years Pedagogy: Distance Learning and Teaching in the Post-COVID-19 Era

Michelle McKay and Klara Redford

> *Our task is to help children communicate with the world using all their potential, strengths and languages, and to overcome any obstacle presented by our culture.*
>
> *Loris Malaguzzi*

1 Background

For this chapter, we reflected on two big ideas. How does an educator team honor play-based learning when the play shifts to distance learning? How does an educator team honor the play when technology is a necessary part of learning and access to materials is limited?

Educators have had to rely on the relationships they developed with their students, knowing their strengths and passions in order to consider appropriate avenues for designing invitations to engage students in continuing to ask questions, think deeply, make connections, and move their learning forward. What does authentic learning look like during distance learning? As educators planning for distance learning during COVID-19 (March 2020), we had to recognize additional considerations including differentiated learning opportunities for various family situations, which includes family composition, access to technology within the timeframe of the day, access to learning materials, indoor and outdoor learning environments, language barriers, students with special education needs, and educator capacity to deliver synchronous and asynchronous learning.

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There have been many challenges, but many successes that educators, students, and family members have experienced as we have taken on co-learning and co-teaching roles to mutually understand what play-based learning looks like, feels like, and sounds like in a distance learning, technology-dependent environment for our early years learners. We first describe our context and how we transitioned to distance learning during COVID-19 times of school closure and then reflect on the shifts required by distance learning, including considering the learning environment as third teacher, assessment for and of learning, equity, mental health and well-being, teacher capacity, and implications and recommendations for early years teaching in future critical situations.

1.1 Context

Both authors of this chapter are Ontario Certified Teachers that were teaching full-day kindergarten with a Designated Early Childhood Educator partner in a large urban public school board in southern Ontario during the 2019–2020 school year (Ontario College of Teachers, 2020). The two classrooms discussed in this chapter were comprised of students aged four to six years in their first and second year of full-day kindergarten (Ontario Ministry of Education [OME], 2016). These students came from diverse socioeconomic and linguistic backgrounds with various learning profiles. Class size ranged from 25 to 30 students in each class.

When in-person learning occurred, the pedagogy of both educator teams was grounded in play-based, inquiry learning and reflected the teaching and learning philosophy outlined in the Ontario full-day kindergarten program document (OME, 2016). Provocation and play invitations were a key instructional practice used within the classroom.

> In education, the term "provoking" refers to provoking interest, thought, ideas, or curiosity by various means – for example, by posing a question or challenge; introducing a material, object, or tool; creating a new situation or event; or revisiting documentation. "Provocations" spark interest and may create wonder, confusion, or even tension. They inspire reflection, deeper thinking, conversations, and inquiries, to satisfy curiosity and resolve questions. In this way, they extend learning (OME, 2016, p. 13).

Play invitations are developed using carefully selected materials presented to students to create, design, respond, and extend students' understanding and representation of various learning concepts (Curtis, 2004). These materials reflect the interests and identity of our students and are responsive to the learning that is currently occurring in the classroom (Curtis, 2004).

Our pedagogy and instructional practices informed our distance learning environment and teaching during COVID-19 times of isolation and physical distancing. This is explored further in the following section.

2 Play-Based Learning in a Culture of Inquiry: Shifting the Paradigm through Distance Learning

Truly honoring play-based pedagogy during distance learning through various technology platforms is possible but does take a strong understanding of instructional practices (OME, 2016). In order to reimagine what a play-based learning environment looks like when technology is a dominant means of delivering instruction, one needs to hold true to their understanding and the value assigned to learning through play (Isenberg & Quisenberry, 2002; OME, 2016). Utilizing technology as a tool to empower learners and allow students to engage in various play-based learning experiences is critical in distance learning scenarios (McLean, 2020). Technology becomes an instructional tool to bridge the physical divide between students, their families, and educators when in-person learning is not feasible. The various technologies (e.g., Google Sites) utilized during pandemic distance learning provide opportunities for teachers to scaffold thinking and learning by inviting children and families into play that is not necessarily technology-dependent (Isenberg & Quisenberry, 2002; McLean, 2020; OME, 2016).

Educators must also be mindful of the various types of play and how we can encourage children to engage in authentic play experiences using technology as a tool (Isenberg & Quisenberry, 2002; McLean, 2020; OME, 2016). The play itself does not necessarily need to be reimagined; however teachers' roles in facilitating play and noticing and naming the learning that occurs do. An effective practice would be to reflect on how this invitation or learning experience would align with a child's experience within the physical classroom.

3 The Learning Environment: Environment as Third Teacher

In "How Does Learning Happen?," the environment is described in the context in which learning takes place (OME, 2014). "It mirrors the ideas, values, attitudes, and cultures of those who use the space" (OME, 2014, p. 20). On Friday, March 13, 2020, the trajectory of our school year changed. Schools were closed and our classroom communities quickly shifted. Emergency remote learning was thrust upon educators, and new learning environments emerged overnight. The once responsive and flexible classroom space that was the "third teacher" shifted to numerous different and varied home spaces for every early years educator (OME, 2016). As distance learning evolved, educators quickly had to shift their mindset to honor the new learning spaces of their students. As we reflected on this challenge, we also had to acknowledge the immense opportunities we had to honor the "values, attitudes, and cultures" of our students, as we became significantly invested as co-learners in these new spaces (OME, 2014, p. 20).

Planning for learning that would occur within students' homes presented one of the largest challenges as we had a limited understanding of what these environments looked like. Soon, this challenge turned into opportunities for authentic engagement with the spaces they lived and played in for our students and their families. The intentionality behind our planning led students to explore and interact with their home environments in ways they might not have approached before. We made no assumptions about what tools for learning and play families might have in their homes but rather thought deeply about the type of questions and provocations we posed that led families and students to intentionally choose and use available parts and objects they could find within their spaces. Couch cushions, bed sheets, towels, canned goods, forks, spoons, laundry items, water, boxes, paper, pencils, recycled materials, light, and shadows were all materials that were shared with us as part of the learning process.

3.1 Relationships with Students in a Virtual Learning Environment (VLE)

When "in-person" learning occurs within the context of the school building, technology is utilized as a tool to further the possibilities for making thinking visible and for documenting learning through play. When we moved to virtual learning, the focus of the integration of technology in learning had to remain at the forefront of instructional decisions. Educators were aware that all learning experiences, both synchronous and asynchronous, needed to be aligned and connected. What happened in the asynchronous environment (students learning at home without the educator present) was talked about and reflected upon during synchronous learning.

Requirements for sharing learning experiences differed among school boards during distance learning. Coupled with our own school board's parameters for "allowable" VLE's ("safe" vs. "unsafe") and our own professional judgment, we selected tools most suited to our learners' needs. For asynchronous learning, the primary VLE for each author varied, but both utilized the Google Suite of tools for educational purposes with the predominant virtual environment being a Google Site and Google Classroom (Google, n.d.). In planning for asynchronous learning experiences, educators continued to honor student voice and choice by providing weekly play invitations that aligned with the four frames of the Ontario full-day kindergarten program: belonging and contributing, self-regulation and well-being, demonstrating literacy and mathematics behaviors, and problem-solving and innovating (OME, 2016). In addition to the asynchronous learning experiences, educators also utilized technology for synchronous learning.

Educators had to reflect on the skills required for successful synchronous learning to occur. After careful consideration of the synchronous learning options available within our school board, both educator teams chose telephone communication as the preferred approach to maintain connections with students and families. These

conversations on the telephone allowed our students to develop listening, communication, and comprehension skills. As well, they provided educators the opportunity to conference and connect one-on-one with our students. These conversations facilitated meaningful, authentic, personal, and "noninvasive" communication with students using a "low-tech" and "high-touch" platform. We would often offer a conversation "prompt" to allow students "think time" before we engaged in live conversations. For example, we would ask them to think about their favorite movie or ask them to read a short story to us. For students that were still developing the ability to read printed words, we would encourage them to describe what they saw in the pictures of the text and to create their own story based on their observations. On other occasions, our conversation prompts would ask students to look outside their window and to tell us what they saw. This became a much-loved conversation that led to story making and storytelling, building upon crucially developing vocabulary and synthesis of observations, especially for our students whose first language is not English. All of these experiences also allowed us to model for parents how we develop some early reading and writing behaviors and skills with students.

Synchronous learning experiences provided opportunities for us to continue to develop our relationship with students. In addition to the relationship between students and educators, we also had to consider how we would continue to facilitate relationships among students. Students told us in no uncertain terms that this is what they missed most – seeing, talking to, and learning with their friends. Due to privacy concerns around various synchronous learning options, we knew we had to innovate "inside the box" and create opportunities for the sharing of learning between students that were approachable, safe, and inclusive. For example, students and families would share drawings created individually by students, and educators would curate the drawings into a "virtual" (electronic) class book.

Another asynchronous approach we used was Flipgrid as a tool for students to amplify their voices – to share with each other, to connect their learning, and to continue to collaborate in a safe virtual environment (Microsoft, 2020). Flipgrid is a video discussion tool where students can watch, create, and respond to videos created by educators or their peers asynchronously (Microsoft, 2020). When we reflected on the experiences shared using Flipgrid, it became clear that this was an immense opportunity for students to naturally and seamlessly begin to develop many twenty-first century competencies (International Society for Technology in Education, 2020). Students who chose to use Flipgrid, not only embraced this environment but thrived in it.

4   Assessment for and of Learning

As educators deeply invested in the success of our students, we had to make a significant shift during distance learning when it came to assessment practices. We were constrained by relying on limited telephone conversations and uploaded photos or videos that were provided by parents and caregivers, as time permitted. We

could no longer notice and name the learning in real time with our students as the play was happening (OME, 2016). We were now forced to notice and name the learning *after* it occurred. Our position had become one of inferring and asking questions about the learning that took place without us being present. We became solely reliant on the willingness and capacity of our co-teachers (e.g., family members) to document learning. The reframing of where learning took place was challenging for some of our learners because of their age. What became apparent over time, and as the school closure extended, was that families were starting to see how learning takes place everywhere, including at home, and is not restricted to the time children spend at school.

Certainly, the challenges around assessment practices have been many, but there has also been a shining light as families have become so much more aware of the learning as it relates to play and inquiry and noticing and naming the learning (Isenberg & Quisenberry, 2002; OME, 2016). They became our "guides on the ride" as they have developed a much keener sense of what the kindergarten program is about and the intention behind the invitations to learn (OME, 2016).

5   Equity

What we do know is that there are profound inequities in schooling. Equity concerns and issues permeate all aspects of teaching and learning and must continue to be at the forefront of our practices in a distance learning environment (Alphonso, 2020; OME, 2009, 2016). These concerns are further exasperated when learning shifts away from a physical classroom setting. Our students come from diverse backgrounds with varying needs, and as a result, their ability to access learning experiences remotely varies (Alphonso, 2020; OME, 2009).

5.1   Access to Technology

The disparity between students who already had the technology and those that had limited technology (i.e., a parent cell phone) varied greatly depending on the location of the school and the socioeconomic factors of the community. Gaining an understanding of students' access to technology became the responsibility of educators. This practice of asking parents to state whether or not they have access to technology and Wi-Fi is one that highlights the inequities within our communities. Although school boards provided support to families by means of lending technology to students and providing Wi-Fi, these were temporary solutions that will still exist if we shift to an online learning environment in the future (OME, 2009).

5.2 English Language Learners

To ensure that all students could access learning opportunities, we relied on our knowledge of our students and families to ensure that appropriate support was provided. This varied depending on the individual needs of students but often ensured that standard practices for supporting English language learners were implemented. Some strategies that were utilized to support English language learners included providing play invitations to support rich-language experiences, using visual cues and pre-teaching new vocabulary, as well as simple and clear visual instructions (OME, 2007).

A challenge with the shift to distance learning and increase of written communication is the ability of families to read and write in English. This is a barrier to accessing the various supports and resources necessary to ensure that children can succeed. Educators also relied on the support of translator services available to us to via community organizations to ensure that families could fully access and participate in the learning.

5.3 Students with Special Education Needs

With the shift to distance learning, our focus on equity and inclusion for programming and supporting students with special education needs remained at the forefront of our focus (OME, 2009). Ensuring that opportunities for play and learning were accessible for all students was of great importance. This involved collaboration between educators and other professionals that work within the school environment to ensure that appropriate programming and supports were in place for students. The pressures for working families of children with special needs, now at home, became even more challenging, especially for students with complex needs and exceptionalities.

6 Mental Health and Well-Being

Mental health and well-being of students, families, and educators must be acknowledged as a key priority during distance learning situations. Pandemics and other crises create unique stressors that vary for all individuals. The research is clear about one's reduced ability to learn when in a state of stress. Before we can focus on learning and higher-order thinking skills, we must ensure that students and families are in a calm state (Shanker, 2013; Shanker & Barker, 2016; Tranter & Kerr, 2016). We must look at the mental health and the well-being of all involved in distance learning with a more holistic lens for meaningful learning to occur for students, families, and educators.

The largest challenge for teachers is that they are not necessarily trained to navigate some of the complex situations that students and families face. Although many resources have been shared by the school board to guide teachers in engaging in these conversations with families, teachers need to be mindful of their limitations and professional boundaries. Keeping open lines of communication with families is key to ensuring that teachers will be able to provide support (or access support through the appropriate means) to families as needed.

In addition to the mental health and well-being of students and families, we must also consider the mental health and well-being of educators (Shanker, 2013). They have just experienced a massive shift in their instructional practices, and the relationships and support networks they have within the school environment have been uprooted. Many of these educators were also in a position of educating their own children who had been impacted by the pandemic. They too were juggling distance learning while working full-time. The flow of their day and collaboration between educators in the classroom had been interrupted.

7   Teacher Capacity

What is glaringly evident during a time of considerable stress and anxiety is the dedication demonstrated by teachers to pivot instruction online. Before distance learning became a common narrative for teachers from around the world, teachers integrated technology into their practice in vastly different ways. We are not suggesting that all teachers now have the same level of understanding and ability to utilize technology in their instruction. However, many teachers have developed a new understanding and skill set to be able to support instruction virtually. Due to the sudden nature of the shutdown of many schools, the ability to build a shared understanding of online instructional practices took place very quickly (Merrill, 2020). Many educators were learning in real time, alongside their students, modeling the process of growth in understanding and skill development (Merrill, 2020).

8   Implications and Recommendations for Early Years Teaching in Future Critical Situations

In any future pandemic situation, early years educators must center play at the heart of learning experiences during distance learning. The kindergarten program is centered around play-based pedagogy. This needs to permeate the invitations and learning experiences in our virtual classrooms (OME, 2016). Reflecting on "why this learning, for this child, at this time, and in this context" will allow us to stay true to a program that is play-based and inquiry-driven (OME, 2016, p. 21).

The most pressing recommendation for any future critical situation in regard to early years teaching and learning is that there is greater funding for support and for resources beyond technology for rich play opportunities to occur. This increased funding would also assist in addressing some of the equity concerns and barriers for equitable access to learning opportunities that were outlined.

When future critical situations occur, the importance of engaging families as co-educators is necessary. What became apparent over time, and as the school closure extended, was that families were starting to see how learning takes place everywhere, including at home. During distance learning, the relationship between educators, students, and family as co-learners and co-educators has evolved. Educator reliance on the important role that families play is imperative in the distance learning model for the early years. "Families should feel that they belong, are valuable contributors to their children's learning, and deserve to be engaged in a meaningful way" as they are implementing the learning in real time (OME, 2016, p. 10).

In order to support the well-being of educators, it would be helpful to develop a virtual network of connected early years educators where brainstorming, planning, and problem-solving can occur in a collaborative setting (Merrill, 2020). This network would also serve as a platform for delivering professional learning opportunities for educators to deepen their understanding of utilizing technology as a tool for facilitating play and learning, while at the same time focusing on effective instructional practices. We must focus on ensuring that we are continuing to build an understanding within kindergarten educators about play-based pedagogy. Without a strong understanding of pedagogy, it makes it challenging for educators to conceptualize a new way of learning through virtual learning environments and how they can support play and inquiry-based learning experiences.

References

Alphonso, C. (2020, April 10). Educators worry gap may grow for disadvantaged students stuck at home. *The Globe and Mail Canada.* https://www.theglobeandmail.com/canada/article-tdsb-aims-to-bridge-gaps-in-at-home-education/?utm_medium=Referrer:+Social+Network+/+Media&utm_campaign=Shared+Web+Article+Links

Curtis, D. (2004). Creating invitations for learning. *Child Care Information Exchange, 157*, 38–40.

Google. (n.d.). *Helping K-12 educators make a greater impact.* For education. https://edu.google.com/why-google/k-12-solutions/?gclid=CjwKCAjw2Jb7BRBHEiwAXTR4jTqQ2_rbXo7PHEkJ4pWoCbv7Rs9L5j-_LWB-xhHKl-AoO-N4esHGZRoCKHkQAvD_BwE&modal_active=none

International Society for Technology in Education (ISTE). (2020). *ISTE standards for students.* ISTE. https://www.iste.org/standards/for-students

Isenberg, J. P., & Quisenberry, N. (2002). A position paper of the Association for Childhood Education International – Play: Essential for all children. *Childhood Education, 79*(1), 33–39.

McLean, C. (2020, April 12). *Let the children play: 4 reasons why play is vital during the coronavirus.* The Conversation. https://theconversation.com/let-the-children-play-4-reasons-why-play-is-vital-during-the-coronavirus-135751

Merrill, S. (2020, March 19). *Teaching through a pandemic: A mindset for this moment.* Edutopia. Retrieved from https://www.edutopia.org/article/teaching-through-pandemic-mindset-moment

Microsoft. (2020). *Empower every voice*. Flipgrid. https://info.flipgrid.com/

Ontario College of Teachers. (2020). *How teachers are certified*. Ontario College of Teachers. https://www.oct.ca/public/professional-standards/how-teachers-are-certified

Ontario Ministry of Education. (2007). *Supporting english language learners in kindergarten: A practical guide for Ontario educators*. Author.

Ontario Ministry of Education. (2009). *Ontario's equity and inclusive education strategy*. Queen's Printer for Ontario. Retrieved from: http://www.edu.gov.on.ca/eng/policyfunding/equity.pdf

Ontario Ministry of Education. (2014). *How does learning happen? Ontario's pedagogy for the early years: A resource about learning through relationships for those who work with young children and their families*. Author.

Ontario Ministry of Education. (2016). *The kindergarten program*. Queen's Printer for Ontario.

Shanker, S. (2013). *Calm, alert and happy*. Queen's Printer for Ontario. Available at: http://edu.gov.on.ca/childcare/selfRegulate.html

Shanker, S., & Barker, T. (2016). *Self-reg: How to help your child (and you) break the stress cycle and successfully engage with life*. Penguin.

Tranter, D., & Kerr, D. (2016). Understanding self-regulation: Why stressed students struggle to learn. In *What works, research into practice*. Ontario Association of Deans of Education and the Student Achievement Division. Retrieved from: https://thelearningexchange.ca/wp-content/uploads/2017/02/ww_struggle.pdf

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An Emergent Course Design Framework for Imaginative Pedagogy and Assessment in Higher Education

Nina Pak Lui and Jenn Skelding

> *Imagination is at the heart of all that is meaningful and powerful in learning. We can teach, but when the imagination of our students is sparked: when they feel, connect, engage; then true, meaningful, and long-term learning happens.*
>
> *Kavita Hoonjan*

1 Introduction

In these current times of crisis and change, critical conversations and collaborative efforts highlight the lack of values-aligned practices that already exist in higher education (De Rosa, 2020). Mechanisms in higher education such as content-heavy lectures and traditional assessment strategies serve mainly to verify attainment of factual knowledge; they do not facilitate or assess the type of learning we say we value. As we look ahead in times of uncertainty, how can we offer engaging, meaningful, and lasting learning experiences that will support students in depth of understanding in content-heavy courses? How can students be released into a dialogic and imaginative and innovative space of playfulness?

Our primary audience is all types of educators who are keen to disrupt traditional pedagogy and assessment practices in higher education. The chapter describes an innovative teaching solution—an emergent course design framework that combines Egan's imaginative education (IE) pedagogy (1997) with Kolb's experiential learning theory (1984). This is our emergent Imaginative Course Design Framework (ICDF), which aims to guide readers to examine traditional faculty-centric practices

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to liberate the energy of teaching and learning into pedagogical approaches that lead to wonder, playfulness, collaboration, and lasting understanding.

We begin by painting a canvas of the context in which we teach and provide explanations of the theories we combined to create the emerging Imaginative Course Design Framework. We include descriptions of practical examples from our own teaching practice that intentionally and effectively invoke imagination and enrich student learning. The chapter illustrates the components of the emergent course design framework in action as it occurred and developed during COVID-19 to bring theory to life. We challenge readers to consider pedagogy that awakens and inspires both the heart and mind.

2   Situating Ourselves

Trinity Western University (TWU) is a small, private, faith-based liberal arts institution, located on the traditional, ancestral and unceded territory of the Kwantlen First Nation, the Katzie First Nation, and Stó:lô First Nations in British Columbia, Canada. We are faculty members in the School of Education. In preparing to teach Education 222 (EDUC 222), Principles of Teaching and Learning, a commitment to ensuring meaningful and enduring learning was born. We knew we were "edu-soul sisters" when we both shared our hopes for the course and our future students. We share a common vision to shift the paradigm of traditional learning (i.e., lecture; "sit and get") in higher education to interactive, experiential, and reflective learning.

It is important to understand that we discovered much of what we share in this chapter by happenstance. That is to say that our collective tacit practice was always innovative and multifaceted, but we did not have the language, or the theory, to justify and situate. Things changed when Nina made a connection with Dr. Gillian Judson and IE accomplices at Simon Fraser University's Centre for Imagination in Research, Culture and Education (CIRCE). Simultaneously, Jenn was engaged in the Experiential and Embodied Learning Taskforce at TWU where Kolb's theory (1984) of experiential learning was emphasized as a high impact practice (Brownell & Swaner, 2012; Kuh, 2008).

We had spent two years of successfully navigating cohorts of EDUC 222 when, in the spring of 2020, Jenn found herself teaching a single section of the course as COVID-19 shut down our campuses. Even though Jenn was teaching the course alone, we remained a unified team. We quickly realized that the course design was built to endure even the force of a global pandemic. Our new remote learning environment consisted of pre-recording short video lectures, hosting one-on-one conferences online, using online breakout rooms for small group dialogue in Zoom, and communicating with students through our learning management system, Moodle. However, it has been through this COVID-19 experience that we have realized that student interactions, experiences, and reflections are amplified by employing cognitive tools from IE.

3   Conceptual Background

Educational theorist Dr. Kieran Egan outlines a conception of human development that describes how the human imagination grows through language use (Egan, 1997). This imagination-focused approach is called imaginative education (IE). It offers educators practical ways to engage their students' imaginations in learning any subject matter (Egan, 1997). Imaginative engagement with knowledge happens when educators employ what Egan calls "cognitive tools" – that is, learning tools such as the story-form, vivid mental imagery, metaphor, etc. (Egan, 1997; Egan & Judson, 2016). Students gain an increasingly rich understanding of the world by gradually accumulating "cognitive or thinking tools" (Egan & Judson, 2016, p. 5). Educators who are imaginative not only consider the curricular content and concepts they are dealing with but also think about the "emotions, images, stories, metaphors, sense of wonder, heroic narratives, and other cognitive tools that can give these concepts life and energy" (Egan & Judson, 2016, p. 8). Imaginative educators seek to value and build upon ways learners understand their experiences; they aim to tap into their imaginative lives with cognitive tools.

Kolb's (1984) model of experiential learning, one of the most widely used theoretical frameworks in education, is grounded in a constructivist and developmental philosophy of learning. Kolb describes learning as "the process whereby knowledge is created through the transformation of experience" (1984, p. 38). At first, as our course pivoted to a remote learning environment, we felt that the experience of experiential learning was lost to students. It took some tinkering and testing to create a new framework for course design that relies heavily on Kolb's framework to include experiences and reflection also that the mode of teaching and learning was intentionally interactive and collaborative. A new emergent framework for course design was born by combining imaginative education and experiential learning. Refer to Fig. 1 below for a conceptual overview of this new framework.

4   Innovative Teaching Solutions

We considered how to design a course that aligned with our values for student care and enduring understanding (Wiggins & McTighe, 2005). McTighe and Willis explain that enduring understandings are "promoted by active mental manipulations, construction of new ideas, and opportunities to apply newly acquired knowledge and skills in different ways than they were originally learned" (2019, p. 20). Trusting the pioneering work of Kolb (1984) and having experienced first-hand the power of experiential learning, it was our desire to apply principles of IE into the process as well to achieve deep, rich, and enduring understandings for and with our students. Cognitive tools allow learners to shape their interactions created from experiences so that they become powerful "lightbulb" moments for individual learners and their peers (Egan & Judson, 2016). This is what we aimed to do by introducing IE activities.
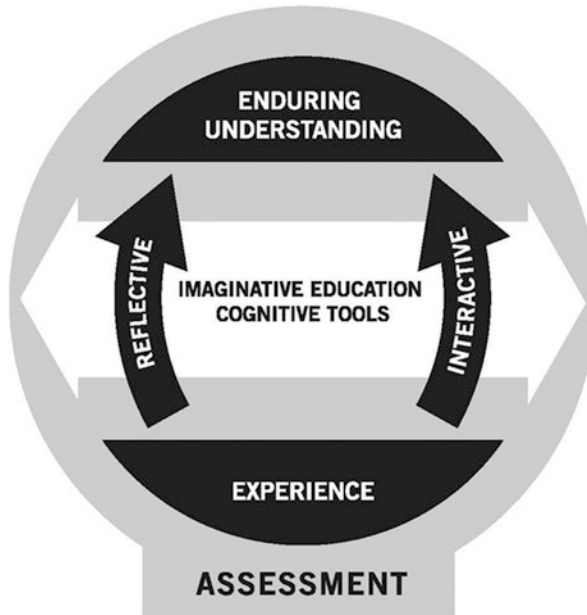
Fig. 1 Emergent Imaginative Course Design Framework (ICDF)

Furthermore, quality assessment would create the cohesion in this ICDF framework. Assessment tasks in EDUC 222 are designed for students to demonstrate higher-order thinking and meaning-making based on their learning experiences in an ongoing or formative way. Formative assessment involves the students and engages their sense of purpose and creativity (White, 2017). This means that time for reflection, engagement with success criteria, clear learning goals, and feedback conversations are embedded in the course tasks. Students write extended reflective responses, as well as create imaginative and playful products. White (2019) explains that "without continuous formative assessment built into the classroom, creativity would suffer, risk-taking would lack purpose, and products students create would be meaningless" (p. 33). We agree with White (2019) that "formative assessment is the oil in the creative engine" (p. 33). Through individual conferencing with students about activities and assignments, achievement of deep enduring understanding was clearly on display for the instructors to hear, feel, and see. COVID-19, and the shift to remote learning, allowed us during this time to critically reflect on our emergent framework and name it.

5 Emergent "Imaginative Course Design Framework" in Action

The performance-based assessment tasks discussed in this chapter illuminate how each component of the Imaginative Course Design Framework is interwoven into their design – IE and experiential learning. These assessment tasks are prime

examples of the interactions, experiences, and reflections that activate and employ the following cognitive tools from IE – metaphor, story-form, and sense of wonder – in addition to being built on dialogue based on concrete experience.

6   Example 1: Brown Bag Metaphor

During the first class of EDUC 222, students are assigned the brown bag metaphor activity. This assessment task acts as bookends for the course. It is designed to grow with student knowledge and understanding of the course content. We purposefully facilitate a sharing circle to create an open, equal space with eyes on each other, and openness to learn and receive. Using a diagnostic assignment like this at the beginning of a semester develops immediate trust and safety in a community of learners.

Students are given opportunities to play with and share metaphor. Egan and Judson (2016) suggest that "we do not lose the ability to think metaphorically as we become adults, but metaphor can lose its flexibility and energy, and so we become less creative and imaginative in how we conceptualize the world around us" (p. 41). The outcomes of student learning from the brown bag metaphor example confirms that "forming metaphor is clearly one of the foundations of all mental activity, a foundation upon which our systematic logics of rational inquiry also rest, or a better metaphor - a ground out of which they grow" (Egan & Judson, 2016, p. 42). Although the first iteration of metaphors that students create at the beginning of EDUC 222 describe connections that are already there, the second iteration of metaphors communicates the culmination of transformed thinking and new ways participants have conceptualized course material.

This assignment highlights the "power of metaphor as a learning tool because it expands our students' capacity to think and make meaning" (Egan & Judson, 2016, p. 43). For example, one common metaphor for teaching described by students at the onset of the course is a musical conductor. The conductor is described as the teacher while the students are the members of the orchestra. The curriculum is captured as the score and all students are playing one common composition. By the end of the course, based on their experiences and reflections, students see the conductor metaphor as teacher-centric. Students opt for and develop a more student-centered metaphor for teaching such as a wildflower garden at the summit of Mt. Revelstoke. According to this final metaphor, the whole community made it to the top of the mountain together to see the wonder of wild plants thriving in a surprising environment. The instructor does not define the metaphor; rather students unearth new understandings and present them in imaginative ways to spark the minds and hearts of others.

7   Example 2: Teacher Interview

The purpose of the teacher interview is to investigate and reflect on a variety of perspectives related to teaching through the realities and lived experiences of beginning and veteran teachers. It is a guided inquiry in which we provide students with targeted questions to ask during their interviews.

In class, students make their findings from their interviews visible, and they co-construct connections and emerging themes. Collaboratively, a variety of concepts – time management, diverse learners, lesson planning, self-care, professionalism, funding, and relationships – emerge as students explore and examine their narratives. Students note similarities and differences between the responses with other classmates and recognize the emotions that are conveyed in the respondents' stories. After gaining multiple perspectives and a greater sense of empathy, students write an extended reflective response summarizing what they learned from this interactive and experiential activity. Moreover, they also identify what surprises them the most and make explicit connections with associated course readings.

Egan and Judson (2016) argue: "The educational challenge is to keep the mind awake, energetic, and imaginative" (p. 101). This assignment portrays a way that our students access their imagination and opens a pathway for collective stories by teachers to come to light. In addition, "story-form tells the listener and reader how to feel about the content by bringing out the emotional meaning of the elements it contains" (Egan & Judson, 2016, p. 20). The responses from the interviews provide as much relevant knowledge as possible, and this awakens another cognitive tool – a sense of wonder (Egan & Judson, 2016). Egan and Judson (2016) explain that "a sense of wonder acts like a searchlight, bringing something into the bright light of our recognition and showing what is unique about it" (p. 102).

8   Example 3: Inquiry in Action

As students engage with the metaphor task, the teacher interview, and their early practicum experience, a sense of wonder is invoked. Our observations confirm that imagination is the engine that fuels student teachers' curiosity and drives the learner toward an intrinsic motivation to question and inquire (Egan & Judson, 2016). For example, one student reflected on the teacher interview data after experienced teachers shared with them that creating a truly inclusive classroom for all students is a challenge. They wondered: "What is a truly inclusive elementary classroom?"; "When I am teaching, how will I know if my classroom is inclusive?"; "What criteria would I measure my success by?"; and "Who is being excluded if I have to define my class as inclusive?" The list of wonderings of our students are endless. The goals for this Inquiry in action task example are to invite and delve into the wonderings of our students.

Wonder arises in students in EDUC 222 as they proceed humbly and courageously to uncover their curiosities. "Paths of learning, when paired with courage, have a greater chance to be intrinsically motivating and engaging for students" (Piersol, 2014, p. 12). Students investigate not only their questions, but in the process of free inquiry, they become vulnerable, dismantle familiar preconceptions and explore new ideas with fresh eyes (MacKenzie, 2016; Piersol, 2014). One student who investigated how to destigmatize mental health had the bravery to include their own mental health journey in their authentic piece. They shared a raw and honest poem and accompanied it with provoking images in the form of a photo essay. There was not a dry eye in the classroom; the community of learners were drawn into their peer's learning at an intellectual and emotional level – evidence of the power of heart and mind at the center of learning and teaching. We have included the poem here in Appendix A with the student's permission.

Instead of prescribing what the authentic piece should be, students choose to do something creative with their research and share it publicly (MacKenzie, 2016). These formative assessment practices set the conditions for our students to feel supported to wonder, take risks, be playful while inquiring, and create a product of their choice. Some students create and share an authentic piece that employs the story-form. This also results in a collective learning experience that is memorable for them and their audience. Students say that they will never forget this learning experience. Our observations confirm consistently that when learners have a deep and invested personal connection to what they inquire, they have the courage and vulnerability to produce evidence of learning that is a "product of their hopes, fears, passions, and ingenuity" (Egan & Judson, 2016, p. 3). Imagination brings learning to life; meaningful and memorable learning are felt and made visible (Egan & Judson, 2016).

9   Concluding Thoughts

Teaching in the postCOVID-19 era forces instructors to examine how their approaches to teaching and learning affect learners. De Rosa (2020) notes that "pedagogy is the driver of how students will interact, experience, and reflect on their learning as well as how they will assess their learning experience at our institutions during and post COVID-19." Our observations and reflections of shared experiences in teaching EDUC 222, before and during COVID-19, as well as co-writing this chapter, show us that the emergent Imaginative Course Design Framework is for all. By employing cognitive tools from IE in the design of student interactions, experiences, and reflections, educators seek to value and build upon ways learners understand their experiences. When learning is shaped in emotionally engaging ways, this gives knowledge life and renewed meaning (Egan & Judson, 2016). As educators, we need to uncover our own sense of wonder and awe to embody our own

imagination in teaching, if we want to encourage it in our students (Egan & Judson, 2016; Piersol, 2014). The possibilities for sense-making, meaning-making, and enduring understanding are endless.

10 Personal Critical Analysis

Teaching for understanding happens when the learners create new understanding versus rote learning where the professor does all the heavy lifting (McTighe & Willis, 2019). Even when a course is content-heavy, the Imaginative Course Design Framework supports an instructor in flipping the methodology before the learning process begins. In this light, another next step is revealed – what support would an instructor require to use this framework effectively?

We acknowledge that the framework is emerging and, as such, it is the beginning of a new way of planning our courses. McTighe and Willis (2019) are clear that enduring understanding must be evidenced in two ways. The first is through the application of content in novel environments, and the second is by explaining thinking through justification. Performance-based assessments are recommended to gauge understanding (McTighe & Willis, 2019). EDUC 222 is an introductory conceptual course; therefore, there is little space to see the application of content for our learners. This will inform our research focus in the future as we seek to apply this framework in higher-level undergraduate teacher education courses.

Although IE and Kolb's experiential learning theories inform the emergent course design framework, we acknowledge a possible tension. Egan and Judson (2016) indicate that "IE is distinct from both the traditionalist and progressivist methods; it is truly a new, 21st-century approach, although it draws from old resources" (p. 5). Egan (1997) argues that educators direct learners into an emotional space where learning can happen, whereas Kolb's experiential learning theory is underpinned by a constructivist orientation – letting the learner fully direct the learning (Ehf & Vilhjalmsson, 2009). We are aware of the inherent dissonance and the need to gain a deeper understanding of these tensions.

Lastly, our chapter provides an original contribution by making a supposition that quality assessment practices create a supportive environment for students to have the courage to be imaginative, to wonder, and to take risks with their thinking. We posit that it is the assessment practice holding the Imaginative Course Design Framework together, and this is worthy of future analysis and research.

Appendix A

Our Story

XIV: Still Waters
I am a girl
With an adventure to live
I have it all
my whole life left to win!

My family is loving
My friends are wild and free
I have no worries
No drama, no spilled tea.

School is a place
where I learn and play
Hanging with friends, talking to boys
Trying to figure out what to say.

And then there is sports
The love of my life
I dance with him, passionately and free
All day and all night

This is my life
Young, wild, and free
There is certainly no place
I would rather be.

XVI: Thundering Clouds
I am a girl
With a mountain to climb
I know I can make it
Hopefully just in time.

My friends...my friends?
Yes. I know they are.
We live the life of a party.
Uncontrolled, yet futures as bright as a gold star.

School is a bit harder
I'm not going to lie
I still work hard to get the grade
But I sometimes cry

Sports is there.
It's not going so well.
I don't know what to do
No one to turn to, no one to tell.

This is my life
Young, wild and free
There is certainly no place, I guess
I would rather be.

XVII: Wind and Rain
I lie awake
Alone in my bed
All is quiet
Not a word is said

I wish to rest
But instead softly weeping
I struggle to find that place
That they call sleeping

Thoughts go on
Worries all around
A long lonely battle
To this torture, I am bound

An embrace is all I want
To know someone's there
But the room is empty
And I just sit and stare

I know all will be okay
My Father told me so
But right now I am hurting
Veins colder than snow

Give me rest, O God
From this troubled mind
Grant me peace, please.
To myself, teach me to be kind.

XVIII: Monsoon
Do you know
How insufferable it is
To be in so much pain and disguise it with "I'm okay"
While inside you feel nothing but shame everyday

It rips you apart
Tears you agonizingly; slowly
Skins you alive
Leaves you for dead; crying and lonely

But I don't live for myself
Or else I would be gone by now
It's for the people I love,
for whom I stay silent when I want to cry out loud

For my mother and brothers
My father and friends
Would surely be in great pain
If they were to find me sobbing and dead

The children I look after
Would lose all hope
Not only in me, but when life gets difficult
How then, would they cope?

That is why I give myself to them
I make them all laugh and sing
I help them find joy in life
In all the little things

That is why I cheer for my friends
I cheer with my entire heart, body and soul
Although I feel like a sword has been pierced through my own side
For reasons I cannot control

And what of my younger friends, siblings and teammates
What are they to think?
If they see me on the sidelines
Moping and sad, just about to sink?

So I must be strong
In order that they may take courage
And see the light at the end of the tunnel
So they know they're not simply mannequins for storage

XIX: The Dove and the Leaf
I am a girl
Who has journeyed far and wide
But still has plenty left to discover
In this world; vast and bright

My family has helped me over the years
Have dragged me across the line
My real friends: a solid foundation
Immovable no matter how strong the tide

I sought help
Though I was terribly afraid
But in the end it saved me
It helped me to be brave

I am in love with knowledge
My mind is always learning and free
I could spend hours and hours
Reading, exploring, and drinking tea

I love sports again
And have grown to love other passions
Writing, painting, hiking, and others
All performed in equal rations

This is my life
Young, wild, and free
There is certainly no place
I would rather be.

XX: Ode of Respect
This is for those
Who have this burden to bear
And for those who don't know
So that you can understand this burden clear

They are the strongest people
I have ever met
To me they have greater honour and prestige
Then any starting set

For they have endured long and hard
And have sometimes received nothing for their effort
Yet they perform everyday to the best of their ability
Without uttering a bad word

So this is my Ode of Respect
To those who suffer in silence
Whether you are the best of the best or the least of the least
Or anywhere in between
I honour you for your resilience!

Carry on and hold fast to hope.
Everything happens for a reason.
I promise you, you are not alone.
We all go through these seasons.

References

Brownell, J. E., & Swaner, L. E. (2012). Five high-impact practices: Research on learning outcomes, completion, and quality. *Peer Review, 14*(3), 29.

Center for Imagination in Research, Culture, and Education. (2016). *Imaginative Education.* http://www.circesfu.ca/practice/imaginative-education-ie/

De Rosa, R. (2020, May 13). Values-Centered Instructional Planning. *Inside Higher Ed.* https://www.insidehighered.com

Ehf, A., & Vilhjalmsson, B. (2009). *The philosophy and theory of experiential education: An introduction*. The International Academy of Experiential Education. https://www.viaexperientia.net/wp-content/uploads/2017/01/Introduction-to-the-Philosophy-and-Theory-of-Experiential-Education-_ViaEx.pdf

Egan, K. (1997). *The educated mind: How cognitive tools shape our understanding*. University of Chicago Press.

Egan, K., & Judson, G. (2016). *Imagination and the engaged learner: Cognitive tools for the classroom*. Teachers College Press.

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice Hall.

Kuh, G. D. (2008). *High-impact practices: What they are, who has access to them, and why they matter*. Association of American Colleges and Universities.

MacKenzie, T. (2016). *Dive into inquiry: Amplify learning and empower student voice*. EdTech Team Press.

McTighe, J., & Willis, J. (2019). *Upgrade your teaching: Understanding by design meets neuroscience*. Association for Supervision and Curriculum Development.

Piersol, L. (2014). Our hearts leap up: Awakening wonder in the classroom. In K. Egan, A. Cant, & G. Judson (Eds.), *Wonder-full education: The centrality of wonder in teaching and learning across the curriculum* (pp. 5–21). Routledge.

White, K. (2017). *Softening the edges: Assessment practices that Honor K to 12 teachers and learners*. Solution Tree Press.

White, K. (2019). *Unlocked: Assessment as the key to everyday creativity in the classroom*. Solution Tree Press.

Wiggins, G., & McTighe, J. (2005). *Understanding by design* (2nd ed.). Association for Supervision and Curriculum Development.

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How Digital Technologies Are Taking Shape in the Teaching-Learning Process: COVID-19 and Beyond

Renata Guidi, Michelle Silveira, Diogo Fernandes, and Rafael Braz

> *Technology can become the "wings" that will allow the educational world to fly farther and faster than ever before—if we will allow it.*
>
> *Jenny Arledge*

1 Background

The pandemic caused by the new coronavirus, COVID-19, has forced many countries in the world to rethink their teaching-learning process. The need for social isolation to stop the spread of the virus caused the suspension of face-to-face classes in schools and universities. The United Nations Educational, Scientific and Cultural Organization UNESCO (2020) indicated on its website on April 21, 2020 that over 1.5 billion students were affected by the closure of school institutions in 191 countries worldwide.

In this situation, although face-to-face activities are being temporarily replaced by remote classes, the current teaching format is different from true online learning classes. True online classes are built by instructional and program designers over a period of months with tests, assignments, and textbooks built into them. Also, in most cases, they are asynchronous and self-paced and have the assistance of tutors as well as instructors for each class of 15–20 students.

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Defining online learning is not a trivial task due to the different nomenclatures established in different times and contexts: distance education, distance learning, online learning, independent study, open learning, flexible learning, and residential study (home study), among others.

Several studies (Garrison et al., 2000; Keegan, 1996; Moore et al., 2011) draw our attention to the existence of a diversity of terminologies and point out that not all of them are synonymous since many of those were used at different times in their evolutionary process, and others are used specifically in certain countries

However, the authors clarify that the term online learning is a generic term and includes a range of teaching and learning strategies used by different institutions that use this type of education, which would encompass all other terminologies presented (Garrison et al., 2000; Keegan, 1996; Moore et al., 2011). Moore et al. (2011) uses the term online learning to unite two elements of this field of education: distance learning and online learning, and this is the term that is used in this chapter.

Online learning is an educational modality in which didactic-pedagogical mediation in the teaching and learning processes occur with the use of information and communication technologies and with students and teachers developing educational activities in different places and times (Bissolotti et al., 2014).

In contrast, online remote synchronous learning or delivery (RSD) such as those classes implemented during COVID-19 "shutdowns" are classes that usually existed previously as "in-class" offerings on campus. It is a shift of instructional delivery to an alternate mode of class delivery via video conferencing due to the crisis and need for remote virtual rather than face-to-face classroom delivery. RSD is the focus of this chapter. Here is where information and communication technologies play a great role. These tools enable educational institutions to migrate "in-class" courses to a remote environment effectively.

The objective of this chapter is to analyze the importance of digital information and communication technologies (DICT) in the teaching-learning process during the COVID-19 pandemic. Reflections provoked in this study may help researchers, educators, instructional designers, and administrators with insights about technological innovations and challenges during this crisis, as well as implications for the future of remote synchronous delivery.

Our theoretical background is based on work by Levy (2017) and the current literature related to DICTs. We support this conceptual background and illustrate it with concrete examples based on our experiences as educators working with post-secondary institutions in Canada and Brazil during COVID-19 and campus "shut downs," which have resulted in the transition to remote teaching and learning in 2020–21.

Our research uses an analytical-interpretive method (Miller et al., 2018) to analyze how digital platforms have been used in the teaching-learning process during the global pandemic. This method assumes that social reality is not singular or objective but is rather shaped by human experiences and social contexts (Miller et al., 2018). Analytical-interpretive methods have several unique advantages as pointed out by Adams et al. (2007). First, they are well-suited for exploring hidden reasons behind complex, interrelated, or multifaceted social processes. Second, they

are also appropriate for studying context-specific, unique, or idiosyncratic events or processes. Last, analytical-interpretive research can also help uncover interesting and relevant research questions and issues for follow-up research (Adams et al., 2007).

Therefore, discussions generated in this study are based on observations interpreted through our own eyes as postsecondary educators and researchers teaching during the time of COVID-19. Personal insights, knowledge, and experiences are critical to accurately interpreting the phenomenon of interest. We as researchers strive to be aware of our personal biases and preconceptions.

In the following we first detail the theoretical background about information and communication technologies which informs this research and then discuss synchronous and asynchronous communication and our teaching. Later this is considered the corpus of analysis for the discussion and notes we have included as implications and recommendations for follow-up.

2   Theoretical Background

Higher education providers have recently been fully engaged in transitioning their services to remote delivery and virtual meetings due to the COVID-19 pandemic and resulting closures of campuses. Some institutions have rapidly innovated and implemented remote learning, due to in part to established familiarity with the necessary tools, teaching approaches, and considerations for online learning. Others, on the other hand, have struggled to implement broad-based online learning due to the lack of preparedness for use of digital tools and platforms. This has been our experience both in teaching in universities in Canada and Brazil.

The online environment presents several challenges for many academic staff who increasingly require higher levels of technological competency and proficiency on top of their regular academic workload. Teaching online isn't a solo sport. Professors need training in how to involve students in online discussions and facilitate their deeper understanding of subject matter and content material. Instructional designers and/or educational technologists can help professors figure out how to best teach with technology and make the most of remote learning (Bowen, 2012).

With advances in existing resources and technologies for accessing the Internet (e.g., tablets and smartphones), a new name "Digital Information and Communication Technologies" (DICT) has gained prominence. According to Correia and Santos (2013), this refers to the procedures, methods, and equipment used to process information and communication to stakeholders. The authors also mention that DICT streamlines and speeds up the content of communication through digitization and communication in networks (Internet) for capturing, transmitting, and distributing information, which can reproduce a form of text, image, video, or sound.

The use of DICT in the educational context requires adequate training for educators who are primarily responsible for the quality of the teaching-learning process. However, it is observed that several faculties lack technical competencies in

manipulating those technologies. According to Costa, Ramos, and Sanches (2014), both in initial and continuing education teachers may not be fully and consistently prepared to deal with digital technologies. To illustrate this point, it was notorious in online faculties meetings that occurred in Brazil that some professors were not comfortable in using video conferencing features such as share screen, mute/unmute, as well as making presentations online. Also, some professors mentioned that were not confident in providing online feedback to students since they did not know how to use tracking and reviewing features from a word processor.

When it comes to technology, Orlando and Attard (2015, p.119) noted: "teaching with technology is not a one size fits all approach as it depends on the types of technology in use at the time and also the curriculum content being taught." This means that the incorporation of technology provides additional factors for consideration in terms of teaching pedagogy and construction of learning experiences. Despite this, it is "often taken for granted that technologies can enhance learning" (Kirkwood & Price, 2014, p. 6) with the prevailing assumption being that technological incorporation, learning enhancement, and student engagement are mutually and inextricably linked.

Therefore, in order to implement effective remote learning, the effective use of DICT tools is necessary, both for communication between students and professors, as well as for the availability of classes, whether in real time or recorded. DICT can be defined as a set of technological resources, used in an integrated manner, with a common objective (Oliveira, 2015).

Therefore, the use of these new digital technologies is increasingly common and constantly changing in people's daily lives. We depend on them since they provide us with convenience, comfort, practicality in everyday activities, and in education it could not be different. Lévy notes:

> […] commenting on the new role of the teacher, it brings the notion of cooperative learning, citing the new fields of research, in which […] teachers learn at the same time as students and currently develop their students' discipline knowledge as well as their pedagogical skills. (Lévy, 2017, p. 171)

Thus, technological objects also serve as integration tools in the teaching-learning process because, through those technologies used in remote education, knowledge is disseminated and goes beyond boundaries of the primary goal to educate, encouraging active interaction between educators and students. For instance, professors share presentation slides, learning activities, and any other online materials with students located in any part of the world, facilitating knowledge exchange. That possibility became even more relevant during the pandemic, especially for some international students who were unable to travel to Canada due to international border closures.

Additionally, digital technologies can facilitate the participation of internationally and renowned professionals through lectures, webinars, or workshops, contributing to a robust and current education, for a larger number of students without greater difficulties of agenda and travel costs.

In times of changing values, technological parameters and popularization of DICT, the professor figures not only as a disseminator of knowledge and gains even more prominence. In accordance with Tardif (2014, p. 31), "the professor is first of all someone who knows something and whose function is to transmit that knowledge to others." To this end, it is their responsibility to develop technical skills which are imposed by fulfilling their pedagogical purposes (Santos et al., 2013).

Taking the authors' own examples as educators, it was observed that in Canada, especially in Ontario, universities were caught having not much time to migrate their last 2 weeks of classes of the Winter semester from face-to-face classes to an online format. Some universities stopped their academic calendar for 1 week and provided this time for professors to plan their online classes. In some universities and colleges, training or workshops were not offered; whereas some shared YouTube tutorials and videos and others provided webinars and synchronous sessions via Zoom regarding the basics of teaching via Zoom or similar video conferencing platforms. Faculties were responsible to develop the skills and acquire the knowledge needed for the quick emergency transition.

In Brazil, the scenario was different and more challenging. The pandemic hit the country at the beginning of the academic semester, strongly interfering with the academic calendar. Due to uncertainties regarding the duration of the pandemic and its effects, preparatory actions for the viability of remote education were delayed. Given its continental size and the different socioeconomic realities among regions, the adoption of remote education during the pandemic did not occur in a standardized way. Each educational institution and state defined their own guidelines.

In the Rio Grande do Norte state, even 5 months after the suspension of face-to-face classes, some public institutions have not yet adopted online learning, mainly due to the lack of technological infrastructure (Internet and computers) at home by most students. The deficient technological infrastructure also involves part of the professors, who had not previously needed to use resources necessary for this modality (webcams, microphones, high-speed Internet, educational software.). Added to this difficulty was the lack of technology competency.

3 Synchronous and Asynchronous Technologies: Challenges and Advantages

Online learning is characterized by the use of nonclassroom methods and tools in the teaching-learning and communications processes. These can be adopted in all (or in part) of the courses taught.

The use of DICTs creates a powerful learning environment. They transform the learning and teaching process in which students deal with knowledge in an active, self-directed, and constructive way (Volman & Van Eck, 2001). DICTs are not just tools which can be added to or used as a replacement of existing teaching methods.

They are tools that require changes in the educators' approaches, which generate changes in the functioning of institutions and in the educational system.

DICTs are seen as important instruments to support new ways of teaching and learning. They should be used to develop students' skills for cooperation, communication, problem-solving, and lifelong learning (Plomp et al., 1996; Voogt, 2003).

Over time, the use of DICTs for remote learning has evolved thanks to technological innovations and expansion of infrastructure. Originally this started with the use of correspondence lessons which were delivered through radio and TV programs in the 1960s and 1970s (Basilaia & Kvavadze, 2020).

Nowadays, online learning has the Internet as its main ally and agent for most effective operationalization. The growth of online learning in recent years has certainly been possible with the improvement of the Internet infrastructure and the development of teaching/learning tools adapted for this type of education. The methods and tools adopted for distance education vary according to the nature of the course taught – synchronous or asynchronous.

Courses that do not require real-time activities and communications are asynchronous. Communications and activities among professors and students may occur in a nonsimultaneous way, whereby professors develop the teaching platform with academic and pedagogical resources such as recorded presentations, class materials, assignments, and learning activities. In this type of teaching structure, communication takes place through e-mails, chats, or discussion forums in which the professor communicates to the class about the resources and activities available and students correspond, at any time during the grading period, with questions or comments.

Most of these online courses offered in recent years have this asynchronous structure in which, after enrollment, students have access to the lesson materials divided into modules provided by the professor and tutor(s) of the course. Thus, students can advance or review any module of the course at the time they want. This course structure brings as advantages the possibility for the student to have contact with the content and advance in their studies at their own pace within the parameters of the course dates and schedule. However, in case of questions or other pedagogical need, they need to wait for a later response from the professor or tutor. It is usually recommended that chats, messages, e-mail, and forums are responded to within 24 h by the professor.

In contrast, the synchronous pedagogical format demands the participation of students and professors in real time via video conferencing platforms such as Zoom, Teams, WebEx, and Google Meet. Synchronous courses provide greater interaction among the participants as well as closer contact by the professor with the students' learning. Despite the advantages, the greater infrastructure costs associated with the need for an Internet network sufficiently capable of allowing a stable connection for a long period of time and the necessary technological equipment are main disadvantages of this synchronous format. In addition, synchronous type courses can bring some challenges for participants to participate according to a single schedule, mainly due to time zone differences when participants are in different regions or even countries.

The exclusively academic digital platforms (e-learning platforms) currently used mainly for asynchronous learning (such as Moodle, Blackboard, Google Classroom, Hotmart, Apollo, etc.) are characterized by being virtual learning environments (VLEs) with asynchronous tools that store learning resources and course materials. According to Pinner (2011), despite being frequently used as a synonym for learning management systems (LMS), a VLE is characterized by being founded on constructivist pedagogical principles, that is, in practice they generate a space for collaboration, interaction, and discussions.

Due to the suspension of face-to-face classes recently in 2020 during COVID-19, students and educational institutions intensified the discussion about distance learning and tools capable of promoting online teaching and learning. As result, without time for prior preparation of remote classes, such e-learning platforms, essentially with asynchronous resources, have proved to be insufficient to current demands (Owusu-Fordjour et al., 2020) in some of the following ways.

The abrupt suspension of face-to-face classes astonished professors and students with the challenge of effectively continuing teaching/learning. The use of synchronous tools became desired both due to the need for interactive learning activities previously used in the physical classroom, and the need for direct interaction with instructors to monitor students' educational development.

Therefore, educational institutions sought digital platforms that allow sharing and editing of files in real time in order to maintain the quality of teaching and learning. In the search for digital platforms with synchronous resources, they found digital communication platforms, which were originally aimed at and developed for the corporate and business environment, useful as tools for online conferences and meetings in real time and capable of providing the necessary contact between professors and students.

The main videoconferencing tools available such as Zoom, Microsoft Teams, and Google Meet started to be adopted by educational institutions that needed the use of resources in "real time," both to better monitor the participation of students and due to the lack of preparation time for classes in the remote environment (Basilaia & Kvavadze, 2020).

This immediate and large-scale adoption of digital communication platforms that had previously focused on the business world shows the educational environment as a potential market for companies that provide these types of platforms (Kodama, 2020). It is important to note that, regardless of the origin or operational structure of these tools, the use of digital information and communication platforms in the academic environment was accelerated due to the coronavirus pandemic (COVID-19). DICTs have become part of the new methodologies for teaching-learning worldwide.

From our own observation as educators, during this adoption of digital learning tools in the time of COVID-19, faculties that had already some technology knowledge stood out – for example, some of those in Canada – while others faced multiple pressures and delays, including the need to be updated with the latest technology or computers and the need to have a high Internet speed at home as well as an adequate home office. At the same time, elementary and secondary schools faced the same

challenges. Professors that had school children had one more challenge to work from home while assisting their kids with home learning.

On the other side, students were experiencing resistance to online classes due to the lack of experience in this format. Many of them did not have access to laptops either and had to watch "live classes" on their phones. Also, some of them did not have access to high-speed Internet. As a result, students joined online classes, however, barely turned their cameras on. In Brazil, particularly, this reality was even worse due to students' socioeconomic situation.

Currently, after a few months of experiencing online learning, it has been observed that professors like us are more adjusted to this new reality and also students. It is our practice to ask students how they feel about home learning, and most answers are very positive nowadays, especially due to the reduction of commute time and the increased time that they have for work or for themselves.

For the future, when the spread of coronavirus is over, it is expected that universities will be back to in-class courses; however, it is unlikely that digital information and communication technologies will be put aside again.

4 Implications and Recommendations

The investigation and discussion carried out in this chapter has aimed to study the use of DICTs in the current scenario during the COVID-19 pandemic and the transition of education professionals to using these new technologies in times of hypermodernity and the technological development of postsecondary education.

According to our research and experiences, it has been observed that it is not enough to have access to the latest technological resources if universities and colleges do not train professors and students in delivering and studying courses in an educational cyberspace. They require this training to overcome the challenge of using available resources with great ease.

It is evident that it is not enough to computerize the administrative part of universities and colleges; rather it is necessary to teach computer software and skills to students and professors as well.

Therefore, we need to provide opportunities and show everyone a new path for reflective and communicative learning in the face of this significant modern scenario where information technologies (DICT) formerly used in corporate settings are gradually now fitting into educational spheres.

In this research, we also discussed the need to plan and choose digital tools for teaching while observing our immediate operational structures. In order to adopt the best digital platforms, whether synchronous or asynchronous, there is a need to recognize the infrastructure that higher institutions have themselves – that is, not only offer training and orientation to the academic community but recognize the infrastructure such as laptops, tablets, Internet access, and physical space in their homes that students and professors have themselves. In summary, it is necessary to

consider the sociocultural reality of students and education professionals who do not have privileged access to DICTs in their homes.

It is also worth noting that universities and colleges, together with federal and provincial governments, ought to provide opportunities for communities, especially students and professors, to use available tools and to guide them regarding the use of technologies in a contextualized and collaborative way.

We expect that this paper will stimulate reflections on the importance of digital information and communications technologies for the teaching-learning process regardless of the teaching delivery mode. It was observed that higher educational institutions have strongly emphasized face-to-face classes in the past (Guzer & Caner, 2014), ignoring to a certain extent the power of DICTs to enhance the quality of teaching and learning.

For instance, most colleges and universities in Canada used to invite guest speakers to their face-to-face classes, aiming to share knowledge and experience. Most of the time, however, these guest speakers come from the local area due to costs and convenience. Through the consistent use of DICTs or video conferencing tools integrated into learning managing systems, universities and colleges could, in the future, create a learning environment without boundaries. Guest speakers could be invited from any part of the world, benefiting students, the community, and educators. This has been a benefit and learning opportunity gained through the adoption of DICTs and remote learning recognized more frequently as valuable now because of COVID-19.

Another example of this is the interruption of classes due to environmental issues such as snowstorms in the winter. Classes would not be cancelled if professors have the flexibility and ability to switch their teaching delivery mode from face-to-face classes to RSD via video conferencing when needed to accommodate extraordinary situations.

Therefore, we recommend that universities and colleges that offer face-to-face classes be able to provide a full learning experience to students, without boundaries, interruptions, and improvisations. Digital information and communications technologies are powerful and could work as an ally for these institutions. Higher education needs to develop DICTs that can be integrated into their learning management systems to offer the most beneficial learning experience to students.

Taking some of our students' opinions from Ontario, Canada, as an example, they feel they have adapted and have expressed several benefits of online and RSD learning – for instance, reduced commute times. Higher institutions need to consider how to be flexible about their delivery format, offering versatility in their teaching-learning process, rather than a fixed teaching method.

We hope that this discussion can serve as a foundation and provocation in the future to be used by researchers and educators to enhance remote learning and teaching in higher education. As pointed by Arledge (2015): "technology can become the 'wings' that will allow the educational world to fly farther and faster than ever before – if we will allow it."

References

Adams, J., Khan, H. T., Raeside, R., & White, D. I. (2007). *Research methods for graduate business and social science students*. SAGE.

Arledge. (2015). Two Way Street: An Applied Research Study on the Effects of Increased Parent and Community Involvement Activities on Student Academic Growth in Mathematics at South Lee Middle School. Electronic Theses and Dissertations, 1642.

Basilaia, G., & Kvavadze, D. (2020). Transition to online education in schools during a SARS-CoV-2 Coronavirus (COVID-19) pandemic in Georgia. *Pedagogical Research, 5*(4), em0060. https://doi.org/10.29333/pr/7937

Bissolotti, K., Nogueira, H. G., & Pereira, A. T. C. (2014). Potencialidades das mídias sociais e da gamificação na educação a distância. *RENOTE-Revista Novas Tecnologias na Educação, 12*(2), 223–224.

Bowen, J. A. (2012). *Teaching naked: How moving technology out of your college classroom will improve student learning*. Wiley.

Correia, R. L., & dos Santos, J. G. (2013). A importância da Tecnologia da Informação e Comunicação (TIC) na Educação a Distância (EAD) do Ensino Superior (IES). *Revista Aprendizagem em EAD, 2*(1), 88.

Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The internet and higher education, 2*(2-3), 87–105.

Güzer, B., & Caner, H. (2014). The past, present and future of blended learning: An in depth analysis of literature. *Procedia – Social and Behavioral Sciences, 116*, 4596–4603. https://doi.org/10.1016/j.sbspro.2014.01.992

Keegan, D. (1996). Foundations of distance education. 3.ed. London: Routledge.

Kirkwood, A., & Price, L. (2014). Technology-enhanced learning and teaching in higher education: What is enhanced and how do we know? A critical literature review. *Learning, Media and Technology, 39*(1), 6–36.

Kodama, M. (2020). Digitally transforming work styles in an era of infectious disease. *International Journal of Information Management, 55*, 102172.

Lévy, P. (2017). *La cibercultura y la educación*. Universidad Pedagogica Nacional, Facultad de Educacion.

Miller, R. M., Chan, C. D., & Farmer, L. B. (2018). Interpretative phenomenological analysis: A contemporary qualitative approach. *Counselor Education and Supervision, 57*, 240–254. https://doi.org/10.1002/ceas.12114

Moore, J. L., Dickson-Deane, C., & Galyen, K. (2011). e-Learning, online learning, and distance learning environments: Are they the same? *The Internet and Higher Education, 14*(2), 129–135.

Oliveira, C. (2015). TIC'S na educação: A utilização das tecnologias da informação e comunicação na aprendizagem do aluno. *Pedagogia em Ação, 7*(1).

Orlando, J., & Attard, C. (2015). Digital natives come of age: The reality of today's early career teachers using mobile devices to teach mathematics. *Mathematics Education Research Journal, 28*, 107–121.

Owusu-Fordjour, C., Koomson, C., & Hanson, D. (2020). The impact of COVID-19 on learning – The perspective of the Ghanaian Student. *European Journal of Education Studies, 0*. Retrieve from https://www.oapub.org/edu/index.php/ejes/article/view/3000/5638

Pinner, R. (2011). VLE or LMS: Taxonomy for online learning environments. *IATEFL Learning Technologies SIG Newsletter, 2009–2013*.

Plomp, T., ten Brummelhis, A. C. A., & Rapmund, R. (1996). *Teaching and learning for the future. Report of the committee on MultiMedia in Teacher Training (COMMITT)*. SDU.

Sanches, K. S., Ramos, A. D. O., & Costa, F. D. J. (2014). As tecnologias digitais e a necessidade da formação continuada de professores de Ciências e Biologia para tecnologia: um estudo realizado em uma escola de Belo Horizonte. *Revista Tecnologias na Educação, 11*, 25–26.

Santos et al. (2013). Extending web-based educational systems with personalised support through User Centred Designed recommendations along the elearning life cycle. Journal of Science of Computer Programming, 88.

Tardif, M. (2014). *Saberes docentes e formação profissional*. Editora Vozes Limitada.

UNESCO. (2020, April 21). *COVID-19: A global crisis for teaching and learning*. Retrieved May 15, 2020, from UNESCO: https://unesdoc.unesco.org/ark:/48223/pf0000373233

Volman, M., & Van Eck, E. (2001). Gender equity and information technology in education: The second decade. *Review of Educational Research, 71*(4), 613–634.

Voogt, J. (2003). Consequences of ICT for aims, contents, processes and environments of learning. In J. van den Akker, W. Kuiper, & U. Hameyer (Eds.), Curriculum landscapes and trends (blz. 217–236). : Kluwer.

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Creating a Global Virtual Tandem Community Through Technology and Experiential Learning

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> *Experiential learning posits that learning is the major determinant of human development and how individuals learn shapes the course of their personal development.*
>
> *David Kolb*

1 Background

In an era of uncertainty, when international travel is virtually impossible, and nations have imposed strict domestic guidelines detailing what their citizens can and cannot do, creating a virtual community between academic institutions has never been more critical. As educators, we share a common motivation to encourage, support, and develop global citizenship, especially in these trying times, by expanding our students' critical thinking skills. The project described below explains how two institutions from different countries were able to reach beyond the classroom borders to connect. Although this project began prior to COVID-19, it is a program that endures and will continue long after this crisis has ended. Although the initial stages of this project ended in early 2020, we have moved to the next stage in our cooperation. Both students and teachers have been able to benefit from a program of connectivity despite the global situation making it virtually impossible to step outside of our homes. The project was based on a framework for technology-based learning that encapsulated students' collaborative abilities to discuss and write about current issues and events that affect us all as global citizens.

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During the first semester of the 2019 academic calendar, a tandem learning project was developed between Kyoto University of Foreign Studies (KUFS) in Japan and Wenzao Ursuline University (WZU) in Taiwan. Tandem learning describes any project where the educational goals of two or more parties are being fulfilled simultaneously. As Brammerts (1996) described, a tandem approach to language learning is one in which second language learners pair up with a speaker of the language they are learning. It is noteworthy that this narrower description of tandem learning predates the ubiquity of social networks and the Internet. Furthermore, such a definition presupposes that utilizing a tandem learning approach necessitates interactions between first language (L1) users of a second language (L2), and L2 users of the L1. However, L1 and L2 users can also benefit significantly in their studies by the effective use of a third language (L3) through positive interactions in this target language.

Tandem learning involves three main principles: reciprocity, responsibility, and autonomy (Calvert, 1999), which makes this approach not only extremely beneficial to the EFL learner but to all globally minded institutions. First, reciprocity acts as a stabilizer and motivator in the tandem relationship (Parks & Priego, 2017). Second, students are responsible for "how, what, and when" they need to study as well as being accountable for the assistance they provide to their counterparts. Finally, learners become much more autonomous not just by oneself but for oneself (Little, 2007) and tend to experiment more outside of the required task and often independently of the teacher's assigned objectives.

2   Purpose

The purpose of this project has been to explicitly take the idea of an international "tandem learning" framework in a new direction. Rather than attempting to conduct a language exchange, we made it our goal to engage two groups of students from different cultures and educational institutions in discussions to develop issue-based writing, while both groups used their *second language*, the lingua franca of English. With both groups involved in the tandem learning using their non-native language at all times during their interactions, the issue of the interactions becoming unbalanced with speakers reverting to their native tongue was eliminated. All participants were in a situation where they had to share and explain their ideas as succinctly as possible while using only English through asynchronous email, group work blogs, and in synchronous video and online chat platforms. Resorting to one's L1 was not an option. This required the use of language skills such as circumlocution, the grading of language, discerning the language level of the listener/reader, and simplifying the spoken, or written messages to match the anticipated language level of one's interlocutor.

3   Literature Review

While there is an extensive amount of relevant literature focusing on tandem learning, there are very few publications that look at L3 tandem issues that focus predominantly on utilizing technology in EFL classrooms.

The central framework for this study was Kolb and Kolb's (2005) experiential learning model, which is based on a four-stage learning cycle in which the learner goes through a sequence of experiencing, reflecting, thinking, and finally acting as part of the learning process.

With the advancement of technologies, Internet tools, and with hand-held smartphone applications becoming common practice (Mishima, 2018), the constraints of the traditional classroom have been unshackled. Taking advantage of the technology by linking similar methods in the classroom with what students are using already outside of the classroom could harness the very same technology that plays a dominant role in university students' lives (McClung, 2019).

Learning has become more socially interactive and multimodal for university students (Jones & Hafner, 2012; Richards, 2015). Recently, university classrooms are becoming more innovative through a variety of methods, including blended learning and flipped classrooms, as well as self-access study spaces utilizing autonomous learning approaches. Tandem learning has been viewed not only as a technique for improving language skills but, more importantly, as a means of providing an authentic social interaction experience between students of different backgrounds (Calvert, 1999, Firth & Wagner, 2007; Karjalaınen et al., 2017; Pörn & Hansell, 2017, Larson, 2019). Although some educational institutions have the means to conduct the interchange between students face-to-face, many are now opting for more creative nontraditional classroom solutions. Hybrid online classroom environments can meet the needs and demands of the class through peer-supported learning by using web-based email, blog posts, and application-based social media or video chat sites (Richards, 2015).

4   Project Learning Objectives

The primary goal of this project was to provide a framework in which university students could use their second language to interact collaboratively by writing academically on a variety of topical issues. Students would be discussing current issues and events based on an academic book written by a historian for an English speaking audience. This would therefore involve more sophisticated and intricate use of language than simply talking about oneself, one's interests, or one's family. This is especially challenging for L2 students because of the type of explanations and descriptions required. These modes of language production, combined with receptive skills used in reading a high-level text and the use of Internet searching and

browsing, was expected to result in a high degree of involvement, motivation, and engagement.

The other chief aim of this project was to introduce a group of students in Japan to a group of students in Taiwan through the promotion of connectivity. International projects of cooperation and exchange universally show we have a lot in common despite cultural and economic differences in the face of ethnic, religious, and cultural divides. Finding common ground is a step in the direction of global help and assistance. Therefore, we sought to answer the following research question (RQ):

- RQ: How can an EFL tandem approach to learning affect student engagement and increase writing and critical thinking?

Participants in the project read excerpts from *21 Lessons for the 21st Century* (2018), written by the historian Dr. Yuval Noah Harari. The book was chosen as both the framework for our discussions as well as the basis for our writing projects as it discussed a broad range of issues. The primary themes of its 21 chapters include such diverse topics as education, equality, religion, and progress. Thus diversity of topics was guaranteed to promote some difference in opinions among the students. An associated aim of the project was for students to gain a greater understanding of the cultural differences when speaking with people who possess different opinions and to also describe and accept alternative interpretations respectfully.

By sharing ideas and essays with a real audience of peers, we expected more immediacy in our students' writing. It was hypothesized that participants would put more effort and thought into legitimate writing that was to be examined carefully by a reading audience consisting of peers from another university.

5   Project Implementation

While taking into account initial concerns about the level of the material, it was decided to pair two students from KUFS with one student from WZU, forming 21 groups of one - three students. This construction gave the KUFS students, who were first year students, a greater degree of support. It was also more likely to facilitate teamwork on the part of participants with the more confident assuming the role of group leaders.

The LINE social media channel was chosen because of its degree of familiarity in Asia. Both the Japanese and Taiwanese university students deemed LINE to be the most widely used and effective for peer-to-peer and larger group messaging.

After an initial social networking contact was made between the triads and the project had been accepted by the students, they were all then given their reading assignments. The source material for the project was divided into 21 themes, and each group was supplied with a copy of an excerpt that covered their topic for the duration of this 6-week project as shown in Table 1.

Table 1 Tandem learning project tasks

Project group tasks	Time line
1. Read/summarize the first pages of selected passages	April 15–April 21
2. Choose ten sentences that exemplify the theme	April 22–April 28
3. Write a short 100-word summary of the first section of their chapter, and ask questions about partners' work	May 6–May 12
4. Choose a recent news article or webpage on the topic	May 13–May 19
5. Write an essay on the topic	May 20–May 26
6. Evaluate partner students' academic writing	May 27–June 2

6   Data Analysis and Findings

A study of student response to this tandem approach was conducted by the teacher researchers herein. Data was gathered by collecting written opinions from 40 Japanese students on a weekly basis. Students were presented a series of one to four questions in which they were free to either answer all parts or focus on just one question. Open-ended questions were asked, including the following: How was your tandem learning exchange? What did you find difficult? What was interesting? How do you feel about the chapter you were assigned? As each week progressed, more specific questions were added. Examples included the following: Were you able to find an article based on your reading and share it with your tandem learning partner? Did you summarize the article into 100–150 words? What questions did your partner ask you? Were there any new developments between your partner this week? These questions were deemed appropriate in order to better understand students' views on the tasks they were given and their relationship with their tandem learning partner. To ensure the credibility of the research findings, all student reports were retyped and printed, reviewed for errors, and then returned to be personally reviewed for member checking.

All the data were imported into HyperRESEARCH software for coding using prior research codes, which corresponded directly with the research question, along with 30 new codes that were discovered in the data from all the sources that were gleaned from the weekly written reports. The codes were regrouped and then analyzed in a theory builder to generate numerous themes and to discriminate between recurring and discrepant data (Merriam, 2009).

Through this particular approach, the study explored how tandem learning could be successfully utilized to improve the range of English language learning skills. Findings centered on the weekly timed written report questions and then on the themes derived from the codes identified from the findings. Table 2 shows the themes generated and includes one comment each per theme from a number of our students.

Table 2 Tandem learning themes

Theme	Students' comments
1. Challenging authentic communication	"My partner made a group line, and we talk[ed] [about it], but I couldn't understand what he says. Then I always use[d] my dictionary and try hard to know what he told us. It has not only difficult words but also [a] complicated topic"
2. Excitement and engagement	"I enjoyed talking with the partner of Taiwan on LINE, not only about tandem learning but also our hobbies, music, J-pop and so on. It's very interesting and I want to meet her"
3. Academic awareness	"I had a good week. It was hard for me to understand all the contents but I could ask questions and my partner answered me. Her answers were fantastic. I could easily understand her writing and they seemed much more academic than my answers."
4. Cultural understanding among partners	"There were many opportunities to discuss with our partner, so I could talk using English. I could find out new knowledge through my Taiwanese partner. It was sometimes difficult to understand, but it leads to improve my English skills"
5. Motivation and interest	"I've been enjoying this project and shared some ideas with my partner. It was very fun! I have got used to talking with them and asking questions"

In the first few weeks of feedback on tandem learning, two immediate themes became quite clear and prevailed throughout the project. The first was the challenging aspect of reading the chapter assigned to individual students. Students were unanimous in stating how difficult they thought the project goals were going to be. For many, it was their first time to communicate in an authentic manner using a shared technology with people from another country.

The second and more positive theme that emerged and which was ever-present throughout the course was the excitement that most students felt about interacting and exchanging ideas with other non-Japanese students. Students' enthusiasm for the challenge was clearly evident with one student stating that she had a very positive connection with her tandem partner and was looking forward to completing the project.

In the following weeks, the students wrote not only about the challenges they were facing but also about how they were taking the opportunity to make a new friend, learn about another culture, and to ask questions to people of a similar age but from a very different background. This focus on spoken and written skills leads to the third theme which was academic awareness. Some students had already begun to see the benefits of the exchange exercise in week 3 and wrote about how it was affecting their English skills.

The fourth theme was building a cultural understanding with team members. In the later stages of the program, most of the students' initial excitement was tempered by the challenge of working on tasks in pairs or groups of three. Students began to show some frustration with their level of English and with the difficulties they faced in understanding their assigned chapter. Furthermore, it was heartening to see that when there was frustration, students helped each other out.

In the middle of the project, students looked for independent news articles in English. This was not an easy task, but some students not only enjoyed it but really excelled at the task. In addition, the Japanese students felt a sense of satisfaction in researching and writing a summary for their partner to read. This sense of satisfaction was also confirmed at the end of the tandem term. It encapsulated the fifth and final theme of the study which was motivation and interest. Student interest with the writing tasks continued through the course, and many asked to be involved in future tandem programs.

This case study approach used to investigate the opinions and responses made by students at KUFS specifically sought to understand how L3 tandem learning with technology could be implemented and used by students in the modern EFL Japanese classroom and how it could amplify engagement and increase writing ability and critical thinking.

7   Conclusion

This program is a wonderful example of international students working together on a common goal. Our preliminary survey showed a strong curiosity and willingness among students to interact with peers at other institutions; however, we were not expecting tandem learning to be as successful as this project ended up being. This program has been continued in 2020 and will continue for the foreseeable future. University students in the twenty-first century are aware of and concerned about global issues, global problems, and global solutions. By using the latest technology, geographical boundaries and constraints posed by nationality, race, ethnicity, or time zones become almost nonexistent. Student perspectives during the execution of our tandem learning projects indicated anxiety and worry about how to achieve the project aims and how to properly carry out the writing and communicative goals of the class. However, as the term progressed and students became more familiar with the expectations, these worries were replaced by a level of motivation and engagement that underscored the inherent benefits of developing an international and virtual academic community. Just as no individual person in any country can live unaffected by the globalization all around us, neither can universities treat our classrooms like a vacuum. The aims of participant institutions, professors, and students are all served by experiential learning techniques, peer-oriented activity, and tandem learning projects, whether they be across the hall or across the ocean.

References

Brammerts, H. (1996). Language learning in tandem using the internet. In M. Warschhauer (Ed.), *Telecollaboration in foreign language learning: Proceedings of the Hawaii symposium* (pp. 121–130). University of Hawaii, Second Language Teaching & Curriculum Center.

Calvert, M. (1999). Tadem: A vehicle for language and cultural learning. *Language Learning Journal, 19*(1), 56–60. https://doi.org/10.1080/09571739985200111

Firth, A., & Wagner, J. (2007). On discourse, communication, and (some) fundamental concepts in SLA research. *The Modern Language Journal, 91*, 757–772. https://doi.org/10.1111/j.1540-4781.2007.00667.x

Harari, Y. N. (2018). *21 lessons for the 21st century*. Random House, NY.

Jones, R. H., & Hafner, C. A. (2012). *Understanding digital literacies: A practical introduction*. Routledge. https://doi.org/10.4324/9780203095317

Karjalaınen, K., Pörn, M., Rusk, F., & Björkskog, L. (2017). Classroom tandem–Outlining a model for language learning and ınstruction. *International Electronic Journal of Elementary Education, 6*(1), 165–184.

Kolb, A. Y., & Kolb, D. A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning & Education, 4*(2), 193–212.

Larson, B. (2019). Learner Beliefs in Tandem Learning: A case study of participants in a German-Japanese intensive tandem program. グローバル日本研究クラスター報告書*, 2*, 41–53.

Little, D. (2007). Language learner autonomy: Some fundamental considerations revisited. *International Journal of Innovation in Language Learning and Teaching, 1*(1), 14–29. https://doi.org/10.2167/illt040.0

McClung, R. J. (2019). *Impact of English language teachers' technology-based pedagogical choices on Japanese university students*. Doctoral dissertation, Walden University, Minneapolis, MN.

Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. Jossey-Bass.

Mishima, M. (2018). Japanese University students' evaluations of teacher-guided e-learning. *The Journal of Rikkyo University Language Center, 39*, 15–24.

Parks, S., & Priego, S. (2017). *A tandem approach to language learning: Re-envisioning the teaching and learning of ESL-FSL in Canada* (Vol. 36, No. 3, pp. 27–30). Réflexions. https://tandem.ulaval.ca/articles/Tandem_Reflexions_CASLT_ACPLS.pdf

Pörn, M., & Hansell, K. (2017). The teacher's role in supporting two-way language learning in classroom tandem. *International Journal of Bilingual Education and Bilingualism*, 1–16. https://doi.org/10.1080/13670050.2017.1379946

Richards, J. C. (2015). The changing face of language learning: Learning beyond the classroom. *RELC Journal, 46*(1), 5–22. https://doi.org/10.1177/0033688214561621

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COVID-19: An Opportunity to Deindustrialize Writing Education

Amir Kalan

1 Imagining a Postindustrial Writing Education in Response to COVID-19

In this chapter I reflect on possible directions for post-COVID-19 writing education and the affordances created by the pandemic for moving beyond our current industrial methods of teaching and learning writing. After explaining why I describe our current writing education as built on a Fordian vision (Clarke, 1992), I will recommend a number of online educational practices that can help writing instructors detour onto more organic approaches to teaching writing.

Similar to the fourteenth-century Black Death, COVID-19 has been traveling to the West along the Silk Roads from the East. In his *The Silk Roads: A New History of the World*, Peter Frankopan (2015) wrote about the irony of the plague: "despite the horror it caused, the plague turned out to be the catalyst for social and economic change that was so profound that far from marking the death of Europe, it served as its making" (p. 186). Frankopan argued that the plague created an opportunity for fundamental cultural, economic, and political reforms in Europe by shaking the traditional structures that ruled the continent. In this sense, the plague contributed immensely to the rise of modern Europe and thus the West as we know it today.

Like socioeconomic structures, our educational systems are substantially formed in reaction to history and the developments that shape it, including disasters (Caruso, 2017; De Vreyer et al., 2015; Mudavanhu, 2014). Natural disasters, wars, and pandemics often hinder current forms of education; nevertheless, they can also create a space for reflection about alternative forms of teaching. Educational resources can be mobilized as a response to the disaster (Brock, 2013), in the course of which we

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might have the chance to develop alternative pedagogical practices that might have felt too experimental to be mainstream just a short while ago.

Despite claims that our schools and universities are state-of-the-art learning spaces, there is little difference between today's educational centers and the establishments built in the wake of the Industrial Revolution (Landahl, 2013; Leland & Kasten, 2002). For centuries the vision of the West as an ideal place where teaching and learning can and should occur has been based on a Fordian factory model:

> As a distinct type of capitalist labour process, Fordism refers to a particular configuration of the technical and social division of labour involved in making long runs of standardized goods. Fordist 'mass-production' is typically based on a technical division of labour that is organized ... [based on] assembly-line techniques. (Jessop, 1992, p. 47)

Current educational structures, similarly, aim to teach centralized curricula to large groups of students following mass production models. Education is viewed as a product to be assembled along a conveyer belt: students are moved around from classroom to classroom to learn skills in scheduled time slots. Every classroom is run by a centralized syllabus that requires students to produce homogeneous assignments based on the blueprint shared in the syllabus. The assignments later are quality checked by rubrics, which are mass assessment tools. Also, students, like factory workers, need to be physically present at school at a particular time and leave the school when the bell announces the end of the day.

Writing, in this system, is treated as one more component to be added to the product at some point in the process, another cog in the machine (Kalan, 2021). Accordingly, writing in our compartmentalized educational structures has been separated from content-rich courses such as history, social studies, and science. For instance, at the university level, we teach writing and composition only as "service" courses in General Education. Moreover, we have compartmentalized teaching genres: academic writing, creative writing, grant writing, proposal writing, test preparation, and so forth. We have also leveled writing as introductory, advanced, applied, academic, and so on. In second language education, we often teach writing as a separate skill from reading, speaking, listening, grammar, and vocabulary.

This aggressive compartmentalization has helped our cumbersome educational apparatuses function and, as aimed by Fordism, be profitable (Ruch, 2003); yet it has had serious undesirable consequences. By over-regulating the process of learning writing, we have cut off essential organic dimensions of the act of writing such as the emotive, conative, phatic, hermeneutic, ideological, and sociocultural contexts in which writers and readers interact (Jakobson, 1960; Kalan, 2014; Kent, 1993).

Moreover, in this industrial mode, we are not able to have a clear view of students' writing trajectories because students move between courses and instructors after short periods. This compels instructors to treat writing assignments as isolated, self-contained activities that do not need to connect with students' past and future writing. Meanwhile, we have cut the connection between students' school writing and their out-of-school literacy engagement. The dominant rhetorical foci of our writing courses often fail to welcome students' out-of-school writing such as rap, poetry, diary writing, social media posting, and online commenting. Similarly, there

is no space in our writing classes for students' home languages. Our regimented genres are not flexible enough for multilingual text generation and other creative formats that allow instances of translanguaging and code-meshing.

COVID-19 has now forced most of us to move classes online. Despite the enormous challenges that this situation has caused, this is the first time in centuries that we have had some distance from the traditional classroom (Landahl, 2013) and thus the opportunity for serious reflection on alternative pedagogical possibilities. As valuable as the classic classroom is for many content-oriented courses that benefit from expert delivery, it is not the best venue for hands-on craft-based activities (Jamieson et al., 2005), and writing classes could be suitably categorized next to art and music workshops and even science labs. After all, post-process writing theory has long advocated for moving "beyond the classroom as the only rhetorical situation" (Kalan, 2014, p. 12). Similarly, online teaching scholars have also been writing about diversifying traditional classroom tasks by employing the potentials of digital technology (Salomon, 2002; Sekulla & Combes, 2006; Tucker, 2012). In what follows, I will provide examples of how an online writing education could restore some organic aspects of engagement with writing by providing post-classroom possibilities.

2   From Lecture-Based Pedagogy to Dialogic Mentorship

Writing and composition courses, similar to content-heavy courses (i.e., philosophy, finance, and anatomy), are typically offered to students in a certain number of allotted time slots, dictated by the academic calendar, in the industrial era classroom spaces still used today (Park & Choi, 2014). One pedagogical consequence of imagining writing courses as a visible chain of teaching hours in the traditional classroom has been the imposition of a lecture-based approach to teaching writing. Moving beyond the industrial writing curriculum will help us see writing as a skill that needs to be practiced rather than lectured. It will also allow us to recognize that writing classes should look like vocational education workshops, labs in STEM, or painting and singing classes in art and music education. Hands-on writing workshops will create space for instructors and students to engage in dialogue when necessary, while students are constructing texts. The significance of such organic and unstructured dialogues about student writing as an effective pedagogical approach has not remained unnoticed. For instance, it is well documented that one-on-one writing conferences create clearer communication between instructors and students (Martin & Mottet, 2011), can build affiliative relationships between the teacher and student writer (Shvidko, 2018), and activate students' agencies by allowing them to challenge the instructor's feedback (Gilliland, 2014; Hawkins, 2019), all leading to meaningful interactions that could improve student writing. Writing centers, similarly, are designed to provide what traditional writing classes fail to address: a hands-on approach to writing in a mentor-mentee relationship with personalized feedback on particular writing tasks and assignments.

Nevertheless, writing conference and writing center support are currently treated as add-on strategies often offered in addition to official classroom time. Online technology can change this dynamic with the ease it provides for asynchronous lessons in which students develop their writing at their own pace and in the environments that best accommodate their writing process (e.g., library, home, or even bedroom) and also with the possibility of allowing instructors to check students' progress periodically and provide individual feedback. Having to move online in response to COVID-19 can indeed be an opportunity to employ conferences as the main pedagogical approach and not what comes after the actual teaching as additional support.

3 Flexible Course Timelines

Moving online, and hence beyond` the traditional classroom and synchronous time-frames, can also provide writing learners and instructors with the opportunity to treat courses as having flexible timelines that are to be met based on completing assignments rather than the amount of time that students spend in the classroom. Writing courses are typically offered prior to content-rich and specialized courses, where students are supposed to engage with "more serious" content in writing. Such leveling of writing is not often experienced in organic writing processes, where writing occurs within a genuine context with relevant content. In contrast, in organic writing contexts, writing is secondary to content of interest and is only mobilized to express that interest. Offering online courses with flexible timelines can restore this organic writing-content connection by allowing writing courses to be run in parallel with students' technical courses. As a major contributor to different forms of "flexible learning" (Collis & Moonen, 2001), flexible timelines allow students to engage with their writing lessons when and where they feel those can more effectively support their other courses.

As well as having the potential of running across semesters, flexible online timelines can also help instructors move beyond process pedagogies that often impose one single writing process on all students. Process theory often reduces writing dynamics to a universal formulaic process (Kalan, 2014). Asynchronous time-flexible writing courses would let students organically follow their own individual writing process rather than mechanically model a homogenizing process formula that resembles the Fordian production line.

4 Online Writing Skill Pools

The online temporal flexibility just described could also be imagined as helping create more student choice in the process of learning writing by allowing students to pick the writing skills that they feel they need most. Although we often speak about "teaching writing," in reality there is no such thing as a well-defined subject of

learning called "writing." What we teach as "writing" is, in fact, what we choose from a large pool of various textual engagements, communication skills, rhetorical structures, formalistic features, genres, hermeneutic events, and, in higher education, types of research dissemination.

Online and beyond the temporal and spatial constraints of the traditional school, we can design interactive writing syllabi that change shape according to students' intellectual directions, academic journeys, writing trajectories, and individual assignments. For instance, syllabi could be designed with enough room for students and teachers to decide what writing practices they need to focus on. Online writing seminars, instead of following a linear progression, could consist of a selection of skill modules activated whenever needed. The writer and the mentor might, for example, opt to focus on literature review, quoting strategies, citation skills, intercultural rhetoric for second language writers, or other skills. Such an approach could be best performed when the instructors of other courses can advise students on what skills they can focus on to maximize the quality of their writing for those courses, the non-writing courses. This idea also leads to the next recommendation: writing courses borrowing all their content from specialized courses.

5   Embedding Writing Seminars in Other Courses

It is ironic that compartmentalization of writing education often happens in the name of creating a logical flow between subjects (i.e., from second language writing to writing seminar and to history) in that it often results in severing organic connections between the instructors because of structural alienation (Hiller & Bogart, 1973). There are reports that show concern about lack of necessary preparation for advanced courses and highlight students' attempts to unlearn what they had learned in previous years or courses (Bonchek, 2016; Minninger, 1977; VandeSteeg, 2012).

Combining writing classes with other courses can create a serious challenge in traditional educational structures because of questions about space, time, and also revenue from introductory courses. Digital technology, however, allows schools and universities to offer writing courses as a part of other courses by treating the writing course as an online addition to the course content. This would enable writing teachers to help students with the actual content that they typically engage with in their specialized classes instead of creating new content for the sake of practicing writing.

Bringing instructors together in this manner will also create interesting interdisciplinary conversations between them about rhetorical possibilities that students can explore. Writing classes are usually run by humanities (typically English) departments, and there are often concerns about rhetorical differences between writing in humanities disciplines and writing in STEM, business, and even law. The course embedding approach would strengthen transdisciplinary bonds and perhaps create much needed "genre fusions" that "can address" epistemological and "critical absences" (Brenneis, 2014, p. 2). In its crude form, this recommendation is by no means a novel idea. Libraries and writing centers, for instance, have always found

ways to be a part of writing and research writing courses. What is new is the idea that online technology can make this merger easier and stronger with much less organizational hassle.

6 Embracing Out-of-School Intellectual and Cultural Mentors

Online asynchronous writing classes not only can put instructors closer together, but they can involve students' out-of-school peers, families, and communities in the process of writing. The standardized nature of current writing education cuts the organic ties between the process of writing and students' out-of-school life, including their natural intellectual interactions. Severing school literacies from home literacies has long been the center of critical analysis, motivating educators to reconnect school education with students' out-of-school literacy practices (Dickie, 2011; Hull & Schultz, 2002; Moje, 2007). There is also a scholarly trend that focuses on community literacy (Fleischer & Pavlock, 2012; Long, 2008) and community service pedagogy (Julier, 2001). In the same manner, in second language education, especially among younger refugee and immigrant learners, practitioners have written about their attempts to invite students' family members to be part of projects that aim to produce multilingual texts (see for instance, Taylor et al., 2008). Community and family involvement in the process of learning helps teachers tap into rich organic literacy practices that are often unnoticed in a Fordian curriculum.

Despite the benefits of including students' communities in the processes of teaching and learning, our current structures make initiating such partnerships challenging in as much as in the Fordian model knowledge is transmitted in small packages along with a number of spatial stations, rendering family and community literacies irrelevant or invisible. Many of the experiences cited above are, in fact, alternative experiences rather than mainstream practice. If schools are culturally and ideologically ready to embrace students' home literacies, they can use asynchronous online writing spaces for welcoming the participation of students' families, peers, and other organic mentors in students writing tasks without the usual concerns for time and space.

7 Bringing Multimodal Writing to Center Stage

There is a sizable body of literature that discusses why digital writing matters and how educators are employing online and digital ecologies for writing (see, for instance, DeVoss et al., 2010; Porter, 2003; Warnock, 2009). Instead of focusing on digital writing, this chapter has been mainly showing how moving writing classes online can restore some of the organic dimensions of the act of writing, which have

been disabled in industrial, educational structures. Through this lens, it should be stressed that today most of students' organic writing practices are digital. Despite a relatively long conversation about the potentials and unique dimensions of digital writing, mainstream writing pedagogies have been slow to adopt digital writing, thus losing the opportunity of treating multimodality, instant posting, and so forth as an integral part of knowledge production, expression, communication, and activism in today's world. Moving classes online during this pandemic is a chance to think about changing the status of digital writing from alternative and fringe pedagogy to mainstream practice.

The current imperative move to online teaching might help teachers find ways to incorporate texting, emailing, social media posting, commenting, blogging, microblogging (like tweeting) into everyday practice. It also can help them regard digital communicative practices such as liking, favoring, linking, aggregating, reposting, copy-pasting, and commenting as legitimate forms of academic communication. The pandemic, on the other hand, can allow teachers to step beyond traditional single-authorship to experiment with different forms of online dialogic, collaborative, and participatory writing such as wiki writing, multiauthored Google docs, crowdsourcing, textual collages, and creative fan labor such as fan fiction.

The current situation, also, is a significant opportunity to seriously engage with multimodality and to embrace content embedding and use of images, videos, audios, GIFS, memes, and so on in the process of writing. This new direction should not only include modifying traditional genres (like argumentative essays) to embrace digital writing practices but to adopt new digital and multimodal genres for academic and creative proposes, including genres such as Tweet threads, Reddit discussions, timelines, quizzes, polls, infographics, product reviews, how-to guides, reaction videos, link pages, newsletters, podcasts, online games, mind maps, content aggregation, and so forth.

8   Conclusion

In this chapter, I used the adjective "industrial" to highlight that most of our current educational structures have been constructed based on the Fordian conveyer belt model for profitable homogeneous mass service and mass production. I have employed the word "organic" to highlight the importance of layers of the act of writing that crucially determine its quality but have been rendered unfunctional as a result of our Fordian approach to writing education. These layers include sociocultural and intellectual networks in which organic acts of writing occur. I exemplified some of these layers by asking how we could use online possibilities to undermine the industrial nature of current writing education. One possibility discussed was how online instruction can help writing courses become interwoven with other course materials. Also, I reflected on how we can use online platforms to create intellectual collaboration between students and their peers and communities. Finally, I discussed digital writing as a form of organic literacy practice that might

be more readily recognized as such in the obligatory online academic communication during the COVID-19 period. Thus, rather than praising digital literacy, I mainly focused on how digital and online possibilities can activate more organic elements in writing ecologies.

References

Bonchek, M. (2016). *Why the problem with learning is unlearning*. Harvard Business Review. Retrieved July 27, 2020, from http://tiny.cc/smpksz

Brenneis, S. J. (2014). *Genre fusion: A new approach to history, fiction, and memory in contemporary Spain*. Purdue University Press.

Brock, C. (2013). *Education and natural disasters*. Bloomsbury Publishing.

Caruso, G. D. (2017). The legacy of natural disasters: The intergenerational impact of 100 years of disasters in Latin America. *Journal of Development Economics, 127*, 209–233.

Clarke, S. (1992). What in the F—'s name is Fordism. In N. Gilbert, R. Burrows, & A. Pollert (Eds.), *Fordism and flexibility: Divisions and change* (pp. 13–30). Palgrave Macmillan.

Collis, B., & Moonen, J. (2001). *Flexible learning in a digital world: Experiences and expectations*. Psychology Press.

De Vreyer, P., Guilbert, N., & Mesple-Somps, S. (2015). Impact of natural disasters on education outcomes: Evidence from the 1987–89 locust plague in Mali. *Journal of African Economies, 24*(1), 57–100.

DeVoss, D. N., Eidman-Aadahl, E., & Hicks, T. (2010). *Because digital writing matters: Improving student writing in online and multimedia environments*. Wiley.

Dickie, J. (2011). Samoan students documenting their out-of-school literacies: An insider view of conflicting values. *Australian Journal of Language and Literacy, 34*(3), 247–259.

Fleischer, C., & Pavlock, K. C. (2012). Inviting parents in: Expanding our community base to support writing. *English Journal, 101*(4), 29–36.

Frankopan, P. (2015). *The Silk Roads: A new history of the world*. Vintage Books.

Gilliland, B. (2014). Academic language socialization in high school writing conferences. *Canadian Modern Language Review, 70*(3), 303–330.

Hawkins, L. K. (2019). Writing conference purpose and how it positions primary-grade children as authoritative agents or passive observers. *Reading Horizons: A Journal of Literacy and Language Arts, 58*(1), 22–47.

Hiller, D. V., & Bogart, D. H. (1973). University size-complexity, academic profession and faculty alienation. *Sociological Focus, 6*(4), 59–73.

Hull, G., & Schultz, K. (2002). *School's out! Bridging out-of-school literacies with classroom practice*. Teachers College Columbia University.

Jakobson, R. (1960). Linguistics and poetics. In *Style in Language* (pp. 350–377). MIT Press.

Jamieson, P., Dane, J., & Lippman, P. (2005). Moving beyond the classroom: Accommodating the changing pedagogy of higher education. In *Refereed forum proceedings of the Australian Association for Institutional Research* (pp. 17–23).

Jessop, B. (1992). Fordism and post-Fordism: A critical reformulation. In M. Storper & A. J. Scott (Eds.), *Pathways to industrialization and regional development* (pp. 46–69). Routledge.

Julier, L. (2001). Community-service pedagogy. In G. Tate, A. Rupiper, & K. Schick (Eds.), *A guide to composition pedagogies* (pp. 132–148). Oxford University Press.

Long, E. (2008). *Community literacy and the rhetoric of local publics*. Parlor Press.

Minninger, J. R. (1977). Unlearning writing blocks. *Transactional Analysis Journal, 7*, 71–72.

Moje, E. B. (2007). Youth cultures, literacies, and identities in and out of school. In J. Flood, S. B. Heath, & D. Lapp (Eds.), *Handbook of research on teaching literacy through the communicative and visual arts* (Vol. 2, pp. 207–219). Erlbaum.

Mudavanhu, C. (2014). The impact of flood disasters on child education in Muzarabani District, Zimbabwe. *Jàmbá: Journal of Disaster Risk Studies, 6*(1), 1–8.

Kalan, A. (2014). A practice-oriented definition of post-process second language writing theory. *TESL Canada Journal, 32*(1), 1–18.

Kalan, A. (2021). Sociocultural and power-relational dimensions of multilingual writing: Recommendations for deindustrializing writing education. Bristol, UK: Multilingual Matters.

Kent, T. (1993). *Paralogic rhetoric: A theory of communicative interaction*. Associated University Presses.

Landahl, J. (2013). The eye of power(-lessness): On the emergence of the panoptical and synoptical classroom. *History of Education, 42*(6), 803–821. https://doi.org/10.1080/0046760x.2013.832408

Leland, C. H., & Kasten, W. C. (2002). Literacy education for the 21st century: It's time to close the factory. *Reading and Writing Quarterly, 18*(1), 5–15. https://doi.org/10.1080/105735602753386315

Martin, L., & Mottet, T. (2011). The effect of instructor nonverbal immediacy behaviors and feedback sensitivity on Hispanic students' affective learning outcomes in ninth-grade writing conferences. *Communication Education, 60*, 1–19. https://doi.org/10.1080/03634523.2010.496868

Park, E. L., & Choi, B. K. (2014). Transformation of classroom spaces: Traditional versus active learning classroom in colleges. *Higher Education, 68*(5), 749–771.

Porter, J. (2003). Why technology matters to writing: A cyberwriter's tale. *Computers and Composition, 20*(4), 375–394.

Ruch, R. S. (2003). *Higher Ed, Inc.: The rise of the for-profit university*. JHU Press.

Salomon, G. (2002). Technology and pedagogy: Why don't we see the promised revolution? *Educational Technology, 42*(2), 71–75.

Sekulla, G., & Combes, B. (2006). Moving the boundaries: Education beyond the traditional classroom. *Pacific-Asian Education Journal, 18*(1), 40–53.

Shvidko, E. (2018). Writing conference feedback as moment-to-moment affiliative relationship building. *Journal of Pragmatics, 127*, 20–35.

Taylor, L. K., Bernhard, J. K., Garg, S., & Cummins, J. (2008). Affirming plural belonging: Building on students' family-based cultural and linguistic capital through multiliteracies pedagogy. *Journal of Early Childhood Literacy, 8*(3), 269–294.

Tucker, B. (2012). The flipped classroom. *Education Next, 12*(1), 82–83.

VandeSteeg, B. (2012). Learning and unlearning from school to college to university: Issues for students and teachers. *Learning, 2*(1), 28–35.

Warnock, S. (2009). *Teaching writing online: How and why*. National Council of Teachers of English.

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Developing Social Media Literacies Through Online Social Reading Practices

Osman Solmaz

Participatory culture shifts the focus of literacy from one of individual expression to community involvement.

Henry Jenkins

1 Background

The ubiquitous use of digital technologies led to the emergence of a "participatory culture" (Jenkins, 2006). This culture involves engagement in creation, socialization into a multitude of genres and networks, and a sense of connection with various audiences through employing and exercising new literacy practices. These new media literacies are simulation, performance, appropriation, collective intelligence, judgment, and networking (Jenkins et al., 2006). They are viewed as a prerequisite for active and creative engagement in participatory culture. It is through these literacy practices that individuals take part in online discussions and activities in efficient and creative ways. Such practices include digital social reading (DSR), which is "the act of sharing one's thoughts about a text with the help of tools such as social media networks and collaborative annotation" (Blyth, 2014, p. 205). Participants can collaboratively engage in a text through annotating specific parts of the text in both synchronous and asynchronous formats. The text is viewed as a meeting place, and individuals are expected to be active and creative participants of a community formed around the text as part of DSR (See Fig. 1 for a sample).

The research examining the use of digital annotation tools (DATS) in higher education settings reveal that such resources and practices are beneficial with respect to fostering reading comprehension, academic achievement, building

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Fig. 1 A sample conversation initiated by a student's annotation

knowledge, motivation, and promoting interactions (e.g., Novak et al., 2012; Sun & Gao, 2017). Studies exploring the potential of these tools for language learning and teaching contexts also demonstrate that digital social reading practices can contribute to learners' reading comprehension. They can provide them opportunities for social gains (e.g., establishing a sense of community) and facilitate online socialization (e.g., Solmaz, 2020; Thoms & Poole, 2017). More recently, the investigation of phenomena in language education practitioner contexts showed that DATs can create an avenue for the professional development of second language teachers following their engagement in multiple collaborative reading practices during a face-to-face course (e.g., Michelson & Dupuy, 2018). Despite the promising value of the tool, particularly for tertiary-level students, the research has yet to document the potential of the tool for pre-service language teacher education contexts, particularly in relation to the underexplored area of future teachers' social media literacy practices. Theoretically guided by the notion of participatory culture (Jenkins, 2006) and social media literacies (Jenkins et al., 2006; Solmaz, 2017), the following study aims to contribute to this scholarship by exploring social media literacy practices of English language teacher candidates. Furthermore, the study aims to offer a free innovative technological alternative for times of crisis and emergency remote teaching practices. To attain these goals, the study is guided by the following research question: What kinds of social media literacies do teacher candidates demonstrate while participating in digital social reading activities?

2 Theoretical Framework

The present chapter analyzes digital social reading literacy practices of teacher candidates through the theoretical lens of the Participatory Culture Framework (Jenkins, 2006) and the methodological tools of emerging social media literacies (Jenkins et al., 2006; Solmaz, 2017). The social media literacies listed in Table 1 are seen as a prerequisite for an efficient engagement in the participatory culture.

Table 1 Social media literacies

Literacy	Definition
Play	The capacity to experiment with one's surroundings as a form of problem-solving
Simulation	The ability to take advantage of technological tools afforded, meaningfully interact with them, and represent/manipulate information
Performance	The ability to display various aspects of the identity for self-presentation and impression management and to adopt fictive identities for the purpose of improvisation and learning
Appropriation	The ability to meaningfully sample and remix media content and to search for, synthesize, and disseminate information
Multitasking	The ability to traverse simultaneously between offline and SNS contexts
Judgment	The ability to evaluate the reliability and credibility of different information sources
Transmedia navigation	The ability to follow the flow of stories and information across multiple modalities
Networking	The ability to travel across diverse communities, discerning and respecting multiple perspectives, and grasping and following alternative norms, recognizing and addressing diverse audiences and cultures in the network
Collective intelligence	The ability to pool knowledge and compare notes with others toward a common goal and effectively seek help from experts in the network
Trans-genre and trans-lingual navigation	The ability to follow and produce content across multiple genres and linguistic elements

Adapted from Jenkins et al. (2006), Solmaz (2017)

This framework and the categorization of social media literacies offer an analytical perspective for the examination of collaborative reading practices in an online context. The analysis of the social media literacies can provide a crucial understanding of which literacy practices are exercised through digital social reading activities of pre-service teachers of English. This could be particularly valuable at times of crisis such as the COVID-19 global outbreak.

3   Methodology

The present study employs a qualitative approach by analyzing participants' social media literacy practices in a digital social reading platform and their views on digital collaborative reading activities. The participants are 40 English language teacher candidates (31 female, 9 male), who were enrolled in a methodology course at a university in Turkey. The students, who were between 20 and 25 years of age, were in their third year of study in the four-year program. The course consisted of 14 face-to-face weekly meetings and concurrent digital social reading activities conducted online through a free digital annotation platform called *Socialbook* (2020).

Participants were able to engage in multilayered conversations through a variety of activities such as leaving comments, underlining a part of a text, responding to other annotations, uploading images, and sharing digital resources by using the tool. As for the present study, the first two weeks consisted of an introduction of the tool and relevant concepts such as digital social reading and collaborative reading. Students interacted through sample texts provided by the instructor through which they gained familiarity with the tool. While participants engaged collaboratively in annotating instructor-provided texts in three different groups featuring 13–14 students in weeks 5–6, they annotated the instructor-provided texts by themselves in weeks 7–8. During weeks 9–12, they were required to form student-led groups of 5–7 participants in which they annotated a text chosen by themselves, led a discussion of their own texts, and participated in group members' texts. Finally, participants were expected to submit reflection journals in which they critically wrote about their digital social practices at the end of the semester.

The data of the present study were gathered from participants' online discussions and their reflection journals submitted at the end of the course before the Covid-19 outbreak. Content analysis was conducted to investigate samples of participants' social media literacies along with expression of their own "voices" prevalent across their journals (Glesne, 2011). Due to the extensive amount of data, only a sample of social media literacy practices, which represented participants' activities, was qualitatively examined following deductive coding according to the theoretical framework (i.e., Participatory Culture Framework) (Cho & Lee, 2014). The analysis was supported and strengthened by the participants' journal reflections on digital social reading. Following the coding process, emerging categories were grouped into major themes, each of which illustrated participants' collaborative social reading practices and their views of the process.

4   Findings and Discussion

The findings here are discussed according to the research question, which aimed to understand what kinds of social media literacies future teachers of English display in their digital social reading practices. The analysis indicated that three main groups of literacy practices and skills were commonly observed: (a) networking and collective intelligence; (b) appropriation, simulation, and transmedia navigation; and (c) judgment. The least observed literacy practices included multitasking and trans-genre and trans-lingual navigation.

The data clearly showed that participants formed a socio-collaborative community on the annotation platform as they engaged in reading as a collaborative activity by discussing and commenting on the subject (see excerpt 1 below), interacting with their peers and the instructor (excerpt 2), and gaining knowledge through their network and collective intelligence formed by the community (excerpt 3).

Excerpt 1

Participant 4: [Regarding the recommendation to highlight the text for an intensive reading task] Coloring the text can be quite useful because it will be time saving when you read the text again. It is also attractive for young learners compared to a black and white text.

Participant 22: So, what is the role of coloring words or phrases during the acquisition process? I mean, what does it add to students and in what ways?

Participant 4: I am not sure, but I think colored texts can enhance motivation and might be positively related to learning performance.

Excerpt 2

Participant 35: [Regarding the use of multiple accents] There is a large number of accents in English and teachers should expose students to different accents as much as possible.

Participant 17: I completely agree with you, however, I want to mention that teachers should be very careful while choosing the accent as students may be discouraged or feel insecure if they find the speaker difficult to understand. The time of introducing different accents matters as well.

Instructor: Good points. Thanks for pointing out these aspects to consider while exposing students to various Englishes.

Excerpt 3

Participant 3: [Regarding texts and activities in class] What kinds of texts are suitable for learners in the class?

Participant 39: The authentic texts can be suitable for them.

Participant 3: I agree, because I think that the more "real" the texts are, the more the students will be prepared for real life situations.

These sample excerpts demonstrating co-construction of meaning in the community are in line with those reported in the literature as well (e.g., Blyth, 2014; Solmaz, 2020; Thoms & Poole, 2017). Such interactive practices can be considered as examples of networking and collective intelligence as participants reach out to multiple audiences in the platform and seek or contribute information to the knowledge pool. This experience was best evidenced in one of the participants' reflection journals: "It was good to see new, different, interesting ideas from my friends. I liked shaping my opinion with other friends' ideas which were so useful" (Participant 7, Reflection journal).

The analysis also indicated that participants often performed simulation, appropriation, and transmedia navigation literacy practices while engaging in multiple texts. These literacies, which involve the use of multimodal content in different ways, were found in many students' posts as they took advantage of the afforded tools in a meaningful way, searching for and efficiently mixing multiple sources of media and navigating through multiple platforms smoothly. Many participants made multimedia-enhanced contributions to the discussions by inserting relevant video links for access to external resources, attaching appropriate images, drawings, and sometimes cartoons for lexical items, expressions, or ideas/categories in

general (see excerpts 4, 5, 6 below). Even though many students performed such practices, the level and extent of their practices were not equally distributed.

Excerpts 4, 5, 6

Participant 12: [Referring to the blockbusters game in the text] (image of a sample blockbuster game is attached as a response) The game is very flexible and it is a team game. It can be used to practice a particular word family or type of word such as phrasal verbs.

Participant 8: [Referring to teachers encouraging teenagers to take responsibility for their learning] (a gray icon depicting a man getting rid of his chains is attached as an image) Like this person, students should be autonomous and take responsibility for their own learning.

Participant 23: [Referring to the body of text where learning styles are discussed – a colorful graphic summarizing eight different learning styles is attached without any text] (Fig. 2).

To further illustrate, Fig. 3 is a clear example of multiple social media literacies in action as the participant successfully navigated the web to find a suitable image to support her argument (i.e., transmedia navigation and simulation) and appropriated it into a particular context in a playful way (i.e., appropriation and play). Similarly, the analysis of students' journals demonstrated that participants favored the multimodal aspect of digital social reading, which assisted them in understanding the content better and helped them with potentially unknown vocabulary. These findings concur well with the previous research in which learners maximized the technological capacity of digital tools provided by the medium (e.g., Solmaz, 2021; Thoms & Poole, 2018).

Another group of social media literacies on display included judgments, transgenre, and trans-lingual navigation. The latter two were relatively limited compared to the use of judgments. It was observed through participants' annotations and

Fig. 2 A sample post featuring a participant's multimodal annotation

Scanning is a really good reading strategy because it is time- saving, it helps us to improve our reading fluency and our attention while reading a text... Scanning looks like *being a detective* because you try to **find special details in the text** such as date, number, name, places, etc

When you scan the text, you may see yourself as a detective like Sherlock Holmes ... :)
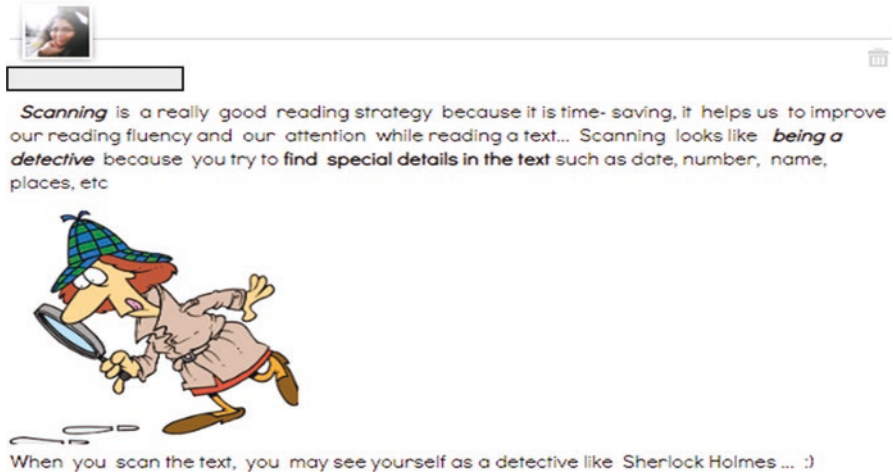
Fig. 3 A sample post featuring social media literacies

reflections that students had more time and space for a critical view of the material while having permanent access to the text and discussions. Although some participants' visits were infrequent throughout the term, most of the students followed up annotations with their comments from a critical perspective. In the following excerpt, for instance, participants submitted critical annotations about their views on a multitude of issues (excerpt 7, 8).

Excerpt 7, 8

Participant 21: [Regarding the use of transcription as part of listening activities] Actually I don't agree with the writer completely because using transcript can cause students to not listen carefully. If they know that there will be a written form of audio file, they will wait for it to speak or answer the questions. However, I also think that if the listening task is difficult for students, then you can use transcript.

Participant 35: [Regarding the way grammar is taught] Teaching grammar only is such a terrible way for language learning. Learners should know grammar, but they should use the language, so noticing form and meaning of language is very crucial at this point.

Participants reported how the platform required performing literacy practices such as judgment (e.g., "Participating in the discussions improved my thinking skills because we needed to think reasonably to take part in the texts," Participant 11, Reflection Journal.), as well as the platform's flexibility, provided them a further space outside the class (e.g., "Sometimes it is hard for everyone to participate in the activities in a 40-minute class and it can be overcome in this format," Participant 33, Reflection Journal). In addition to these benefits, the content analysis of participants' posts showed that participants engaged in practices using textual and linguistic resources such as emojis, discourse fillers, colloquial language, and abbreviations

while switching between various forms of language. These findings are consistent with those reported in the previous research, which were conducted in similar pre-service teacher education contexts (Solmaz, 2020, 2021).

5 Conclusion and Implications

The present chapter aimed to make a value-added contribution to online annotated reading research by investigating the phenomena from the theoretical lens of the Participatory Culture Framework, an analytical toolkit of social media literacies. For this purpose, the study investigated English language teacher candidates' most common social media literacy practices in a digital social reading platform. The data analysis revealed three main groups of commonly observed practices which consisted of networking, collective intelligence, appropriation, simulation, transmedia navigation, and judgment, some of which were also reported in the previous literature in different degrees (e.g., Solmaz, 2020; Thoms & Poole, 2018). It was further shown that the level and extent of participants' social media literacy practices were not the same although most of them exhibited a wide range of such literacies during the project. It is recommended that further studies investigate learners' social media practices in digital collaborative reading settings.

The present study shows that educators can make use of digital annotation tools (DATs) during and after emergency situations like COVID-19 due to the flexible nature of these platforms. DATs constitute an alternative digital space where educators can invite learners to meet around a text and engage in meaningful conversations – unlike discussion boards in traditional learning management systems where a more specific format needs to be followed. Given that DATs have the potential to create opportunities for learners to create their own online communities, they can be particularly beneficial for emergency remote teaching contexts, where students are unable to enroll in face-to-face classes. Second, the present study can function as a guide for teachers who need more socio-interactive tools for their students. Although the study's context is limited to a methodology course, the essence of the tool is promising for a vast area of discussions and topics to be performed as part of various courses. The socio-interactive aspect of digital annotation practices can provide additional resources for learners to reconnect during the times of crisis. Third, DATs can function as supplemental resources and spaces in addition to learning management systems and synchronous meeting platforms such as Zoom and Google Meet due to its flexible format. This might be valuable for learners as they can engage in digital social reading practices at their own pace without being limited to a specific synchronous timeframe, which can be challenging during emergency remote learning such as the COVID-19 outbreak. Fourth, DATs can be implemented not only in higher education contexts but also in K–12 settings through the adaptation of the designed tasks for learners thus allowing a larger audience group to benefit from the current study. However, it is important to note that further teacher agency and involvement might be needed for a more effective integration of DATs into such contexts.

References

Blyth, C. (2014). Exploring the affordances of digital social reading for L2 literacy: The case of eComma. In J. Pettes Guikema & L. Williams (Eds.), *Digital literacies in foreign and second language education* (pp. 201–226). CALICO.

Cho, J. Y., & Lee, E.-L. (2014). Reducing confusion about grounded theory and qualitative content analysis: Similarities and differences. *The Qualitative Report, 19*(32), 1–20.

Glesne, C. (2011). *Becoming qualitative researchers: An introduction* (4th ed.). Pearson.

Jenkins, H. (2006). *Convergence culture*. New York University Press.

Jenkins, H., Purushotma, R., Clinton, K., Weigel, M., & Robison, A. J. (2006). *Confronting the challenges of participatory culture: Media education for the 21st century*. The McArthur Foundation.

Michelson, K., & Dupuy, B. (2018). Teacher learning under co-construction: Affordances of digital social annotated reading. *Apprentissage des langues et systèmes d'information et de communication (Alsic)*, 21. https://doi.org/10.4000/alsic.3344

Novak, E., Razzouk, R., & Johnson, T. (2012). The educational use of social annotation tools in higher education: A literature review. *The Internet and Higher Education, 15*(1), 39–49.

Socialbook. (2020, July 30). *A collaborative thinking processor*. Retrieved from https://www.live-margin.com/socialbook/client/landing_page.html

Solmaz, O. (2017). Adapting new media literacies to participatory spaces: Social media literacy practices of multilingual students. *Journal of Media Literacy Education, 9*(1), 36–63.

Solmaz, O. (2020). Examining the collaborative reading experiences of English language learners for online second language socialization. *The Reading Matrix, 20*(1), 20–35.

Solmaz, O. (2021). The affordances of digital social reading for EFL learners: An ecological perspective. *International Journal of Mobile and Blended Learning, 13*, 36–50.

Sun, Y., & Gao, F. (2017). Comparing the use of a social annotation tool and a threaded discussion forum to support online discussions. *The Internet and Higher Education, 32*, 72–79.

Thoms, J. J., & Poole, F. (2017). Investigating linguistic, literary, and social affordances of L2 collaborative reading. *Language Learning & Technology, 21*(2), 139–156.

Thoms, J. J., & Poole, F. (2018). Exploring digital literacy practices via L2 social reading. *L2 Journal, 10*(2), 36–61.

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Project-Based Learning as a Model for the Normalized Use of Digital Technologies: Facilitating Practical, Meaningful, and Learner-Centered Online Teaching and Learning

Andrew C. Bosson and İsmail Arıcı

> *In the midst of every difficulty, lies opportunity.*
>
> *John Wheeler on Albert Einstein's principles (Big Ear, 2004)*

1 Project-Based Learning and Project-Based Learning at the Sabanci University School of Languages (SUSL)

This chapter provides a retrospective case study in which a 12-week Project-Based Learning (PBL) course, already in progress and delivered primarily face-to-face in the classroom, became an online course involving both synchronous and asynchronous interaction in response to the COVID-19 crisis. The data are drawn from team meeting minutes, teacher and learner comments, teacher interviews, as well as the observations and reflections of the authors, who were also the course coordinators and designers. The chapter describes key course elements. For in-depth information about the course please visit the Proj-001 website (Arıcı & Bosson, 2020).

The case study was conducted at the Sabancı University School of Languages (SUSL) in Istanbul, Turkey. SUSL delivers English Language preparatory courses, including related academic skills, to enable learners to reach a required proficiency in English (roughly equivalent to B2 in the Common European Framework of Reference for Languages) and to enable learners to undertake English language

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medium undergraduate studies. PBL is an established and key element of the SUSL curriculum delivered, until March 2020, as a classroom-based face-to-face course.

PBL is a highly "student-centered, self-directed, integrated, and contextual mode of learning" (Chegwidden, 2006, p.642) that "situates learning in complex problem-solving contexts" (Hmelo-Silver, 2004, p.261). Learners, through active inquiry, engage with their subject matter, not only to further their learning for their current studies but also to encourage the skills and attitudes required of self-directed life-long learners, promoting the development of academic, social, and twenty-first-century skills, including critical thinking, and media and digital literacy. Methodologically PBL is founded on key principles which include basing a project around a realistic driving question leading to meaningful and publicly recognized and celebrated outcomes; being team-based, collaborative and cooperative; promoting learner engagement and choice; having expectations of high-quality outcomes; and embedding reflection to promote metacognitive self-awareness of learning.

At SUSL, subject-based study provides content and context to encourage English language learning. For example, the inquiry-based and problem-solving nature of the course creates an information-gap, a genuine need for realistic written and spoken interaction in a variety of scenarios such as team members conducting and synthesizing research and preparing and delivering presentations; teacher and teams discussing research and meeting goals; and between teams as presenters of their research and their audiences. Additionally, it promotes the development of reading and listening skills for research purposes and the skills of speaking and writing to present the research findings and solutions. The ongoing close interaction between teachers and learners enables teachers to monitor progress and provide timely remedial input as required, including the opportunity to identify and address linguistic needs.

PBL at SUSL was named Proj-001 to follow the conventions of projects that learners will undertake as undergraduate learners (Proj-101 & 201). It is an extended, guided research project course delivered in four class hours per week and culminating in a poster presentation. It takes place over 12 weeks with learners completing additional project work outside class time. Proj-001 is distinguished from subsequent projects by the fact that it follows PBL methodology and provides more scaffolding and teacher support for the learners as they develop their research and presentation skills. The project is structured around three stages, each of which has a specific focus. Each stage culminates in a key element of PBL, that is, learner reflection on their progress and the development of skills and knowledge to date. Proj-001 is a graded teaching component, constituting seven and a half (7.5%) percent of the learners' overall SUSL course. It follows rubric-based continual assessment of course elements. The main elements of the Proj-001 stages and changes, with the switch to online teaching as e-Proj-001, as described in Sect. 3, are shown below in Table 1.

Table 1 Proj-001 and e-Proj-001 course elements

Stage 1 – Initiation. Weeks 1–3. (Completed before the COVID-19 crisis)
– Course introduction. *(Weekly class input via Zoom meetings in e-Proj-001)*
– Team formation and identification of a team research question
– Assessed*. Individual written literature review. Minimum two drafts with face-to-face feedback. *(Online feedback in e-Proj-001, e.g., with Google Docs)*
– End of stage 1 reflection task.
Stage 2 – Research. Weeks 4–7. (Online from week 5 due to the COVID-19 crisis)
– Individual literature and media-based research to identify solutions to the research question
– Weekly face-to-face meeting with teachers to share and assess research progress. *(Online feedback in e-Proj-001)*
– Synthesize research findings with team members in preparation for stage 3
– Assessed*. Recorded video discussion of research findings. *(Removed from e-Proj-001)*
– Assessed*. End of stage 2 reflection task and face-to-face team meeting with teacher. *(Online meeting in e-Proj-001)*
Stage 3 – Production. Weeks 8–12
– Continue and finalize research
– Prepare posters (Appendix 1) and plan presentations. *(e-Proj-001 online presentations [OP])*
– Weekly face-to-face meeting with teachers to share and evaluate research and presentation progress. *(Online feedback in e-Proj-001)*
– Deliver Poster Presentations (PP)
– Practice delivery of PP in their own class. *(e-Proj-001 create OP draft #1 with teacher feedback)*
– Assessed*. Delivery of PP to audience of peers from other classes. *(e-Proj-001 OP draft #2 with class peer and teacher feedback)*
– Assessed*. Delivery of conference PP *(e-Proj-001. Final OP shared with peers and selected examples hosted on the SL Lifelong Learning blog).*
– Assessed*. End of stage 3 and project reflection task and face-to-face team meeting with teacher. *(Online meeting in e-Proj-001)*

All assessed Proj-001 elements were ungraded in e-Proj-001 and did not contribute to the overall SUSL mark. However, assessed components still used rubrics to help provide feedback to learners and promote learner reflection

2   The Challenge

Proj-001 had been running for four weeks when, in March 2020, the COVID-19 pandemic forced the physical closure of all universities in Turkey and a move to online teaching and learning. The initial SUSL response was to consider which curriculum components, including Proj-001, were suited to online teaching and learning. For the vast majority of learners and teachers, this would be their first experience of wholly online education – one into which they were immersed with minimal warning or preparation. Immediate considerations included the digital resources available to teachers and learners as they worked remotely and importantly their competency and confidence to use or learn to use them without the creation of too much additional stress, given the ambiguity of the situation. A further concern was the possible loss of the social aspect of teaching and learning.

In addition to these immediate concerns, it also appeared that the pandemic could have longer-term impacts on teaching and learning making a return to "normal" education unlikely, leading to an educational version of punctuated equilibrium (Fidler & Parsons, 2005, p.447) in which a jump in practice could occur in a short space of time rather than through gradual evolution. This provided the potential for a "disruptive moment" (Bass, 2012) in which the circumstances and current digital technologies (DTs) presented an opportunity for innovation. For us this became a motivating challenge, very much in the spirit of PBL, to use the crisis as a chance to build approaches that promote real and meaningful learning in an online or blended future learning environment and for our own professional development.

3   The Response

The COVID-19 crisis presented an opportunity to promote meaningful learning in a supportive, social, and collaborative online context. The communicative and collaborative elements of the course that had originally mainly taken place in face-to-face settings could now be facilitated through DTs, including weekly whole class input sessions. The use of DTs would be normalized in that they are "integrated into all aspects of classroom life" and central to facilitating teaching and learning taking place but not at the center of the lesson or being the focus of learning (Chambers & Bax, 2006, p.465). Proj-001 had required the use of DTs for a variety of other purposes, from conducting literature and media-based research to the creation of posters. These were maintained in e-Proj-001.

The immediate SUSL response to the crisis was to streamline the curriculum to its core elements with Proj-001 becoming a fully online and temporarily ungraded component, being renamed e-Proj-001 to reflect the change. e-Proj-001 retained much of the structure of Proj-001 with adjustments to their timing and temporary omission of some tasks (Table 1). A key principle of PBL is a realistic project, culminating with a meaningful outcome. The outcome of Proj-001 – a poster presentation – no longer represented a realistic outcome. Teams would not be presenting their poster in front of a physical audience. Consequently, we changed the e-Proj-001 outcome to a recorded online presentation (Appendix 2) with selected presentations being hosted on SUSL's universally accessible Lifelong Learning website (Bosson, 2017). Such a presentation was more relevant in an online world in which presentations are regularly hosted asynchronously for others to view.

The move online came with the concerns that teachers and learners may not possess the technological competence or confidence to use new DTs. Therefore, to create a psychologically, safer development area for every e-Proj-001 participant a *minimum-core* of online, synchronous, and asynchronous communicative and collaborative tools were suggested to facilitate previously face-to-face course elements. These almost acted as a digital survival kit for teachers and students and included Zoom for online meetings and the Google suite to enable collaborative working.

Although we have institutional access to these DTs, they are also available as free versions.

We did not presume any detailed knowledge of the minimum-core DTs. Therefore, to familiarize teachers with their use, the tools were used in teacher meetings and asynchronous communication and collaboration with the teaching team, paralleling their possible uses by the teams of learners. Teachers, in turn, modeled their use in interactions with their learner teams and shared possible uses to manage the project with the aim of promoting a smooth and more organic transition to online learning.

4   Evaluation, Implications, and Possibilities

Feedback from teachers and learners following the first iteration of e-Proj-001 indicates that the project was successful in meeting the primary learning goals of developing learners' English language skills and knowledge, as well as meeting its subsidiary goals. A senior teacher who has taught Proj-001 multiple times noted: "Despite the changes we had to make to some components, I think it went very well overall, and we were able to get good final production work from groups."

Learners, now required to undertake the course online, recognized how the DTs enhanced learning and became normalized adding value to task completion. Learners reflected: *"At the first, I thought it will not work. However, I find e-Proj better."* **"**Of course it is not the same as we do our projects face-to-face, but I think it is more practical to work online and easier to get things together.*"* Another learner identified how collaborative DTs could foster effective teamwork and also facilitate supportive online subcommunities: *"I feel that the inspiration and cooperation was better online."*

A student comment indicated how many learners were not initially competent with even our common-core tools and went on a steep and rewarding learning curve: "I have learnt how to do online presentations and how to run projects without seeing each other face-to-face." They identified seemingly basic experiences as significant learning events: "I found out so much about google drive."

Teachers also observed how e-Proj-001 encouraged learner autonomy: "I liked the idea of giving students a different perspective on their learning. Learner autonomy was the most precious part of this journey"; and "I believe they developed greater autonomy in organizing and doing their work as they could not meet in class."

The minimum-core appeared to reflect the essential yet realistic expectation of the use of DTs with one teacher noting: *"We were modest in terms of technology use. I don't mean this in a negative way, it was effective too. For example, they used Gdrive, Padlet and so on."* Their use was also normalized: "we got rid of the novelty effect." In addition to online modelling the minimum-core tools with teachers in course meetings, communications, and administration, we also provided technical

and methodological support meetings for all e-Proj-001 teachers, specifically for those requesting additional support.

The minimum-core of DTs did not impose an upper limit on DTs that the learners and teachers may use and try. Instead, in the spirit of PBL, we set the learning context and goals, trusting and encouraging learners and teachers to be innovative users of technology (DTs) to enhance their learning and teaching. Not only did learners enhance their skills and knowledge using DTs, but teachers saw this as an opportunity for their own professional development. One teacher experimented with Slack, a business communication platform: "since I am into using technology in class, I enjoy trying different tools. I have learned a new tool that I can use for teams." They chose a DT based on its affordance to complete a normalized purpose, noting that "it is better to use a certain tool for a specific purpose, such as Slack for Proj."

Although it was decided that e-Proj-001 would not receive a grade in this iteration to reduce potential anxiety for teachers and learners, teachers were encouraged to use the existing course rubrics to assess performance and to provide feedback and promote learner reflection. Having run the course online, we feel confident in reinstating graded assessment with a few changes to specific rubrics. The course elements that were dropped could be included once again according to the post COVID-19 scenario. One argument often advanced for the grading of coursework is that without it learners would not engage in the tasks. Interestingly, this was not our experience with e-Proj-001 as we found learners actively engaged in the course without the prospect of a grade to advance their learning. The course had an 85% completion rate, and the Director of SUSL expressed that she "was amazed by the effort they put in and the quality of the work" upon viewing some of the presentations. This is indicative of the ability of PBL to provide exciting and intrinsically motivating online learning experiences - whether the course is graded or not.

The suddenness of the move to online teaching and learning meant that as coordinators we often operated on a week-to-week basis in terms of the implementation of course changes. Nonetheless, the move to e-Proj-001 was relatively smooth and felt natural. A teacher observed: "When the course is online, you can be more individualized, and you can communicate with students more effectively. Therefore, I think the course was almost seamless when it was online." It appears that the disruptive moment created by the pandemic crisis forced the positive reawakening of latent parts of the course with the inherent communicative and collaborative nature of PBL being enhanced through the affordances of DTs.

5   Conclusion

Amid the challenge of the worldwide COVID-19 crisis, we feel that we have adapted and adopted an educational solution that met the immediate situation and suggest solutions for the future. We anticipate that future iterations of PBL at SUSL will retain these normalized elements of digital communication and collaboration,

whether on campus or in a new normal of virtual or blended modes. They replicate real-life use as well as educational and professional expectations, develop learner technical knowledge of common DTs, and provide course flexibility and depth of learning opportunities. Additionally, while the long-term effects of social distancing are unclear, online PBL offers the opportunity for socialization and collaborative learning while remaining safe and healthy, also offering solutions to other situations where learning takes place remotely. While education in the post COVID-19 world is uncertain, an online approach to PBL offers the opportunity for meaningful learner-centered teaching that can be delivered to a larger number of learners.

Our experience in delivering PBL as e-Proj-001 suggests that many of our experiences are applicable to other online teaching and learning situations. As teachers, we will undoubtedly be building upon these in delivering other SUSL curriculum components.

References

Arıcı, İ., & Bosson, A. (2020). SL Proj-001. Retrieved July 15, 2020, from http://slproj-spring2020.weebly.com/

Bass, R. (2012). Disrupting ourselves. The problem of learning in higher education. *Educase Review*, March / April 2012. Retrieved July 15, 2020, from https://er.educause.edu/articles/2012/3/disrupting-ourselves-the-problem-of-learning-in-higher-education

Cosmic Search Magazine Vol. 1 No. 4. (2004, September 21). Big Ear. Retrieved July 26, 2020, from http://www.bigear.org/vol1no4/wheeler.htm

Bosson, A. (2017). *Lifelong learners in the school of languages*. Retrieved July 15, 2020, from http://sllll.weebly.com/

Chambers, A. C., & Bax, S. (2006). Making CALL work: Towards normalisation. *System, 34*, 465–479. https://doi.org/10.1016/j.system.2006.08.001

Chegwidden, W. (2006). A problem based learning pathway for medical students: improving the process through action research. *Annals of the Academy of Medicine Singapore, 35*, 642–646. Retrieved July 15, 2020, from https://www.researchgate.net/publication/6745088_A_problem-based_learning_pathway_for_medical_students_Improving_the_process_through_action_research

Fidler, C., & Parsons, B. (2005). Internationalisation of higher education a new theory of educational change – Punctuated equilibrium: the case of the internationalisation of higher education institutions. *British Journal of Educational Studies, 26*(8), 447–465. Retrieved July 15, 2020, from https://www.researchgate.net/publication/44838396_A_new_theory_of_educational_change_-_Punctuated_equilibrium_The_case_of_the_internationalisation_of_higher_education_institutions

Hmelo-Silver, C. E. (2004). Problem based learning: What and how do students learn? *Educational Psychology Review, 16*(1), 253–266. https://doi.org/10.1023/B:EDPR.0000034022.16470.f3

Mai, V. A. (2020). *Padlet*. program documentation. https://padlet.com

Microsoft Corporation. (2020). *Powerpoint* (16.39) [Desktop app]. App Store. https://apps.apple.com/tr/app/microsoft-powerpoint/id462062816?mt=12

Slack Technologies, Inc. (2020). *Slack* (4.8.0) [Mobile app]. App Store. https://apps.apple.com/tr/app/slack/id803453959?mt=12

Zoom Video Communications, Inc. (2020). *Zoom* (5.2.0) [Desktop app]. https://zoom.us/download

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Shortening the Learning Curve for Learners and Educators: Solutions in the Times of COVID-19

Amy El-Tobgy

> *Out of chaos, new life emerges.*
> *The purpose of life is not to be happy. It is to be useful, to be honorable, to be compassionate, to have it make some difference that you have lived and lived well.*
>
> *Ralph Waldo Emerson*

1   The Context and the Solutions

I teach General Education Studies courses at a medium-sized university in Canada. Prior to the COVID-19 shutdown, all campus programs there already used Moodle as a platform for the online portion of their face-to-face campus courses. Resources, instructions, assignments, and the syllabus are housed in the online Moodle course site for access between weekly face-to-face class sessions. When the COVID-19 shutdown moved our classes fully online in March 2020, both the instructors and students had already been using Moodle to use these online resources between classes. It was, therefore, a relatively smooth transition to full online with remote synchronous delivery (RSD) via Zoom video conferencing class sessions.

Professors like me also introduced extra online applications to engage students more effectively and to improve their attendance. Zoom was used as a video conferencing platform to continue weekly face-to-face sessions with students. MS Teams was implemented to enhance communications with students and group work, and Kahoot! and other apps were used for quizzes to check and review learning.

As we began the transition, faculty participated in professional development workshops before the start of the new semester in April 2020 to prepare for the new methods of delivery. The start of new classes after the COVID-19 shutdown in

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March was delayed by 1 week until April 13 to give the faculty time to adapt their delivery methods and activities. During that period, constant communications and sharing among faculty took place. That feeling of support eased the stress levels that everybody experienced at the time.

However, there were adaptations to be made as we moved to our online virtual classrooms. By using Zoom for classes via video conferencing, the students were able to interact with their professor and classmates face-to-face online – to give presentations, to have discussions and debates, and to practice skills in breakout room small group activities. The breakout room feature is highly effective for learner-centered activities in the virtual classroom. The professor divides the class into small groups of three to five students. Each group works together in a breakout room to complete an activity or task for a given time and then return to the main room to discuss their findings and questions. The professor can visit each "breakout room" to observe and assist the group's interaction. Groups can then share and discuss their PowerPoint slides or documents while presenting to the whole class. Adding visual presentations is a very important element in better understanding the material. Videos and Ted Talks related to the discussion and topics are also shared in the virtual class.

The virtual classroom also has a whiteboard where students can write comments and brainstorm while working together. These sessions can also be recorded and posted in the online portion of the course in Moodle for students that have missed important items. Professors that have used both face-to-face virtual sessions in Zoom combined with the asynchronous learning activities online in Moodle have found that the students were more informed and participated more.

Another frequently used addition to our virtual classes was the use of MS Teams, which helps students to engage in online discussions, schedule group meetings, and share files for their group projects.

Kahoot!, another fun online application, helps instructors design their own quizzes or use an existing database and choose questions for review from it. Students engage in the game-like format of the Kahoot! quiz via their mobile phones. The quiz is timed and competitive but tests the understanding of the material and has a reporting system that shows the most difficult questions that each student is not able to answer. It is a valuable feedback tool for both the instructor and the students.

Before the COVID-19 closures, students in on-campus courses were encouraged to participate actively during class through doing research and critical thinking and discussion, presenting individually or in groups, explaining in their own words, and providing examples using PowerPoint slides for visual presentations. Now with the online synchronous sessions via Zoom, it was even more important than before to engage students as active participants in their own learning experience.

I find that the use of visuals in presentations is very important for both on-campus and online sessions as this generation is used to social media and visual stimulation. Both instructors and students are moving away from the traditional style of teacher-delivered lectures and getting students more involved. To set up the virtual sessions in a more positive and engaging tone, instructors like me also use warm-up activities or icebreakers for the first few minutes of class while attendance is being taken and students are joining.

The following are a few examples of warm-up activities that my students enjoyed:

- *The Scavenger Hunt:* I use this activity during the first week of the term. It consists of ten questions to be answered within 15 minutes. The questions are geared toward exploring and finding answers related to the course material and tools available in the asynchronous portion of the course online in Moodle. If it is during the Zoom class session, I send students to the breakout rooms, and they work together in groups of four to five students. After 15 minutes, they return and share their answers about their explorations of online activities and resources. If it is to be done asynchronously in the online course, I post the scavenger hunt activity in the online forums, and each student posts their answers replying to the main post.
- *Creative Warm-Up Activity:* This is an activity that everybody enjoys. Many of my past students still do this activity whenever they feel stressed out or have an upcoming exam or major assignment. The purpose is to balance left and right brain thinking and to empower focus and creativity. The activity is in three parts. Three pieces of paper plus two colored pens, pencils, or crayons or markers are needed. I usually show students a YouTube video demonstrating how to do each part. The video is paused after each part, giving them a chance to practice it. After they finish the three parts, they share their reflections on how they felt before and after the activity. Each student posts their drawings from the three parts in their class forums online. Once they practice the activity with paper and pens, they can do the activity anywhere and at any time by doing the tracing with their fingers on any surface. This has the same effect. It is basically calibrating and unifying the right and left brain through dual-handed drawing or tracing. Here is the YouTube video: https://youtu.be/y7ETuec0n4Y (The Joy Spring, n.d.)
- *Riddles and Problem-Solving:* The students always enjoy solving riddles and problems. Here is an example of one from TED-Ed: https://youtu.be/3viZhIumUNo (Gendler, 2018)

Another point worth noting is that in challenging times like these, the well-being of both faculty and students is very important. Our university runs workshops for both on a regular basis. I have presented and facilitated well-received wellness workshops for faculty, staff, and students – "Are You Living a Well-Balanced Life?" https://youtu.be/hc8qGleyvGo (El-Tobgy, 2020).

2   Discussion

2.1   *Disadvantages of Using Technology (Gorenko, 2020)*

We experienced many of the typical disadvantages of being confined to delivery via technology – the availability of suitable equipment such as laptops and iPads with working video cameras, microphones, speakers, and reliable and affordable Wi-Fi service. As well, students can easily get distracted by "home activities" that are

going in the same room or nearby during their online sessions. Instructors also need to spend more time preparing extra material and activities for online sessions to encourage more participation (Gorenko, 2020).

2.2 *Advantages of Using Technology*

At the same time, students and instructors alike benefit from the advantages of technology-enhanced learning (TEL). The use of the latest progressive educational tools for delivery engages students and encourages them to actively participate in their learning experience. As well, students can access classes regardless of their physical locations. They can continue their studies without delay and spend less time in commuting and more time in research and study. Conducting online research is more feasible. Collaborating with classmates in group projects, discussions, and debates is easy. Online quizzes and exams seem to reduce the opportunities for cheating (Gorenko, 2020).

2.3 *Experiences at Other Educational Institutions*

In contrast to our university, Mohmmed (2020) describes the difficulties that another postsecondary institution has experienced in transitioning to online delivery during these critical times. They noted:

> The abrupt migration to online learning due to the COVID-19 pandemic has created an extreme disruption for the students, educators, and managing staff. This disruption emerged and extended to their normal lives outside the academic institutions and university. Therefore, the entire shifting process to the ERT must be conducted with consideration that this move toward continuity of education might not be a priority to the involved stakeholders. Asynchronous activities are more rational than synchronous as it provides an ancillary opportunity to the students who failed to attend the immediate sessions. Furthermore, it facilitates flexibility for assignments due dates within modules and department policies. (Mohmmed, 2020, p. 10)

Another contrast to our university experience was in Brunei where some instructors found themselves struggling to learn about and adapt to online teaching at the same time as they were trying to help their students. Dr. Malai Zeiti Sheikh Abdul Hamid, an assistant professor at UTB, noted that the lack of engagement and face-to-face emotional support, which hampered motivation, as well as the lack of practical activities, were challenging (Noorashid, 2020).

On the other hand, like our university in Canada, a case analysis of Peking University's online education (Bao, 2020) focuses on solutions that made their transition from on-campus to online delivery effective. The paper published by Wei Bao, who is an associate professor there, explained that they came up with these five

principles of high-impact teaching practice to effectively deliver large-scale online education (Bao, 2020):

1) First, the principle of appropriate relevance. The quantity, difficulty, and length of teaching content should match with the academic readiness and online learning behavior characteristics of students.
2) Second, the principle of effective delivery. Due to student characteristics of low concentration in online learning, it is essential to adjust the teaching speed to ensure the effective delivery of teaching information.
3) Third, the principle of sufficient support. Faculty and teaching assistants need to provide students with timely feedback, including online video tutoring and email guidance after class.
4) Fourth, the principle of high-quality participation. It is necessary to adopt some measures to improve the degree and depth of students' class participation.
5) Last, the principle of contingency plan preparation. In view of the extraordinarily large scale of online education, it is necessary to make contingency plans for addressing possible problems such as the traffic overload issue of the online education platform.
6) Furthermore, since this online teaching "migration" was implemented quickly during the outbreak of COVID-19, students' anxiety needs to be relieved in various ways to ensure that they can actively and effectively engage in online learning (Bao, 2020, p. 115)

At our university in Canada, like Peking University, we were able to go through a smoother transition than other educational institutions because courses were already partly based on an online model – principles one and five. An online course site in Moodle was already used as the standard platform of delivery for the use of an online syllabus, resources, assignments, and grades and feedback. Both instructors and students were already partly familiar with technology use. To support and engage students, we did have to learn to use extra tools and the virtual classroom (Zoom), as well as developing and adapting teaching activities implemented to enhance the online learning experience – principles 1, 2, 3, and 4. We also recognized the need to support student, faculty, and staff emotional needs and provided wellness activities and support – principle 6. Therefore, we had a shorter learning curve than other learning organizations because of our previous online experience, preparation and early adaptation of teaching/learning activities and technologies, and support of student and faculty emotional needs. These were the educational advantages that shortened our learning curve.

2.4   Experiences of Our Students

As for our students, these are some of their experiences and feedback taken (with their permission) from their course writings during the COVID-19 lockdown. They, too, express the positives and negatives of these times. They also reflect many of the factors that I have already discussed in relation to the adoption of technology and adaptations in teaching and learning that have shortened our learning curve during this time:

> *COVID has been a whirlwind of emotions throughout 2020. My household is no different. The negative impacts being that my kids lost the ability to be able to socialize with their friends after school. Both my kids much like myself are very social beings. Thank-fully this*

pandemic has helped teach my children how to better communicate in our home and better ways to do things as a family besides movie nights. We play board games and discuss our day in much more detail. With how COVID-19 has affected our mental health we have also started "name two positive things about your day" evenings as well. I felt his would be good so my kids could try to focus on the good more than the bad. – Student A

As a coin has two faces, so is COVID-19. Throughout the pandemic I have gone through good and bad experiences. The good thing that I have experienced is that nature got a chance to renew itself. During the pandemic time pollution has been reduced and road accidents have also been reduced. I also learned a lot of things to do during this time like value of hygiene, cooking, overcoming my weak points. Normally my family does not have enough time to spend together because of jobs at different time frame, but during pandemic we spend a lot of quality time together. On the other side I also have experienced a lot of negative things. I lost my job due to this pandemic. At that time, I suffered financially. I went through depression and frustration when the man living next to me was found corona positive. I was too scared at that time. – Student B

I would like to describe my experience of Covid 19. I have experienced, some positive and negative things during this pandemic. If we talk about the positive side, earlier I used to work for a security company for which I got paid 14 dollars per hour but due to this pandemic I am working under essential services for 6-7 months and now my pay is almost 20-22 dollars per hour which is a really good as I can pay my tuition fee, my rent and other expenses, which I used to find difficult to pay earlier. Another thing that I find positive, is that rather than going to school I can attend my classes while sitting at home. On the other hand, if we talk about the negative stuff, I can say that I had plans to go back home to spend my vacations this month after the semester but due to Covid19 I cannot go back home until everything gets back to normal. – Student C

This pandemic has affected everyone's life to a great extent and has changed many things in everybody's life. For me, this pandemic brought many positive and negative changes. In so many years of my life I never have spent such a long time with my loved ones. I developed a great habit of regular prayer and regular exercise which proved very beneficial to my soul and body. I learnt a very good skill of cooking which is very advantageous as I will be settling in a new country and cooking is a must skill required. Daily life had stopped, and everything came to a standstill. This resulted in a stop of my further studies, my coming to Canada was delayed, I could not enjoy the second year of my college. I could not meet people and go to any place due to restrictions. – Student D

Every crisis has many positive and negative aspects. The Corona crisis, despite its negative effects, also created many positive points in the world. I had a lot of experience during the COVID-19 period. I got it early in the outbreak and went through a difficult time, especially when I was away from my children for a long time. Thank God I recovered. My wife was forced to work because of the illness and losing my job. We decided to stay at our house for a long-time quarantine. Positive experience: I bought a 3500-piece Eiffel Tower puzzle and started making the puzzle with my boys, it took 15 days to finish it with my boys. it was a very good and experience for us, we spent hours together to make the puzzle and away from the COVID-19 problems. I enjoyed being with my sons and experienced their happiness. – Student E

This covid-19 pandemic impacted me in many ways. The education system has changed totally from on-campus to online, as a student I am saving my travel time and I can spend this time to learn new things, and better prepare for my assignments. I was not a health-

conscious person before, but now my entire life changed practicing better hygiene, and eating healthy. It also affects me in negative ways, as I cannot enjoy going out with my friends. I am getting bored staying home which resulted in increased stress. It is becoming more difficult to get new ideas and meeting new people. Most seriously, it disturbed the celebration of cultural, religious, and festive events. – Student F

The current situation put the world on pause, but this pause gave me time to reflect on troubling matters. During this time, I want to encourage us to see this case as a unique time to explore how social distance can impact the mental health of people over a long period of time and with drastic results because of the severity of the current problem. One parallel that can be made between our present constraints and mental illness reminds me of the culture of hikikomori. Hikikomori is not a psychiatric illness, but a symptom of a disorder that may occur. People engaged in hikikomori remain confined for a prolonged period, often for several years, in their homes and often in their quarters. A severe form of withdrawal from community and self-isolation is this behavior of voluntary confinement. Maybe the world needed a time-out to remember how to appreciate what it had but forgot to experience. Life is to be lived through experience, not to be used as a pastime to observe and compare oneself with others. I'll leave you with a simple reminder: never forget to take care and love more because in a world where life is often unpredictable and ever changing, one cannot risk taking time or loved ones for granted. With that, like all else, this too shall pass, now go live your best life! – Student G

3   Conclusion

Throughout history when major events have taken place – either natural disasters or wars or revolutions or financial crisis or pandemics – new global political, economic, and societal changes have occurred. New inventions and new industries evolved after such global chaos. "Out of chaos, new life emerges" (ancient-origins, 2019). We have found that it is important to accept and embrace global change as a learning opportunity. This is the Phoenix myth of continual change and renewal. The Phoenix represents the idea that the end is only the beginning. Much like this powerful myth, the symbol of the Phoenix will be reborn repeatedly in human learning, just as our learning experiences during COVID-19 have been spurred on and renewed by early adoption and adaptation of technology and online teaching and learning during these critical times.

References

Ancient-origins. (2019, March 24). *Symbolism of the mythical phoenix bird: Renewal, rebirth and destruction.* Retrieved from ancient-origins: https://www.ancient-origins.net/myths-legends/ancient-symbolism-magical-phoenix-002020

Bao, W. (2020). COVID-19 and online teaching in higher education: A case study of Peking University. *Human Behavior and Emerging Technologies, 2*, 113–115. https://doi.org/10.1002/hbe2.191

El-Tobgy, A. (2020, October 2). *Are you living a well balanced life with Amy Eltobgy | Ask an expert Yorkville University*. Retrieved from Yorkville University: https://youtu.be/hc8qGleyvGo

Gendler, A. (2018, September 10). *TED-ED RIDDLES S4 • E7*. Retrieved from YouTube: https://youtu.be/3viZhIumUNo

Gorenko, Y. (2020, May 25). *The Benefits Of Using Technology In Learning.* Retrieved from teachthought.: https://www.teachthought.com/technology/the-benefits-of-using-technology-in-learning-education/

Mohmmed, A. K. (2020, July 1). *Emergency remote teaching during Coronavirus pandemic: the current trend and future directive at Middle East College Oman.* Retrieved from Innovative Infrastructure Solutions (2020) 5:72: https://doi.org/10.1007/s41062-020-00326-7

Noorashid, N. H. P. (2020, October 10). *Brunei. Beyond the pandemic, integrating online learning*. Retrieved from University World News: https://www.universityworldnews.com/post.php?story=20201009150047136

The Joy Spring. (n.d.). *Creative warm up activity*. Retrieved from YouTube: https://youtu.be/y7ETuec0n4Y

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Effective Storytelling to Engage Learners: Once Upon a Time

Kelly Fanson

> *"Tell me a fact and I will learn it. Tell me the truth and l will believe it. But tell me a story and it will live in my heart forever."*
>
> *Indian proverb*

1 A Good Story

Stories have always been a unifying force in our human experience. It is our deep desire to connect through story, learn from the accounts of others and advance our ability to organize. Stories foster curiosity, inspiration, reasoning, and achievement. I am reminded of my grade eight geography class. I remember it vividly because my teacher, Mr. Jonson, designed it that way. He told stories we could relate to. He would introduce characters and take them on adventures in the places we were learning about. They were sensory experiences and it did not take long for Mr. J to hook you. Sometimes he would pull a gem from his greatest hits story collection; other times, it was a "new release," but he always wove our daily lesson into a sequence of events that would forever connect you to a place on Earth you never knew existed. It was impossible to walk out of that class without carrying a new place in the world along with you.

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1.1 Story as a Tool

From Ancient Man to Instagram, it is through storytelling that we expand our learning. Storytelling methods in education have most often been reserved for younger children, used by those with a natural tapestry in the telling. There is much evidence to support the use of story as an essential tool to be embedded in a broad range of educational curricula. The addition of a story may appear to be an ineffective use of time in the contract of curriculum at certain subjects and grade levels, and for this reason, the integration of storytelling seems to lack systemization. Answers in calculus may not be typically found in a hero's journey—either numbers add up or they don't. Even still, a story engages students and enhances retention of information. Stories open pathways in more ways than one.

"The universe is made of stories, not of atoms."—Muriel Rukeyser

1.2 Significance

Stimulus in the brain creates a pattern of neuronal activity. Those patterns are where our memory occurs. The efficacy by which a memory becomes imprinted in our minds can be found in research and discoveries in cognitive neuroscience pointing us to the hippocampus and amygdala, the brain's emotional centers for remembering. It highlights information, thereby affecting all the phases of memory formation. Emotion, or a felt experience, thus enhances our memories and enhancing memory improves recall overall. To make our memory stronger, it helps to attach significance to our experiences. Applying the same notion to learning and adding significance to information can subsequently increase retention. Therefore, the integration of stories and felt experience in all courses of study is a means by which best engagement occurs. Through the examination of both brick-and-mortar classrooms and online platforms, the elements of emotional connection, teacher presence, imagination-engagement, and active learning can create effective and positive outcomes for students and instructors alike, pertaining but not exclusive to online classrooms and a post-COVID-19 approach. In the 2018 article, "Exploring Imagination in Learning," Gillian Judson, director of the Centre for Imagination in Research, Culture, and Education at Simon Fraser University, supports the necessity of story, highlighting: "Emotion. Imagination. Feeling. These words rarely take center stage in conversations about teaching and learning in higher education. The odd thing is that I have never met an educator that does not value emotional and imaginative engagement. All educators want students to be engaged. All educators want their students to be imaginative, to experience and demonstrate creative and flexible understanding of knowledge. But we rarely discuss how we achieve it in our practices" (Judson, 2018, p. 4). Storytelling is a "felt experience" tool that teachers at any educational level and field of study can use to elevate engagement in learning for their students. In both online and brick-and-mortar classrooms, integrating story

activates the listener's positive emotional state and hooks information into a strong memory template. The memory becomes more durable as the learning follows the narrative pattern that is connected to a theme, concept, or experience.

The use of storytelling to relay our experiences is explored in "The Power of Storytelling and How it Affects Your Brain - Tales for Tadpoles" (2017) by Michael Heffernan. He notes:

> Listening to a story that's being told or read to you activates the auditory cortex of your brain. Engaging with a story also fires up your left temporal cortex, the region that is receptive to language. This part of your brain is also capable of filtering out "noise"; that is, overused words or clichés. That is why the most skilled storytellers are careful about the language they use, employing a host of literary techniques to keep your brain engaged. For instance, once you begin to feel emotional engagement with a story it is because the frontal and parietal cortices have been stimulated. Powerful descriptions of food, for example, will also stir up your sensory cortex while descriptions of motion or action will get a response from the central sulcus, the primary sensory motor region of your brain. Indeed, just thinking about running can activate the neurons associated with the act.

> Additionally, Paul J. Zak (2014) in the Harvard Business Review explains the effectiveness of storytelling in "Why Your Brain Loves Good Storytelling": "…character-driven stories with emotional content result in a better understanding of the key points a speaker wishes to make and enable better recall of these points weeks later. …I advise business people to begin every presentation with a compelling, human-scale story. Why should customers or a person on the street care about the project you are proposing? How does it change the world or improve lives? How will people feel when it is complete? These are the components that make information persuasive and memorable." If engagement is the goal, then stories as well as teaching presence are essential steppingstones to getting there.

1.3 Adaptation

This new era has shown an emphasis on learner engagement. It creates an opportunity to discover new and effective ways to connect with students. The success of both brick-and-mortar and online learning varies depending on the individual learner, teacher presence, and effective methods utilized to engage all students in various courses of study. The necessity of effective teacher engagement is brought to light by Cornelius-White (2007): "The relationship between instructor and student is at the heart of the learning process. Instructional settings characterized by frequent and meaningful instructor-student interactions have consistently been found to support student achievement and learning satisfaction." In specific regard to self-directed learning, the student has chosen their area of study to consume on their own schedule using their own methods of research. They are provided with reference materials and recommended reading along with submission deadlines, all without the stimulated engagement and support of teacher presence. But in teacher-facilitated courses, it must be the instructor's intention to create sustainable and highly effective engagement along with an expectation of agreement of reciprocity from their students. For the specific purposes of engagement, the teacher's ability to

engage the minds of their students is increased exponentially with the integration of story and felt experience.

At the onset of COVID, students transitioned overnight from physical classrooms to online learning exclusively, and students and educators alike had to pivot, dig deep, and navigate their way through this unprecedented process. It's as if engagement was present all along but sitting politely at the back of the room. Online learning moved engagement up to the front row. For some, there was productivity and a surprising ease of use as everyone took their virtual seats—in it together. However, the continuation of online learning brings with it the occurrence of a sort of hedonic adaptation. The cause and effect of this are explored by Scott (2020) as she explains: "…activities that get us into a feeling of 'flow' where we don't notice the passage of time, where we're thoroughly engaged in what we're doing, and sort of lost in the activity. This effect occurs most easily when we face a challenge that's both fun and the right kind of challenge for our abilities: not too difficult lest we feel discouraged but just difficult enough to keep us feeling challenged. Gratifications, as well as activities that present a strong sense of meaning to us, are more immune to the effects of hedonic adaptation." In other words, the buzz can wear off. How then can teachers most effectively and sustainably engage their students in learning? In a post-COVID era and in an age dominated by screens, an inescapable factor can be screen fatigue. With wireless devices constantly on and unseen by an online instructor, students are often multitasking, leading to distraction and disengagement over time. Storytelling and imagination-engagement may be the remedy. A clear mandate may be to create exploratory classrooms and for lectures to become more of a conversation to avoid information drain (within reason regarding class time and relevant questions and feedback). An online example would be via chats over Zoom, which provides an opportunity for an immersive interactive experience for all. Students can ask questions, provide feedback, and introduce ideas without interrupting a lecture in progress. This applies to any interactive learning that is also available in physical classrooms. An instructor can choose to incorporate relevant questions into the conversation or allow time for responses and discussion once the lesson is complete. The same conversation applies to physical classrooms and how educators structure their lessons and prioritize their time. Communication falls short without comprehension, and open discussion involving the participation of the collective group or class allows for active learning, imagination-engagement, and felt experience. By utilizing these cognitive tools, teachers can lead the way to effective engagement. This draws on an active learning approach and techniques (Queens' University).

2   Individuality

Individuality in learning exists. Not all students are created equal. By equal, I refer to how a student learns to use their mind in ways unfamiliar to one another. For this reason, also, not every student easily aligns with every instructor. Instructors, too, span the gamut of expertise, unconscious biases, and personality types. As the

possibility of a teacher/student disconnect exists as a result of one or all of these factors, it often becomes a "grin and bear it" situation. In fact, the notion of finding a connection in some situations seems too far-reaching. In many areas and levels of study, a direct connection with one's instructor is not necessary. In most circumstances, where connection is mandated, even then, students may still choose to disengage. Lack of stimulus due to "information drain" is what we want to avoid. This is made possible by sharing insights, metaphors, and felt experience in a relevant framework. By telling a story, the listener shifts into a state of curiosity in their mind, and that important element of curiosity tempers judgment by promoting narrative transportation—the extended transportation imagery model: a meta-analysis of the antecedents and consequences of consumers' narrative transportation allowing for a mindset conducive to maximizing the absorption of information. In a nutshell, an instructor who tells a story also contributes to their student's sense of calm and well-being.

As human beings, social interaction is conducive to enriched experiences. Pertaining to online learning, even in the most subtle of circumstances, the absence of the felt experience in the classroom can create diminished connectivity and decreased impact for both student and instructor. A story touches everyone. Therefore, connecting storytelling principles to information promotes the engagement of learning and can also traverse the boundaries of different-styled learning. The necessity for connectivity and its reach to a broader range of students is essential as online teaching facilitates universality and an opportunity for educators to create curiosity, igniting classrooms through felt experiences that connect students to the relevant subject matter. Story elevates impact. For teachers, the reward is in having reached more of their students, more of the time. Applying this cognitive psychology to online teaching enriches exchanges and enhances effective engagement.

What students learn independently online versus what they learn in a classroom from their instructor are also not created equal. The awareness of the measure of this divide and its differentiating principles is essential for creating fundamental strategies to deepen the relevancy of a teacher's role. A significant element that results from a storytelling and imagination-engagement style is the assurance that students have the opportunity to absorb materials in a meaningful way. Stories create depth, where fact-based information may not. Evocative imagery promotes participation in the action of a narrative and lends to a student's expression of personal agency in their learning. Individuals listening to a story respond automatically, by participating, in a sense, in the action of the narrative, resulting in a sense of ownership toward the information and a decrease in anxiety, overall.

Pertaining to remote online teaching, the engagement of imagination through storytelling can be facilitated through the presentation and interpretation of how the subject matter also relates to their existing world. Thus, teachers can engage students in using cognitive tools to discover connective solutions and formulate theories through their own tangible examples. Again, the prioritization of the teacher can be significantly honed using storytelling and active learning principles, assuring a measurable difference in all modes of learning.

3   Story and Instructor Bias Concerns

However, unconscious bias can occur in the telling of a story and therefore create a possible red flag in the use of storytelling as a teaching tool. This can be offset by explaining to students the broader trends and relationships in a topic of study and urging caution in drawing conclusions from a single anecdote or story; additionally, to encourage an emphasis on felt experiences and imagination, thereby creating both a related understanding of the content as well as themselves. With a traditional emphasis on critical thinking, it is a challenging notion to integrate imagination into all courses of study, but it is how we discover new ways of thinking. It is a staid notion that the use of imagination removes us from reality rather than opens pathways to new thoughts, ideas, discoveries, and solutions.

Kieran Egan, professor at Simon Fraser University, writes in depth on the subject of the importance of imagination in learning: "Our present tendency in educational discourse to see memorizing and imagination as somewhat at odds with each other is a product of forgetting how closely tied in our cultural history they are. Indeed, one might almost say that the imagination was born from the need to remember" (1989, p. 3). Egan further explains: "these features of our imaginative lives are 'cognitive tools'--they are emotional ways human beings make meaning in the world. The crux of the matter is you can nurture the heart of learning—engaging emotion with your curriculum content—if you know what cognitive tools your students employ and if you can use them in your teaching" (2018, p. 5).

In situations where teachers and instructors require support in connecting stories to subject matter, there are a multitude of professional writers to consult with or employ in various modes, from novelists to screenplay writers and playwrights, keynote speakers, bloggers, and freelance journalists. This provides employment opportunities for content writers to create stories that effectively align with specific lessons in our multifaceted education system. If we were to integrate story into all curricula, initial steps might include a practical approach to storytelling and imagination-engagement instruction for teachers in training. Additionally, courses in storytelling can be designed for instructors at all levels, as well as writing courses, audiobooks, and TED Talks readily available with an emphasis on storytelling and delivery, rather than structure and grammar.

4   Meaning and Connection

Every story needs a direction (knowing the ending beforehand), emotion, and meaning (a key message to move your audience). You need a character who creates empathy: someone who is in danger or is the victim of a catastrophe, a quest, or a simple dilemma. This character should invite action, challenging students to consider the message of the story, perhaps through a survival advantage. Additionally, the character might undergo a transformation or arch as they succeed or fail to solve their

problem, perhaps through a sense of specific design. Some stories are an account of a person, place, or thing with sufficient details, wherein the details themselves engage the listener. Every story needs an element of robust specificity used to enhance simple details about the experience, using *see*, *hear*, *feel*, *smell*, and *taste* to heighten the curiosity and relatability for the listener.

But whether a story is funny, dramatic, filled with horror, or unicorns, the imagery is a connector that flips the switch that leads to engagement. Such is the magic of storytelling.

Used effectively by instructors in all areas of study, stories save time, as students will have absorbed materials in a meaningful way, with increased retention and ownership of their knowledge. We must integrate and utilize the effects of these practices into lessons across all facets of learning. Enhanced memory and agency will be of great service to each and every student throughout their curriculum, and can help in areas of potentially heightened stress, such as tests and examinations.

5   Stress Factors and Meditation

The need for cognitive practices versus information overload is even more essential during times of crisis. Stress is a factor in the success of our cognitive performance. For example, high stress can lead to blanking on recall, and low engagement can cause the mind to be unfocused. This phenomenon is known as the Yerkes-Dodson law. If levels of arousal are too low (boredom) or too high (anxiety or fear), performance will likely suffer (Cherry, 2020): "The Yerkes-Dodson Law suggests that there is a relationship between performance and arousal. Increased arousal can help improve performance, but only up to a certain point. At the point when arousal becomes excessive, performance diminishes."

Meditation is increasingly being integrated into traditional curricula, having proven beneficial results for calming the brain and maximizing learning. An increasing number of educational institutions, currently predominant in the UK with up to 370 schools in England, will begin to practice mindfulness as part of a study to improve mental health, including Yale University, Coursera's "The Science of Happiness," its most popular course online (Magra, 2019). In Canada, schools have introduced mindfulness and happiness courses to their selections—to name a few: Academy of Mindfulness and Contemplative Studies, University of Ottawa; Mindfulness in Modern Society, McMaster; the Science of Well Being, Mindfulness, School of Continual Studies, University of Toronto; Mindfulness Studies, Humber College; Mindfulness Programs, CAMH; and Therapeutic Models of Mindfulness, Wilfrid Laurier University. These courses are designed for those who have an interest or desire to heighten their awareness and understanding in these fields of study. It also indicates a curiosity on the rise, as well as the efficacy of these practices overall. One does not need an entire course in meditation to reap some of the benefits of such practices in a traditional or online classroom. A growing number of adults are choosing to explore their own minds and thinking practices as a necessary

way of life. These shifts are indicators that the use of mindfulness in all areas of study may produce impactful results.

Every day, frontline services see children and teenagers struggling to get a grip on how they fit into an increasingly complex world. Practices such as meditation, when integrated into learning, can elevate the quality of learning and in some cases, can help reduce a student's need for professional services. The impact of incorporating mindfulness as a means of reducing anxiety in education is further highlighted by Iliana Magra (2019) in the *New York Times*. Additionally, the integration of mindfulness practices (the intentional acceptance of one's state of being in the present moment) are shown to have a positive impact in controlled trials as explained by Wehry, Beesdo-Baum, and Hennely (2015), as having "been utilized as the basis for a myriad of treatments over the last several decades to promote health and well-being in both adults and youth with anxiety disorders."

It is with dedication and passion that we, as educators, search for all optimal means and modalities to provide extraordinary learning experiences for all students. The future may be altered by our COVID pandemic, but it may also accelerate a much-needed drive to integrate and align our methods of teaching with a rapidly changing world. The future is ready for an education-based, evolutionary leap. It begins with once upon a time….

References

Cherry, K. (2020, May). The Yerkes-Dodson Law and performance. *Very Well Mind*. https://www.verywellmind.com/what-is-the-yerkes-dodson-law-2796027

Cornelius-White, J. (2007). Learner-centered teacher-student relationships are effective: A meta-analysis. *Review of Educational Research, 77*(1), 113–143.

Egan, K. (1989). Memory, imagination, and learning: Connected by the story. Article in *Phi Delta Kappan*. https://www.researchgate.net/profile/Kieran_Egan/publication/234763056_Memory_Imagination_and_Learning_Connected_by_the_Story/links/5512feec0cf283ee083223cc/Memory-Imagination-and-Learning-Connected-by-the-Story.pdf

Egan, K. (2018). Foot soldiers in the war on cliché. *Creative Academic Magazine, 11A*, 40–41. http://ierg.ca/wp-content/uploads/2018/05/IE-Creative-Academic-Magazine-May-2018.pdf

Heffernan, M. (2017). *The power of storytelling and how it affects your brain — Tales for Tadpoles*. https://talesfortadpoles.ie/blogs/news/the-power-of-storytelling-and-how-it-affects-your-brain#:~:text=Listening%20to%20a%20story%20that's,is%2C%20overused%20words%20or%20clich%C3%A9s.

Judson, G. (2018). Imaginative education. *Creative Academic Magazine, 11A*, 4–6. http://ierg.ca/wp-content/uploads/2018/05/IE-Creative-Academic-Magazine-May-2018.pdf

Magra, I. (2019). Schools in England introduce a new subject: Mindfulness. *The New York Times*. https://www.nytimes.com/2019/02/04/world/europe/uk-mindfulness-children-school.html

Scott, E., MS. (2020, July 16). Hedonic adaptation: Why you are not happier. *Very Well Mind*. https://www.verywellmind.com/hedonic-adaptation-4156926

Wehry, A. M., Beesdo-Baum, K., & Hennely, M. M. (2015). Assessment and treatment of anxiety disorders in children and adolescents. *Curr Psychiatry Rep, 17*, 52. https://doi.org/10.1007/s11920-015-0591-z

Zak, P. (2014, October). *Why your brain loves good storytelling*. https://hbr.org/2014/10/why-your-brain-loves-good-storytelling

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Part IV
Teacher Education and Leadership in Crisis Situations
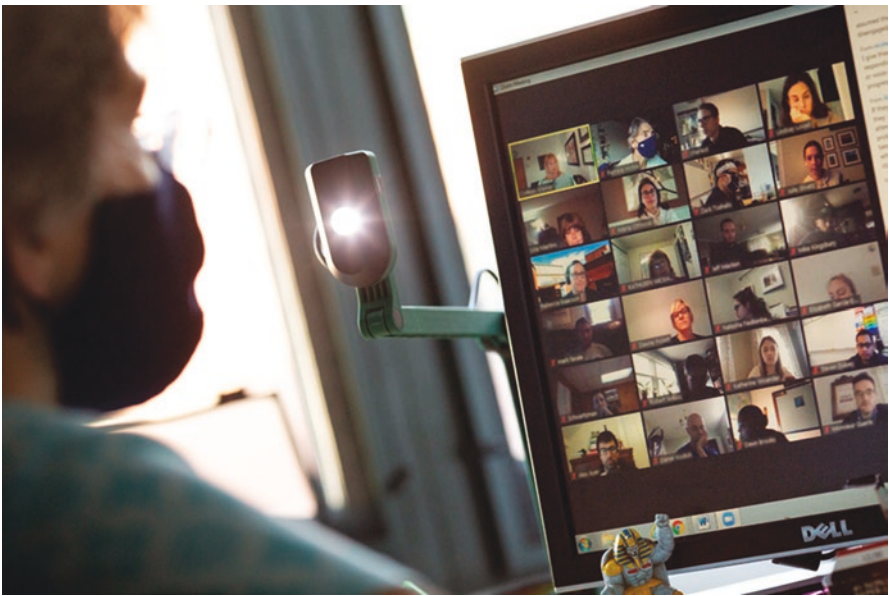
Responding to Adult Learner Student Needs in the COVID-19 Pandemic: Modifying Online Graduate Courses in Education to Seize Teachable Moments

Adele T. Macula, Christine Harrington, and John Melendez

"Students are whole people and need to be treated as such. Their learning is impossible to separate from this virus or from remote learning. The way forward is learning, and learning deserves our focus."The TPHE Collective, May 6, 2020

1 Background

During the COVID-19 pandemic, most have focused on how face-to-face educators shifted to a virtual environment. There is no doubt that this transformation was a monumental one. However, it is important to acknowledge that shifts in online learning environments were also needed. This chapter focuses on the needs of an overlooked population, adult learners already enrolled in online courses. Theoretically grounded examples of how graduate courses in educational leadership were changed to address the needs of adult online learners during this unprecedented world situation will be shared.

2 Understanding Student Needs During the Pandemic

The world had changed overnight. This meant that the needs of our students changed too. As educators at a comprehensive university located in Jersey City, New Jersey, the second largest city and the most ethnically diverse US city (McCann, 2020), just minutes from New York City, the COVID-19 epicenter, we found ourselves dealing with the myriad of situational challenges suddenly impacting the learning process

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for students. The Educational Leadership Department at New Jersey City University offers an M.A. in educational leadership, certification for principals, and an Ed.D. in Community College Leadership. All programs are offered primarily in an online format. A few in-person meetings on weekends are held in the master's program and a one-week in-person summer institute provided in the doctoral program. In March 2020 when COVID-19 hit, many master's students were enrolled in a yearlong internship and scheduled to graduate. The doctoral students were completing their inaugural year of study in a newly created doctoral program.

Our graduate students work full-time as educators and administrators in pre-K-12 and community college settings. Balancing professional responsibilities with graduate school expectations is a challenging task in the best of situations, but became especially challenging during this pandemic because work responsibilities significantly increased. Our students had to learn how to teach and support students remotely in a matter of days. Not surprisingly, exhaustion quickly set in as a result of this transition (Gewertz, 2020). Educators and school administrators were operating schools in a totally new virtual environment – something that had never been done before – and without an established playbook.

In addition to increased work-related stress, graduate students also faced health, financial, and social stressors. The daily news of the effects of the pandemic situation has and continues to penetrate everyone's world. Several graduate students tested positive for COVID-19. A few had severe symptoms that required hospitalizations. The road to recovery was often a long one, in some cases taking a month or more.

Those fortunate to not be directly touched by the virus in terms of physical health still faced many other challenges. Staggering changes to their family situations, their social lives, and their daily routines added to student stress. Given that all schools moved to remote learning, many of our graduate students not only had to teach and work online but now also had to provide their own children with guided support and oversight of completing comprehensive school tasks remotely. These roles often collided, especially in homes where there were multiple children at various grade levels. Moreover, there might have been a spouse or other adult family member working from home at the same time. The home situation for many included many family members vying for the use of limited devices, straining Internet capabilities, working in common areas, and needing to be online at the same time. Forced social isolation imposed during the state-mandated stay-at-home period, along with worry about contracting the virus, often led to mental health issues. Feelings of loneliness and frustration like this can intensify uncertainty, increase anxiety, and trigger burnout (Carr, 2020).

3   Actions Taken

As faculty members working with this group of graduate students, we realized that no one could be expected to handle the multiple roles and responsibilities perfectly. Our students are essential workers as educators, and we needed them to stay safe

and healthy. We recognized that although our adult learner students started their graduate program ready to learn and with high levels of motivation (Knowles et al., 2019), the pandemic, not surprisingly, shifted priorities and altered motivation levels. Supporting students during this unprecedented time was critical. We needed to be humane and supportive. This meant providing flexibility, modifying timelines, making stronger connections between school and their work, and creatively solving problems with them. Brookfield (2013) noted the importance of collaboration when working with adult learners. We spent time better understanding the challenges facing our adult learners in the midst of the pandemic and engaged them in determining what modifications and supports were needed to help them successfully complete their graduate coursework. Galbraith (2004) explained that "becoming an effective teacher of adults depends on acquiring a balance between an appropriate philosophical vision of teaching and the understanding and implementation of that vision into a practical instructional process" (pp. 3–4). The pandemic brought new meaning to what was practical and meaningful.

4   Check-in Meetings

As the world dramatically changed during the pandemic, we placed a high priority on assessing the current stressors, anxiety, and emotional needs of our graduate students. We wanted to provide a source of strength and stability during these trying times through listening, encouragement, support, advisement, and guidance. Calls to primarily focus on the students' well-being were made (The TPHE Collective, 2020). Such calls align with Brookfield's (2013) recommended techniques for teaching adult students.

We initiated synchronous and asynchronous "check-in meetings" using texting, e-mail, telephone, and videoconferencing to find out how students were doing and what they needed. In addition to using these meetings to assess how students were coping with professional and personal stressors, these meetings also became a lifeline for class colleagues to connect with each other and discuss pertinent work-related issues. During these meetings, students often brainstormed possible solutions to challenges in their educational settings.

Creating these sessions allowed the class of students to better connect and network with each other. These online sessions became more than classwork sessions; they also became a critical way for students to support one another and engage in creative problem-solving. These meetings were voluntary. In addition to class meetings, faculty also met with students individually to allow for more personalized conversations. Although faculty expected stress levels to be high, the levels of stress and difficulty in focusing were more significant than initially expected. These meetings provided valuable insights into the challenges facing students during this incredibly stressful time.

5   Re-evaluating Learning Outcomes

The class and individual meetings prompted internal department discussions among faculty colleagues about what changes to the curriculum might be needed to be responsive to student needs during these challenging times. We used Wiggins and McTighe's (2005) backward design framework to re-examine what constituted essential learning outcomes and to determine which assignments were most critical and which could be modified or eliminated. In addition, faculty explored what additional support structures could be incorporated into the courses and overall program.

For candidates enrolled in the master's degree program, several of the leadership experience assignments were originally designed to be in-person experiences. For example, one of the planned activities included designing, planning, and presenting a learning workshop or conducting an informational meeting session for parents and community members. While that experience could have been facilitated in a virtual environment, the timeframe in which the assignment was scheduled occurred exactly during the frenzied days when schools were shutting down. Many students did not have the opportunity to complete the presentation part of the assignment due to schools and districts canceling all events. Therefore, an alternative leadership experience assignment was created. It required students to explore online resources about being a leader during times of change and to write a reflection paper about leadership during the pandemic. Because the students found this assignment to be so valuable, a version of this modified assignment will likely be incorporated into future courses.

In the doctoral program courses, modifications were also made. Students were taking Educational Research I, a course that provides students with strong foundational knowledge in research methods associated with program evaluation. Given the importance of this course in the program, all the learning outcomes and assignments were deemed essential. However, faculty adjusted due dates, adding flexibility to the schedule for students. The program uses an embedded dissertation framework, so students were expected to write a draft of Chapter 1 of their dissertation during this semester. Upon reflection and in consultation with advisory board members who are community college leaders at institutions and national organizations, it was decided that although this model was well-intentioned, it was placing too much stress on students who were already taxed. This assignment was eliminated as a class requirement. Instead, students would work with their advisors during the summer months to accomplish this task. In another course, Promoting Equity: Teaching and Supporting Diverse Adult Learners, a teaching-focused task was also eliminated because students would be taking an entire course on Innovative Teaching Strategies and Modalities in the summer. Although this task was designed to provide students with some important background that would have served them well in the next course, it was decided that assignments could later be adjusted so that students could develop the knowledge and skills within the summer course.

Incorporating choice and providing support increase student engagement and motivation (Wlodkowski & Ginsberg, 2017). Additional choices were built into the

curriculum. For example, students were given the option to work individually or in a group on projects. Students were also given choices about how to present academic products. For example, students could write papers, do presentations, create infographics, or develop online resources.

Conversations about the modifications needed were not a onetime conversation, but rather an ongoing one. As the pandemic continued, student needs continued to change. We continued to work on balancing compassion and understanding with the importance of structure and support so that learning outcomes could be achieved. We involved learners in conversations about revising learning plans, a practice aligned with andragogy (Knowles et al., 2019).

6   Capitalizing on Teachable Moments

As faculty in an Educational Leadership Department teaching graduate students, we wanted to capitalize on the opportunity to help students develop leadership skills in this real-world situation. We had numerous discussions about how we could incorporate opportunities posed by the pandemic. The aim was to help students enhance problem-solving and critical thinking, foster improved time management, balance multiple complex priorities, amplify effective communication, and cultivate support from community stakeholders. Leveraging real-world learning experiences is an essential principle of andragogy (Knowles et al., 2019). As educational leaders in various leadership roles, it is expected that they possess the knowledge, skills, and dispositions to be effective and unwavering during a time of crisis (Nevarez et al., 2013).

There were numerous teachable moments during the internship component of the master's degree program. As students encountered various challenges related to the shift to remote learning, faculty members provided students with informational articles, reports, and data published from reliable sources about the ongoing challenges of teaching during a pandemic. Information on free webinar offerings and podcasts from national, state, and regional professional organizations were regularly posted in the online course materials. Students were then asked to discuss these issues in online discussions. They used this information when completing assignments. Thus, the learning activities are directly related to their current professional experiences.

In the doctoral program, faculty identified several ways to assist students with developing leadership skills during this crisis. During class meetings, faculty challenged students to reflect on what leaders in their educational settings did or did not do and how these actions and inactions impacted student success. Throughout the pandemic, faculty shared public scholarship articles about how college leaders were addressing the pandemic. We engaged students in synchronous and asynchronous online conversations. Students were encouraged to stay abreast of issues related to higher education and COVID-19 through various platforms and to share articles with classmates via a student group on LinkedIn. In addition, faculty also asked

community college leaders to facilitate conversations on issues related to leading during a pandemic. As one example, four community college leaders, including vice presidents and deans, presented on leading during a pandemic at the Community College Showcase, a conference that students were required to attend.

7   Conclusion and Recommendations

Although faculty teaching educational leadership courses to adult online learners had designed their courses to assist students with developing key leadership skills, the pandemic offered an opportunity to review course outcomes and learning tasks using adult learning theory. This crisis required faculty to revisit course and program competencies, centering academic tasks on the competencies and goals that were most linked to skills that future leaders in the field of education need to develop. Being responsive to changing student needs in this way is an important part of effective teaching (Vegas, 2020). Listening to students and engaging them in collaborative efforts to determine what changes and supports were needed resulted in meaningful changes that increased authentic learning and prioritized the most essential learning outcomes.

Here are some recommendations for faculty teaching adult learners in online programs that we have learned through this "trial by fire" experience:

- First, connecting with students using synchronous technology tools is essential. Faculty should also use nonsynchronous options such as discussion boards and messages or e-mails to connect with students who may find it challenging to attend live sessions. Recording and posting synchronous meetings are highly recommended.
- Regularly engaging in conversations with colleagues to ensure that the curriculum focuses on the essential learning outcomes is also recommended. Aligning course assignments with learning outcomes is an important activity that carries even more importance when in the middle of a pandemic. Adult learners really value coursework that focuses on assignments that are authentic to the situation and their needs. They assist them with developing essential problem-solving skills.
- Reflection is a critical component of learning for adult learners (Brookfield, 2010). Faculty are encouraged to build reflective opportunities and activities into their courses.
- Finally, faculty are encouraged to give adult learners choice when it comes to assignments and learning activities. Examples of choice can go beyond choosing topics for assignments. These include giving students options in terms of the type of product they create and how they want to complete an assignment – independently or as part of a group.

No one can predict what the future of this COVID-19 pandemic will be as the nation navigates the upcoming months. One fact is for certain, educators and educational leaders are learning how to do things differently, given what has occurred this

year. New possibilities are emerging for creating innovative and forward-focused learning experiences that are engaging and designed for inquiring adult learners. Being flexible and responsive to student needs is essential to being an effective educator.

References

Brookfield, S. (2010). Critical reflection as an adult learning process. In N. Lyons (Ed.), *Handbook of reflection and reflective inquiry: Mapping a way of knowing for professional reflective inquiry* (pp. 215–236). Springer Science and Business Media.

Brookfield, S. D. (2013). *Powerful techniques for teaching adults*. Jossey-Bass.

Carr, D. (2020, May 8). *COVID-19 and social isolation: How loneliness can affect your health*. https://news.fsu.edu/multimedia/radio/2020/05/08/covid-19-and-social-isolation-how-loneliness-can-affect-your-health/

Galbraith, M. W. (2004). The teacher of adults. In G. W. Galbraith (Ed.), *Adult learning methods: A guide for effective instruction* (3rd ed., pp. 3–21). Krieger.

Gewertz, C. (2020, December 2). Exhausted and Grieving: Teaching During the Coronavirus Crisis. Education Week. https://www.edweek.org/teaching-learning/exhausted-and-grieving-teaching-during-the-coronavirus-crisis/2020/04

Knowles, M. S., Swanson, R. A., & Holton, E. F., III. (2019). *The adult learner: The definitive classic in adult education and human resource development 7th edition*. Routledge.

McCann, A. (2020, February). *Most & Least ethnically diverse cities in the U.S.* https://wallethub.com/edu/cities-with-the-most-and-least-ethno-racial-and-linguistic-diversity/10264/

Nevarez, C., Wood, J. L., & Penrose, R. (2013). *Leadership theory and the community college: Applying theory to practice*. Stylus Publishing.

The TPHE Collective. (2020, May 6). *The elephant in the (zoom) room.* https://www.insidehighered.com/advice/2020/05/06/pandemic-brings-home-need-focus-humane-and-meaningful-student-learning-experiences

Vegas, Emiliana. (2020, April 9). *What can COVID-19 teach us about strengthening education systems? A conversation with the dean of Harvard Graduate School of Education*. https://www.brookings.edu/blog/education-plus-development/2020/04/09/what-can-covid-19-teach-us-about-strengthening-education-systems/

Wiggins, G., & McTighe, J. (2005). Understanding By Design (2nd Expanded ed.). Assn. for Supervision & Curriculum Development.

Wlodkowski, R. J., & Ginsberg, M. B. (2017). *Enhancing adult motivation to learn: A comprehensive guide for teaching all adults*. Wiley.

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A Process-Content Approach in Faculty Development: Transitions to Remote Synchronous Delivery in Higher Education

Jill Cummings

> *Why… the best way to explain it is to do it.*
>
> *Alice's Adventures in Wonderland, Lewis Carroll, (Carroll, 2000).*

Our university, like most other postsecondary institutions, had been unexpectedly "locked down." Students and instructors were sent home in March 2020 during the global COVID-19 pandemic. As many of our programs are mainly campus-based, I paused for a moment to consider how to transition our more than 300 professors teaching on campus undergraduate university courses to teaching virtually via remote synchronous delivery (RSD) and videoconferencing in Zoom. As Associate Dean for Faculty Development, I was responsible for instructors' transition to RSD teaching. Fortunately, I could count on our professors to step up to the challenge – we have a highly professional, collaborative team with a talent for flexibility, sharing of knowledge, and adaptation.

This chapter describes the workshops and professional development webinars that we implemented for and with faculty at that time to make this transition to RSD effective. Key approaches are recommended for developing an active community of teacher practice and supporting such transitions.

I describe our context and the approach implemented in these urgent circumstances, as well as follow-up professional development activities and resources used to further support instructors in the weeks after this transition. These are recommended as response measures to meet faculty development needs according to the principles of a process-content approach to teacher education (Bruner, 1976/1996; Lewis, 1999; Knight, 2001; Tanner & Tanner, 2007).

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1   Context

Our university is a medium-sized post-secondary institution with programs and services for about 9000–10,000 students across Canada. We offer two main types of course delivery and programs – face-to-face on campus and online programs. We provide undergraduate programs in Bachelor of Business Administration (BBA), Bachelor of Interior Design (BID), and General Education Studies (GES) for on-campus students in Toronto and Vancouver, Canada. We also provide fully online programs across Canada in Bachelor of Business Administration (BBA), Master of Counselling Psychology (MACP), Doctorate in Counselling and Psychotherapy (DCP), and Master of Education programs in Education Leadership (MEEL) and Adult Education (MEAE). Admittedly, our transition to RSD was eased by our already existing online capacity and experience in some of these designated online programs.

Most of our instructors (numbering more than 500) had been teaching either on campus or online courses prior to the pandemic; only a few had taught both on campus and online courses and were experienced in both delivery modes. It is important to note, however, that prior to beginning to teach at our university, all new instructors complete a two-three week orientation workshop with online discussions and activities delivered via our Moodle learning management system (LMS) plus one RSD session, that is, an e-meeting in Zoom with me, to learn the best practices, policies, procedures, and resources for teaching in our context. In fact, that is where I get to know each instructor – I develop and facilitate these faculty workshops for orientation to our teaching practices and procedures. In effect, then, all professors had already had a brief experience with online learning via this initial faculty workshop – whether they were teaching on campus or online courses.

Among the campus professors, some had already set up and used their Zoom classrooms for e-conferences with their students beyond their physical classrooms prior to March 2020. However, many had not previously used Zoom to any great extent, although many had participated in our monthly professional development (PD) sessions offered via faculty e-meetings in Zoom by my department, Faculty Development. There was, then, a range of previous experience and expertise among instructors in using a video conferencing platform like Zoom for teaching.

2   Conceptual Framework: The Process Is the Content

On March 16, 2020, the day of the shutdown due to COVID-19, I went to bed turning over various ideas in my mind about how to facilitate the transition of our 300 plus campus professors to teaching via RSD and Zoom before their next courses began in April. There seemed to be two possible solutions. Faculty Development could provide a simple training session about how to set up and use Zoom, thereby giving instructors the basic technology skills they would need. Or we could aim for

a broader, more educative approach to develop teaching strategies and activities, along with the technology skills. Another pertinent question was whether we would organize workshops for groups according to their programs, faculties, and specific subject matter or schedule according to time availability and keep the instructor workshop groups mixed. "Sleeping on" and contemplating these questions overnight proved productive. The following day I decided to implement a transition to RSD workshop for professors based on a process-content approach (Bruner, 1976/1996; Tanner & Tanner (2007), an approach that I have always found useful in faculty orientation and professional development. This workshop would engage instructors in online sessions that would focus on developing and discussing active learning strategies for teaching students while at the same time having instructors themselves experience an RSD class session and learn how to use Zoom. It would carry on and develop the theme that we had stressed in previous faculty workshops – that is, engaging students in experiential learning activities (Kolb, 1984) is important for active learning in contrast to providing mainly teacher-centered, lecture-based classes. Active and experiential learning had already become a key practice for our instructors – whether it be in developing teaching activities for Developmental Math, General Studies, or Business courses. It was logical to continue along this route while simultaneously developing technology skills and activities for RSD teaching.

The process-content approach that I implemented is based on the principle that "the process" *is* "the content." Activities that I would engage our university professors in during these transition workshops for teaching virtually would model activities and technologies that instructors would use in their teaching of their students via Zoom and RSD. This activity-based approach integrating the required technology use with teaching strategies could then be adapted by each professor for their subject matter for learning in their own classes. It made sense; plus, it could be accomplished in two - three weeks. It was decided to provide "mixed" sessions in which instructors would share and discuss learning activities and teaching via RSD with faculty from various programs to maximize sharing of activities and use of time.

3   Teacher Development Workshops

The process-content approach explained above was implemented with the TPACK or the technological, pedagogical, and content knowledge framework (Mishra & Koehler, 2006) as background. TPACK explains technology-enhanced pedagogy according to Shulman's (1987) concept of pedagogical content knowledge (PCK) in which content or subject matter knowledge is effectively integrated with teaching knowledge and pedagogical processes. Mishra and Koehler (2006) defined TPACK to integrate technology knowledge and use with PCK. They noted the need to plan for how technology affects the teaching processes (or pedagogy) and content. Otherwise, when planning and teaching, we could overlook the fact that teaching

and learning are specific to a context and process integrated with effective tools and technology skills – rather than simply focus on the technology without consideration for teaching activities and subject matter delivery needs. Therefore, we would integrate TPACK. For example, our instructors teaching Developmental Math may need different learning activities, technologies, and teaching processes than General Education Studies courses – we see Developmental Math instructors teaching problem-solving activities using whiteboard demonstrations and practice exercises based on calculations whereas General Studies instructors often engage students in group discussions of readings and video-based activities. Using TPACK as the background for these teacher development workshops would mean that our professors would experience and discuss integration of effective learning activities according to pedagogical processes and appropriate technologies and skills.

We set out to learn technology skills through discussion and experience of effective pedagogy during this transition workshop for RSD teaching. With the help of our program leads and supervisors, I reached out to professors. I invited them to participate in a 90-minute RSD transition workshop scheduled at numerous times during the following three weeks to accommodate our instructors located in various time zones. Instructors were, in fact, still working on finalizing courses from the previous session and had exams to provide online, assignments to evaluate, grades to enter, and conferences with students to complete. Everyone was busy, so the transition workshops could not take much time. Each professor signed up for one of the many scheduled workshops. They were emailed a five-point set of instructions about how to set up their Zoom classrooms in advance so that they could prepare for using Zoom before the workshop if possible.

During each of these transition workshops, we first spent 10–12 minutes trying out the necessary features and skills for teaching with Zoom, including how to use and share a PowerPoint, video, whiteboard, or document and how to use the chat feature, polls and other features that everyone would need in their RSD teaching. In some workshop sessions, I found that instructors had not had time yet to set up their Zoom rooms, so we began with that; in others, I was able to save Zoom room setup for the last 20 minutes of the workshop for the few instructors who still needed to

Meet and Greet

Zoom Features & Practice

Breakout Rooms & Learning Activities

Questions

Follow Up: TEAMS Site and Groups and Pair Practice

Setting up Zoom Classrooms – if needed
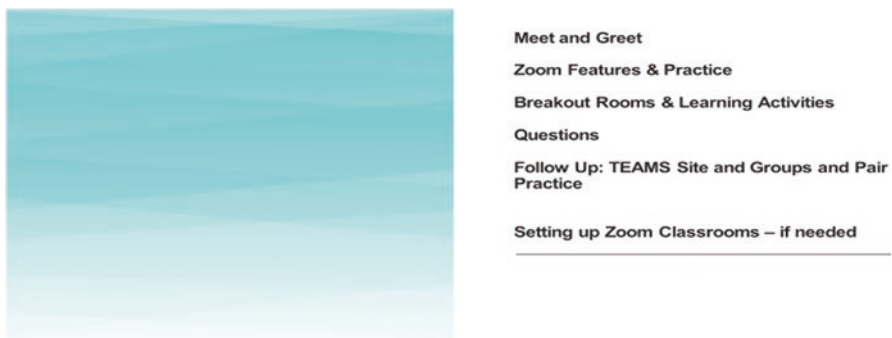
Fig. 1 Agenda: learning activities for the RSD transition workshop

do that. It was important to be flexible. Putting my agenda (Fig. 1) and activities in PowerPoint slides allowed me to easily change the planned order of activities according to the needs of each group of 10–18 instructors.

The central and most important workshop activity was the 30–40 minutes dedicated to small group breakout room discussions and exchange of ideas for lesson planning and teaching activities. Each small breakout group of instructors was assigned a different lesson planning topic and task. Group A discussed warm-up activities that they would use to launch topics and actively engage students in a concrete experience at the beginning of lessons and topics. Group B exchanged ideas for small group and pair learning activities that they would use in breakout room activities, discussions, and tasks. Group B also discussed how they might borrow and adapt each other's activities in their own subject matter teaching. Group C instructors were to recommend three or four techniques for engaging students interactively during instructor-delivered lectures and presentations. Group D brainstormed ideas for review and wrap-up activities that they would use with students to check learning at the end of classes and units. Depending on the number of workshop participants and needs, I added and changed topics in some sessions. Occasionally, other topics and group tasks were included – for example, additional groups discussed what activities could be used for introducing netiquette and setting guidelines with students, or, with instructors teaching quantitative courses like Math and Statistics, the types of practice activities and additional technologies that would be useful. After each small group met in their breakout room to discuss these teaching topics for 10–15 minutes, we came back to the full instructor group to explain and share strategies. We also demonstrated and practiced the technologies and Zoom features needed to implement these various activities and strategies.

This exchange of activities by each group was most beneficial. Instructors had the chance to share and explain teaching activities and strategies – from warm-up introductory activities to techniques for making lectures and presentations interactive and, also, an array of small group breakout room tasks and summary and review strategies. Each group not only recommended their approach but took time to exchange questions and suggest activity adaptations for various courses. In effect then, instructors had the opportunity to explain and experience a range of activities and technologies for a virtual class lesson – from warm-up to wrap-up. They learned the use of the Zoom technology while experiencing active learning activities.

4   Follow-Up Activities and Resources

Following this initial transition to RSD workshop, our professors were requested to set up their Zoom classrooms and invite a colleague to a practice session using the various Zoom room features for teaching – sharing their PowerPoint, videos, online resources, and whiteboard; setting up a chat; and using the poll feature and breakout rooms. As well, I provided and shared short video demos and instructions for using

Zoom with each instructor via our technology demos and resources site for instructors.

We also established discussion forums in MS Teams for each of these groups of professors according to the courses that they teach – that is, Communications 101 instructors, Business 1043 instructors, Developmental Math 0913, and so on… where we have continued to discuss ongoing questions, strategies, successes, resources, and needs related to RSD.

To assist anyone who wanted more practice, I scheduled additional open information and practice sessions for instructors to join during the final week of preparation if they had questions or needed further practice, particularly regarding technology use. Instructors were also invited to book an individual e-meeting with me if they wished. Several instructors took me up on this offer and arranged individual or team meetings with me according to their programs (BBA or BID or General Education) for additional practice and questions.

Although this transition to RSD at the end of March was fast and intensive, we were ready when courses opened on Monday, April 13. Administrators had expected and planned for some last-minute calls for help when classes got underway; however, the RSD via Zoom classes proceeded effectively without emergencies. During the first three weeks, program leads visited the virtual classes to find students, instructors, and courses progressing well.

I waited four weeks for classes to be underway before doing further formal PD. I then invited instructors to a follow-up PD webinar where they came together again to share and demonstrate teaching activities that had already worked well with their RSD students. In advance of these PD sessions, each instructor prepared one or two PowerPoint slides from which to explain their learning activity to their colleagues. We also discussed how to adapt each activity to various courses. After these PD sessions, each instructor emailed me their PowerPoint slides. I combined these into a collaborative PowerPoint of learning activities, noting which professor had contributed each activity with their contact information. These collaborative PowerPoints were posted and shared in Teams for use by all professors along with the video recording of these webinar sessions. A collaborative community of teaching and sharing for RSD teaching was taking shape.

5   Conclusion

Our PD activities and community of teaching continue to develop. Professors share ideas and teaching strategies regularly, as well as questions. Sometimes our ongoing faculty PD webinar topic is related to a specific issue – for example, how to prevent plagiarism. In other cases, it demonstrates various technology and teaching knowledge – for example, how to implement review quizzes and questionnaires using apps like Kahoot, Quizlet, and Pear Deck. Technological and pedagogical content knowledge (TPACK) are combined and shared as we continue to sharpen our RSD expertise.

It is rewarding that our faculty frequently come out to meet with colleagues to discuss and share strategies, teaching activities, and problem-solving in these ongoing PD workshops. As well, instructors have contributed their ideas, knowledge, and suggestions for further PD sessions via a recent questionnaire that I have distributed. We have more than enough instructors from our faculty lining up to facilitate our upcoming webinar-workshops for the next year.

Since our initial workshops for teaching RSD classes began in late March 2020, I have also implemented a special faculty workshop for new instructors who are hired to teach RSD classes. I try to model these new instructor workshops after the courses that these instructors will teach so that they too experience and share teaching knowledge and activities for RSD.

Our continuing and collaborative community of teaching practice is developing. We are getting through COVID-19 intact by sharing and growing together.

References

Bruner, J. (1976/1996). *The process of education*. Harvard University Press.

Carroll, L. (2000). *Alice's adventures in wonderland. The project E-Gutenberg book of Alice's adventures in wonderland*. https://www.gutenberg.org/files/11/11-h/11-h.htm

Knight, P. T. (2001). Complexity and curriculum: A process approach to curriculum-making. *Teaching in Higher Education, 6*(3), 369–381.

Kolb, D. (1984). Experiential learning: Experience as the source of learning and development. Prentice-Hall.

Lewis, T. (1999). Content or process as approaches to technology curriculum: Does it matter come monday morning? Journal of Technology Education. *V., 11*, 1.

Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A new framework for teacher knowledge. *Teachers College Record, 108*(6), 1017–1054.

Shulman, L. S. (1987). Knowledge and Teaching: Foundations of the new reform. *Harvard Educational Review, 57*(1), 1–22.

Tanner, D., & Tanner, L. (2007). *Curriculum development theory into practice*. Pearson Education Inc.

Resources

Kahoot https://kahoot.com/

Microsoft Teams https://www.microsoft.com/en-ca/microsoft-365/microsoft-teams/group-chat-software

Pear Deck https://www.peardeck.com/googleslides

Quizlet https://quizlet.com/

Zoom https://zoom.us/

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Educational Leadership at the Time of Crisis: Lessons Learned from the COVID-19 Pandemic

Salma Waly

> *There is no better than adversity. Every defeat, every heartbreak, every loss, contains its own seed, its own lesson on how to improve your performance next time.*
>
> *Malcom X*

1 Introduction

Emergencies and crises take many shapes and forms. While many are caused by natural disasters or man-made conflicts such as wars, others such as pandemics can emerge suddenly and threaten the health and well-being of individuals and communities. This chapter aims to discuss the impact of the recent health pandemic, COVID-19, on education and the lessons that educational leaders should bear in mind so that future challenges are handled more swiftly.

2 Impact on Education

According to UNESCO, school closures due to COVID-19 have affected 91% of students worldwide. This, in turn, has prompted various responses from governments and institutions so that students would still have access to learning resources while schools are closed. The situation is more complicated in areas of pre-existing crises, wars, and instability where resources are scarce in the first place.

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In the United States, the closure of schools urged educators and researchers to examine the impact of students' absence on their overall academic performance. Researchers at the Northwestern Evaluation Association (NWEA) anticipate that if schools remain closed, students would only retain 70% of their reading progress compared to performance in a normal academic year. These statistics are expected to be way more dramatic for students who are homeless or poor. In these cases, retention rates are believed to be much less (Sparks, 2020). While many school leaders in the United States are now mainly concerned about the social, physical, and emotional well-being of their students, the question of how to compensate for missed instructional hours remains open.

Besides the risks to students, researchers are also concerned about teachers and teaching conditions. The drastic change of schooling dynamics and the sudden closure of schools left many teachers struggling with learning new technologies, adapting existing materials and resources for online use, and responding to unprecedented demands by school administrations, students, and parents (Gewertz, 2020). Many teachers have also taken on the role of advocates to ensure that their students have access to services and resources such as school meals, technology devices, and Internet access. All these reasons highlight the importance of school and district leadership that is capable of handling crises effectively to minimize risks and set the well-being of all students as a top priority.

3 Educational Leadership at a Time of a Pandemic

3.1 Leadership Styles

Fernandez and Shaw (2020) identify a style of leadership that is essential amid the outbreak of COVID-19. This style of leadership is referred to as allostatic leadership, which, in addition to possessing a great adaptive capacity, involves the ability to evolve and grow so that one is better able to address future issues of the same kind. The researchers also highlight the importance of distributive leadership as the key to success during times of emergency and crisis. They argue that distributing the responsibilities of leadership at such difficult times is the most effective form of leadership so that multiple perspectives and opinions are considered. Through allostatic leadership, team members remain incentivized as they feel that their contribution is essential for overcoming current obstacles. The role of the leader is to make sure all team members have the resources necessary to effectively work on their designated tasks. The leader should also select team members for different tasks wisely and make sure that there is a high degree of trust among team members and administrators.

3.2 Personal Characteristics and Competencies

Karim (2016) specifies several essential personal traits that leaders need to successfully handle crises. These include clarity, motivation, empathy, self-control, loyalty, flexibility, and care. These traits help leaders remain goal-oriented, composed, open to challenges, and constantly aware of the needs of their constituents and the communities that they serve. Karim (2016) also highlights key competencies that allow leaders to handle challenges in a more effective manner. A leader's ability to build a team promptly to address issues and challenges is primary among these. Team building entails delegating tasks, assigning roles, listening to various points of view, and making decisions collectively. In a crisis, a leader needs to realize the important role that she/he plays in an institution and exercise self-control when working under pressure.

Another competency that is very important at times of emergency is being sensitive to differences as well as being culturally relevant. An educational leader, at any time, should be aware of the personal, cultural, subcultural, racial, ethnical, and religious differences that may exist in their institutions and the communities they serve. However, at times of emergency when emotions are heightened and one's mental capacities are on edge, leaders need to be even more aware of such differences. A sincere sense of trust must be established with team members so that individuals are open to sharing their fears and concerns. A sense of genuine care about everyone, regardless of their background or living conditions, should be present when addressing parents, stakeholders, and members of the larger community

3.3 Preparedness and Contingency Planning

3.3.1 Budgetary Considerations

What the COVID-19 crisis taught us is that there needs to be a budget set aside for emergencies. While districts can provide financial support at times of emergency, it is wise for individual schools to have a budget, even if small, to deal with emergencies. An emergency fund can be used to provide extra resources for parents and families at times of school closure. It can also be utilized for training programs for teachers and school personnel who, for example, may not have experience working online. Another way an emergency fund can be used is for purchasing software licensees that would further facilitate home learning and virtual home-school communication. While there might be schools that set aside part of their budget for "miscellaneous" purposes, the practice should be implemented across the board.

Following the financial crisis of 2008, researchers have heavily published on the importance of making budgetary adjustments and designating emergency funds for times of crisis and emergency. Sabri (2013), for example, explains that one reason that led the market to collapse in 2008 was lack of preparation on the side of

business leaders and executives in terms of financial risk. While the nature of the business field is different from that of education, the lessons learned after the financial crisis can be applied to any sector of society. It is time that educators financially prepare for difficult times so that when crises strike, their impact can be less severe, especially for needy and unprivileged communities.

3.3.2   Business Continuity Planning (BCP)

The notion of Business Continuity Planning (BCP) is another concept adopted from the business field that can also be implemented to lessen the impact of crises on education in the future. It simply refers to creating systems of recovery in the case of a threat or emergency. According to Cerullo and Cerullo (2004), BCP is a systematic process that involves research and preparation so that a strong system is developed. It usually starts with a needs evaluation to identify risks and what is at stake in times of an emergency. This is followed by identifying key strategies to deal with crises, devising a continuity plan and then testing the plan, and training individuals so that they are prepared to deal with sudden work interruptions. Examples of what can be included in a school's contingency plan include information about virtual learning platforms, training modules for teachers, online resources for students, and community support programs.

   After the COVID-19 pandemic, schools should start devising systems that focus on dealing with prolonged school closures due to social and political unrest, pandemics, or natural disasters. Such systems will need to focus on analyzing the needs of the students and the community, as well as the learning goals and outcomes needed. Strategies should then be identified and a plan be put in place. The system should be tested frequently, reviewed, and adjusted periodically to make sure it is up to date. Teachers and school personnel need to be trained. Parents and communities should be involved in the decision-making process. School leaders should continuously communicate with community members and provide them with lists of updated resources that they can utilize when an emergency takes place.

3.3.3   Partnerships with Community Members, Businesses, and Policymakers

Establishing partnerships with various parties is essential for educational leaders. Goldring and Sims (2005) discuss the positive impact that partnerships between school leaders, community members, and various stakeholders can have on steering schools toward growth and success. Given the COVID-19 pandemic outbreak in a big city like New York, schools could have handled the crisis better if strong partnerships had been established and maintained. Examples of such partnerships include ones with community members who can assist according to their areas of expertise, as well as local businesses and government officials who can facilitate transactions and expedite processes. Partnerships should also be part of the BCP of

a school or district. Contact information of specific individuals that schools can reach out to in case of an emergency need to be handy and available. This would not only save schools time but also resources and human effort.

4 Handling Crises Effectively in the Future

4.1 Prompt and Responsive Decision-Making

Educational leaders need to make prompt and responsive decisions. Decision-making in the time of crisis requires a leader to be a strategic thinker who considers all options and bears in mind the needs of all parties involved. According to Schoemaker et al. (2013), decision-making at the time of an emergency requires strategic thinkers who avoid making simple yes/no decisions; rather consider the multiple viewpoints available and select the ones that maximize benefits for everyone. Another key component for strategic decision-making is breaking down decisions into smaller pieces and aligning them with consequences, both wanted and unwanted. Finally, strategic decision-makers should determine who should be involved in the process of making decisions and the extent to which a person or a party's involvement can lead to the success of a given decision.

Aside from being a strategic decision-maker, an educational leader also needs to be an ethical one. Christensen and Kohls (2003) discuss the importance of ethical decisions that consider the well-being of all individuals and communities affected. Ethics are, in fact, an integral component of leadership. Unethical leaders cause more harm to their institutions than good (Northouse, 2018). Research shows that when under a lot of stress, leaders' recognition of ethical dilemmas can be impeded (Selart & Johansen, 2011). For this reason, it is important that leaders weigh their decisions before executing them to make sure the impact does not cause harm to anyone.

4.2 Effective Communication

Good communication skill at difficult times is the best ability that an educational leader can bring to their institution. Friedman (2011) particularly discusses the importance of communication skills at times of challenge and institutional change. Effective communication is key to shaping perceptions within an institution and influencing outcomes. Because of the essential role that communication plays in facing crises, researchers suggest that leaders should receive training on communication skills prior to being appointed to leadership positions. Foote (2012) evaluated the effectiveness of a communication leadership course that was conducted virtually through a series of activities and problem-solving situations. The students in the

course, then aspiring leaders, had to constantly communicate with the course instructor to address problems and discuss effective ways to handle them. An evaluation of the students after the course revealed that the students felt more comfortable in their ability to communicate during future institutional challenges and threats.

4.3   Outstanding Managerial Capacity

As mentioned earlier, Fernandez and Shaw (2020) discuss the importance of distributive leadership in educational institutions amid the COVID-19 health crisis. They explain that while leaders need to initially evaluate the big picture and set institutional priorities, they should then move responsibilities to a multidisciplinary team of professionals that can carry out the different operations each according to their area and level of experience. Waller et al. (2013) also stress the importance of teamwork and delegation as key managerial capacities. They explain that members of any institution should be trained on how to work collectively when crises strike.

Hull (2010) notes the value of outstanding managerial capacities, specifically for school and district leaders to prepare for future emergency situations. Emergency preparedness is a key strategy to lessen the impact of crises of all kinds. Administrators need to make sure schools are not understaffed, closely oversee how the school budget is used, frequently communicate with stakeholders, train staff, and analyze the needs of the community and the risks involved in the crisis.

4.4   Sincere Advocacy for Communities in Need

Another key leadership essential is advocating sincerely for communities in need that are directly affected by crises. It is worth mentioning here that advocacy should be part of school leadership even before an emergency happens. Khalifa (2012) discusses the importance of being not only a school leader but a community leader. School leaders who are continuously visible, present, and available to assist in their communities are more trusted than others who are not. They tend to have a strong rapport with members of the communities they serve especially when they advocate for causes that aim to elevate the living conditions of such communities.

Auerbach (2009) also stresses the importance of school and district leaders being community leaders and warns that "talking the talk" is not equal to "walking the walk." In other words, educational leaders need to make it a sincere effort to continuously engage with the communities that they serve. The researcher further explains what being an engaged community leader looks like. For example, school leaders who are also community leaders plan various school activities that aim to help them learn about their local communities and contribute to the success and well-being of such communities. These activities include ongoing activities such as home visits, conferences with elected officials, and parent-specific programs. When

such practices are part of the school culture, trust is established between leaders and communities. This level of trust is essential in times of crisis and emergency as parents and community members would thereby realize that the efforts of the educational leader stem from a genuine sense of care and support.

4.5 Swift Transitioning

One last leadership essential at the time of crisis is an educational leader's ability to swiftly transition back to normal operation when the crisis is over. While it might seem that re-opening schools would be an easy step to take once the pandemic is over, it is important that educational leaders realize that schools cannot just go back to normal. School re-opening will have to follow new norms that nobody considered before the pandemic. School re-opening should also be done in a systematic and calculated manner to minimize any potential risks and increase benefits for all students.

According to Davis and Berry (2020), there are several steps that states should take to ensure that re-opening schools goes smoothly. These steps were compiled after researching the response that Ebola-stricken nations took to handle that pandemic. The researchers recommend opening schools only when it is believed that it is safe to do so. Hasty and rushed decisions can have a severe impact on students and school personnel. They also suggest that as soon as schools re-open, remedial and acceleration programs should be used to assess learning gaps due to school closure. The researchers also recommend continuously monitoring the progress of students using short-term and long-term assessment results so that additional services are provided when needed.

5 Conclusion

The health outbreak of COVID-19 emerged earlier this year (2020). It drastically impacted every sector of society. The effects that the pandemic had on health, the economy, politics, and healthcare make one think about how such outbreaks could be handled in the future so that fewer lives are lost, and social well-being is maintained.

In terms of lessons learned in education, researchers have been calling for a "common minimum" to prepare school leaders and teachers to deal with crises in the future. This minimum level of preparation according to Hoskova-Mayerova (2016) needs to be reflected in university curricula to train future school and district personnel on how to respond to and manage crises when they emerge. Graduate courses for school leaders should focus on social justice advocacy, mastering the use of technology and virtual devices and building partnerships with stakeholders and community programs. Courses should also include a managerial component in

which leaders are presented with real-life problems and are forced to work under pressure to address issues and communicate with various stakeholders all at the same time.

While the COVID-19 pandemic disturbed everyone's life in ways that were unexpected, no one can deny that it also brought with it lessons that need to be reflected on and remembered. Educational leaders need to learn the capacity to handle the pressure and the responsibilities that these sudden events bring into the teaching and learning process. They should also be able to react to changes swiftly so that such events do not negatively impact the academic, social, and emotional well-being of students. Preparedness is the essential tool that educational leaders use to steer their institutions back in the right direction during and after a crisis of any kind.

References

Auerbach, S. (2009). Walking the walk: Portraits in leadership for family engagement in urban schools. *The School Community Journal, 191*(1), 9–32.

Cerullo, V., & Cerullo, M. J. (2004). Business continuity planning: A comprehensive approach. *Information Systems Management, 21*(3), 70–78.

Christensen, S. L., & Kohls, J. (2003). Ethical decision making in times of organizational crisis: A framework for analysis. *Business & Society, 42*(3), 328–358.

Davis, E., & Berry, C. (2020, April 8). *Mitigating COVID-19 impacts and getting education systems up and running again: Lessons from Sierra Leone.* Global Partnerships for Education. https://www.globalpartnership.org/blog/mitigating-covid-19-impacts-and-getting-education-systems-and-running-again-lessons-sierra

Fernandez, A., & Shaw, G. (2020). Academic leadership in a time of crisis: The coronavirus and COVID-19. *Journal of Leadership Studies, 14*(1), 1–7.

Foote, L. M. (2012). Honing crisis communication skills: Using interactive media and student-centered learning to develop agile leaders. *Journal of Management Education, 37*(1), 79–114.

Friedman, K. (2011). You're on! How strong communication skills help leaders succeed. *Business Strategy Series, 12*(6), 308–314.

Gewertz, C. (2020, May 8). How are parents dividing home-teaching duties during coronavirus? *Education Week.* https://blogs.edweek.org/teachers/teaching_now/2020/05/parents_dividing_home_teaching.html

Goldring, E., & Sims, P. (2005). Modeling creative and courageous school leadership through district-community-university partnerships. *Educational Policy, 19*(1), 223–249.

Hoskova-Mayerova, S. (2016). Education and training in crisis management. *The European Proceedings of Social & Behavioural Sciences, XVI*, 849–856.

Hull, B. (2010). Changing realities in school safety and preparedness. *Journal of Business Continuity & Emergency Planning, 5*(1), 440–451.

Karim, A. J. (2016). The indispensable styles, characteristics and skills for charismatic leadership in times of crisis. *International Journal of Advanced Engineering, Management and Science (IJAEMS), 2*(5), 363–372.

Khalifa, M. (2012). A *re*-new-*ed* paradigm in successful urban school leadership: Principal as community leader. *Education Administration Quarterly, 48*(3), 424–467.

Northouse, P. G. (2018). *Leadership: Theory and practice*. SAGE Publications.

Sabri, H. A. (2013). The role of corporate culture in maintaining organizational operations during the global financial crisis. *Journal of Social and Development Sciences, 4*(3), 141–146.

Schoemaker, P. J., Krupp, S., & Howland, S. (2013). Strategic leadership: The essential skills. *Harvard Business Review, 91*(1–2), 131–147.

Selart, M., & Johansen, S. T. (2011). Ethical decision making in organizations: The role of leadership stress. *Journal of Business Ethics, 99*, 129–143.

Sparks, S. D. (2020, April 9). Academically speaking, the 'COVID slide' could be a lot worse than you think. *Education Week*. https://blogs.edweek.org/edweek/inside-school-research/2020/04/covid_slide_worse_summer_slide_NWEA.html

Waller, M., Lei, Z., & Pratten, R. (2013). Focusing on teams in crisis management education: An integration and simulation-based approach. *Academy of Management Learning & Education, 13*(2), 208–221.

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Online Teachers from Offline Worlds: Lessons Learned

Angela C. Bailey, Kathleen A. Corrales, Lourdes Rey-Paba, and Nayibe Roasado Mendinueta

> *Technology will never replace great teachers, but technology in the hands of great teachers is transformational.*
>
> *George Couros*

1 Background

The transformation to and the integration of technology into education has been difficult in Colombia for multiple reasons. Though government policymakers and higher education entities have planned ways for the creation, development, transfer, and use of technology in the various economic and social sectors, the process has been relatively slow, isolated, limited, and scarce (González & Campins, 2016). This has left many professors and students at a disadvantage at the onset of the COVID-19 crisis as institutions have scrambled to implement effective strategies to teach and learn remotely.

Universidad del Norte (Uninorte) in Colombia serves approximately 16,000 students. The Language Institute is the academic faculty in charge of the development of communicative competence in foreign languages (English, German, French, Portuguese, Italian, and Mandarin) and strengthening the written and oral academic Spanish of all students. There are 181 faculty members, including both tenured and

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nontenured full-time and adjunct professors, in both areas. The campus went remote on March 16, 2020, after the first identified positive cases in the city and will continue to be teaching online until June 2021 at least.

Uninorte, as many other institutions in the world, had two weeks to transition to the remote education modality. Initially, concerns about this transformation derived from an insufficient technological competence of the faculty and students at the university. Some faculty found themselves unprepared to manage, for example, the technological tools inherent to online platforms, creating feelings of personal and professional insecurity, impacting their identity as professional educators. Thus, faculty faced a sudden shift from depending on their physical presence and resources to relying on a third space of emergent characteristics inherent to online scenarios, requiring professional development to prepare faculty to promote student learning in such spaces.

This chapter addresses the professional development experience implemented at this Colombian university at the onset of COVID-19 to help alleviate concerns resulting from transforming face-to-face to *emergency remote* courses considering relevant theory. In our case, we implemented some of Herman's (2012) types of professional development, including self-teaching, peer mentoring, workshops given synchronously and asynchronously, collaborative course design, and online training. Concurrently, teachers were given emotional support to help manage their own and students' stress during the crisis. With this chapter, we aim to provide an example for other institutions in similar situations seeking meaningful ways to support offline faculty moving into online scenarios.

2   Conceptual Framework

Literature on the topic suggests that one of the biggest challenges in transforming from face-to-face to online classes is motivating offline faculty to embrace the potential of teaching in online worlds (Montelongo, 2019). This is true because teaching online differs vastly from teaching face-to-face (Elliott et al., 2015), and traditional types of teaching do not seem to translate well to online education (Shelton & Saltsman, 2005). Effective online education requires the use of a variety of technological tools to organize content, to deliver asynchronous and synchronous classes, promote student interaction, to provide feedback, and to assess student learning (Baran et al., 2011; Herie, 2005). Besides managing the technology, faculty also require the strategies and know-how to be able to implement them in such a way that fosters student learning. For this reason, professional development for online teaching is unique because faculty need to combine these two aspects: knowledge of technology and knowledge of how to successfully integrate this into their practice. As Berry (2019) argues: "to teach in a virtual environment, faculty need skills in instruction, course facilitation, delivery tools, course management, design and content" (p. 122).

Additionally, research has demonstrated that faculty preparation for teaching online has proven difficult because of existing gaps related to a lack of understanding of online media and its challenges (Ragan & Schroeder, 2014), along with a lack of clarity of the various types of online teaching. Hodges et al. (2020) mention that researchers have clearly defined all possible online design modalities, such as "distance learning, distributed learning, blended learning, online learning, mobile learning, and others...[however] an understanding of the important differences has mostly not diffused beyond the insular world of educational technology and instructional design researchers and professionals" (para. 5). Added to this confusion is the new term that has sprung up during the COVID-19 epidemic: emergency remote teaching (ERT). This lack of understanding and the stigma that online teaching and learning is of lesser quality than face-to-face classes (Hodges et al., 2020) are some of the reasons why faculty in the past have been resistant to embrace online instruction (Herman, 2012).

Another dimension cited by researchers as essential for online teaching, especially in a crisis, relates to faculty being aware of student needs, which includes both basic technical (e.g., stable electrical service and Internet connection, access to computers, microphones, and other hardware) and emotional needs (e.g., engagement, need for human contact, fear of sickness, mental health). Also, while the students of this generation are often called "digital natives" because of their close relationship with technology mainly for leisure purposes, many of them have not considered technology as a part of their formal educational experience. Thus, faculty face the challenge of providing students with the necessary support to be able to learn through technological tools (Watson & Pecchioni, 2011). To do this, researchers suggest that faculty explore new student-friendly technology to deliver content and give learners opportunities to reflect on their educational process (Montelongo, 2019).

While little has been published on how faculty development programs have been carried out during the COVID-19 crisis, pre-pandemic research shows a robust body of literature on how institutions have supported professional development for faculty who are transitioning to online teaching. For instance, Herman (2012) studied 25 types of professional development programs for this type of transition. The author grouped them into categories such as self-teaching, peer mentoring, workshops, collaborative course design, and synchronous and asynchronous online training. According to this author, self-teaching can be defined as faculty self-directed learning through a variety of resources such as "books, journal articles, pod/vodcasts, video, recorded online seminars, and online materials" (p. 93). Peer mentoring refers to selecting and training a group of faculty members in online course design and delivery to serve as mentors for other faculty within a formal institutional program or as an informal collegial practice. Workshops include onetime face-to-face training or a series of training activities that are offered either internally or externally and involve "lecture, small-group work, and hands-on technical training" (p. 94). While peer collaborative course design may take on various forms, Herman defines this practice as collaborating with another person – either instructional design experts, other faculty with online experience, or other professors

assigned with designing the same course – on an ongoing basis during the creation of the course. A final type of professional development is online synchronous (which happens in real time) and asynchronous training (which the participants complete at their own pace).

3 Emerging Practices

The types of professional development activities described above allow faculty, to some extent, to have firsthand experience in the online learning environment institutions to select the modality that best suits their context and resources (Berry, 2019; Gregory & Martindale, 2016; Herman, 2012). As suggested by the literature, we created a development program that focused on (1) exploring the types of technology available for each modality and how to successfully integrate them into the teachers' practice (e.g., Blackboard LMS; Google Suite; Microsoft Teams, etc.), (2) clarifying the concepts around each modality and how they are implemented, and (3) supporting educational and emotional needs to help faculty and their students during this time.

The first professional development opportunities were provided by the Center for Teacher Excellence (CEDU), the office responsible for guiding professors in innovating and transforming their pedagogical practice. The CEDU prepared and offered obligatory campus-wide professional development sessions to provide professors with the necessary skills to manage the technological platforms in which synchronous classes were going to be delivered. This training focused on teaching professors the basic functions of the platforms, including how to set up a class session, monitor students during the lesson, and use the various teaching functions (i.e., sharing screens, presentations, and videos, using the digital whiteboard, setting up student polls, among others). The training occurred over a period of 2 weeks, offered either as a face-to-face or synchronous workshop, and they also provided a number of links that faculty could consult at their leisure. After this initial session, other voluntary online workshops given during the following 8 weeks of the semester focused on supporting effective remote teaching-learning processes for both synchronous and asynchronous classes in areas such as course and content organization, lesson planning, class delivery, and assessment design and implementation. The CEDU also assigned one assistant to each academic department who supported faculty with technical issues.

Further professional development was carried out by the academic faculties to focus on the specific needs of the disciplines. The Language Institute implemented a series of actions to support its faculty, including providing spaces for collaborative lesson planning and weekly synchronous small-group faculty meetings. Furthermore, WhatsApp groups were created to provide spaces in which faculty could share concerns, solutions to challenges being faced, and pertinent websites for class use.

As time progressed, some faculty demonstrated a lack of understanding of what online modalities implied in terms of teaching and learning. There was also a sense

of confusion around the specific vocabulary and actions implied by the terminology (i.e., virtual, online, remote teaching, and technology). An interesting initiative came from professors who were eager to help their less technologically savvy peers succeed in this experience. Some professors designed tutorials to demonstrate how to use specific technological tools (apps, software, etc.) and shared suggestions of particular activities to engage students in chats and emails. Therefore, some professors designed more formal professional development activities such as specialized webinars and workshops to explore the theoretical underpinnings of these modalities. Other webinars had provided concrete examples of effective language learning and teaching, material design, and assessments for remote learning.

Attention was also paid to faculty and students' emotional needs. For example, a professor offered sessions on how to detect and support students who were struggling emotionally during this time. Professors, especially at the beginning, demonstrated anxiety and insecurity about handling their own online courses; for this reason, peer observation opportunities were provided allowing faculty to feel more comfortable with this practice. Furthermore, the Language Institute created an intentional strategy, especially targeted for faculty who live alone, to meet and chat with peers by connecting for "coffee time," watching a movie, or playing games with their colleagues.

4   Results

Though this was not a research project per se, we surveyed professors regarding the program provided to them to address the COVID-19 crisis during the first semester of 2020 (March through June). They were asked what activities they attended, what they learned, and how they perceived the development program.

In general, most faculty felt comfortable and pleased with the information and the support provided during ERT and expressed gratitude for the opportunity to familiarize themselves with the platform and other technological tools to teach effectively. They also participated actively in the more formal peer observation and other webinars and the less formal "coffee time" and the group movies. For example, one professor (P4) commented that he participated in class observations and learned how to plan classes in a remote setting. Additionally, faculty mentioned the WhatsApp groups as a way to both stay in touch and share ideas with each other and their students; for example, P2 stated: "It is an important way to interact, share, express opinions and maintain communication. In addition, it is a means to share documents." One professor summarized her experience and expressed the general sentiment of most of the faculty when she said:

> I participated in meetings related to the use of [the platform], assessment, crisis management, among others. In general terms, these activities allowed me to strengthen my technological and pedagogical skills. Likewise, I had the opportunity to expand my knowledge regarding carrying out my role during the crisis [to help] a student or other members of the university. (P15)

Alongside the many positive outcomes of the professional development program, some faculty also expressed a sense of frustration and stress. For example, some of the faculty who were already tech savvy felt the sessions were a "review," whereas others considered that there was too much information. One faculty member referred to the formal sessions as a "marathon of webinars" (P20) that was challenging to manage. A final aspect that professors commented on related to the WhatsApp groups. One faculty member responded: "I don't really like WhatsApp, as it seems a bit invasive, and information is shared that is not in the general interest of work, but I understand that it is a tool to stay in touch" (P9). Professor 27 summarized these ideas when he stated:

> At first, it was a little overwhelming. Too much information to process and, if we add to that the emails received, it was too many things to assimilate in a short time. However, I must say that they were useful since any question we had was resolved instantly.

A final result that we noticed through this process was the large number of faculty who took it upon themselves to resolve their own questions and fears. Many cited reading articles and watching webinars that they chose as ways for professional development. One professor (P39) demonstrated this idea of autonomous development when he said: "the [Language] Institute and CEDU did their best… But finally, it depends on oneself. Like almost everything."

5   Conclusions

Facing COVID-19 impacted faculty as they had to adapt their courses that were already in progress to a version mediated by technology. Our experience demonstrated that professional development was essential to "surviving" this transition to ERT. In our case, we focused on three areas that we believed were essential at the time: exploring and integrating different available technologies; clarifying concepts around technology-mediated modalities; and supporting faculty and students' emotional needs.

We found our initial development plan to be successful. Most professors felt supported and comfortable enough to teach their courses successfully, even though a small percentage felt overwhelmed by the amount of information received. In addition, many professors took on an active role and helped their colleagues to learn how to use technology effectively, promoting emergent faculty learning communities.

Taking into consideration the experience with our professional development plan, it is important to mention some of the pedagogical implications for future development of online learning. Since many institutions worldwide will continue to be teaching online for the foreseeable future, we suggest implementing further professional development, which focuses on reworking professors' classroom activities to fit the online environment. To do this, as we discovered in the first phase, it could be useful to tap into the knowledge and experiences of the institution's faculty and

allow them to lead webinars for faculty learning communities, among others. If possible, we suggest allowing sufficient time for faculty to learn, adopt, and adapt to new technological tools. The focus should be "on preparing everyone to gain further pedagogical expertise and become digitally fluent" (EDUCAUSE, 2020, p. 40). This plan should also incorporate the human aspect inherent in face-to-face contexts, allowing faculty to implement activities that balance personal, professional, and technological competences. Furthermore, plans should have professors at the center of the process, so their needs, interests, and previous experience are appropriately integrated and offer them spaces for reflection as a way to improve the resulting programs. Finally, all these experiences should be documented to provide professional development input for crisis solutions in the future and to find the balance between offline practices for online worlds.

References

Baran, E., Correia, A. P., & Thompson, A. (2011). Transforming online teaching practice: Critical analysis of the literature on the roles and competencies of online teachers. *Distance Education, 32*(3), 421–439. https://doi.org/10.1080/01587919.2011.610293

Berry, S. (2019). Professional development for online faculty: Instructors' perspectives on cultivating technical, pedagogical, and content knowledge in a distance program. *Journal of Computing in Higher Education, 31*, 121–136. https://doi.org/10.1007/s12528-018-9194-0

EDUCAUSE. (2020). *2020 EDUCAUSE Horizon report: Teaching and learning edition.* https://library.educause.edu/-/media/files/library/2020/3/2020_horizon_report_pdf.pdf?

Elliott, M., Rhoades, N., Jackson, C. M., & Mandernach, B. J. (2015). Professional development: Designing initiatives to meet the needs of online faculty. *Journal of Educators Online, 12*(1), 160–188. (EJ1051031). ERIC. https://files.eric.ed.gov/fulltext/EJ1051031.pdf

González, F. D., & Campins, B. B. (2016). La transferencia de tecnología en universidades Colombianas [The transfer of technology at Colombian universities]. *Economía y Desarrollo, 157*(2), 182–198. http://scielo.sld.cu/pdf/eyd/v157n2/eyd13216.pdf

Gregory, R., & Martindale, T. (2016). Faculty development for online instruction in higher education. In M. Simonson (Ed.), *Proceedings of the 2016 Annual Association of Educational Communications and Technology (AECT) conference* (ED579661) (pp. 213–234). ERIC. https://files.eric.ed.gov/fulltext/ED579661.pdf

Herie, M. (2005). Theoretical perspectives in online pedagogy. *Journal of Technology in Human Services, 23*(1-2), 29–52. https://doi.org/10.1300/J017v23n01_03

Herman, J. H. (2012). Faculty development programs: The frequency and variety of professional development programs available to online instructors. *Journal of Asynchronous Learning Networks, 16*(5), 87–106. (EJ1000093). ERIC. https://files.eric.ed.gov/fulltext/EJ1000093.pdf

Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). *The difference between emergency remote teaching and online learning*. Educause.

Montelongo, R. (2019). Less than/more than: Issues associated with high impact online teaching and learning. *Administrative Issues Journal: Connecting Education, Practice, and Research, 9*(1), 68–79. https://doi.org/10.5929/9.1.5

Ragan, L. C., & Schroeder, R. (2014). Supporting faculty success in online learning: Requirements for individual and institutional leadership. In M. G. Moore (Ed.), *Leading the e-learning transformation of higher education: Meeting the challenges of technology and distance education* (pp. 108–131). Stylus Publishing.

Shelton, K., & Saltsman, G. (2005). *An administrator's guide to online education*. Information Age Publishing.

Watson, J. A., & Pecchioni, L. L. (2011). Digital natives and digital media in the college classroom: Assignment design and impacts on student learning. *Educational Media International, 48*(4), 307–320. https://doi.org/10.1080/09523987.2011.632278

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LearnIT2teach: Teacher Training and Online Learning for Newcomers in Times of Crises

Matthias Sturm

We get only about 25 percent or less of what we use in our jobs through formal learning. [...] The other 75 percent of learning happens as we creatively adopt and adapt to ever changing circumstances.

Grebow, 2002, para. 14–5

1 Background

In an age of population movements resulting in emigration and immigration, migrating and displaced people rely heavily on Information and Communications Technology (ICT) as well as responsive and flexible support infrastructures for their settlement. The impact of LINC programs on newcomer settlement does not only include language learning, but equally important are opportunities for networking with other newcomers for peer support; integrating into the larger Canadian community; communicating with the schools of their children; getting recertified in their profession; pursuing further education and training; connecting with employers for volunteering, internships, and work; and leveraging resources that support newcomer families in Canada and in their first country.

LINC is a free Canadian government settlement language education program regulated by Immigration, Refugees and Citizenship Canada (IRCC) that supports newcomer settlement (Government of Canada, 2014). About 375 service provider organizations with 4000 teachers offer full-time and part-time language classes to

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100,000 adult permanent residents annually. LINC programs can be found in most Canadian provinces and territories. Many are community-based nonprofits or operated by school districts and school boards. These programs are generally marginalized within the broader education system and are not equally supported. Therefore, they need teacher training, curriculum development, technology troubleshooting, and instructional mentoring. The Avenue-LearnIT2teach project from New Language Solutions has provided PD and learner courseware[1] for LINC teachers at no cost since 2010. The project offers five stages of teacher and coordinator online training courses to professionals in the LINC sector. The first two training stages allow teachers to become familiar with the learning management system (LMS). Stage 1 was offered in-person at conferences and program sites to reduce barriers to participation due to digital access and technology skills before the outbreak of COVID-19. Stages 3 and 4 provide certified training for course building and e-activities development. During these training stages, teachers receive learning activities that they use with their students, assisted by a mentor and a live support chat. An innovation and leadership course for managers and aspiring lead teachers is also offered. The learner courseware is aligned with the Canadian Language Benchmarks (CLB) and is hosted in a Moodle-based LMS. It includes fully customizable learning activities at all LINC levels, interactive and collaborative features, and communication and assessment tools – a program delivery solution for BL in classroom-based settings that is scalable to meet increasing OL demands as well. As of June 2020, around 750 courses are actively used to train adult newcomers.

The COVID-19 outbreak and resulting closures of in-person interactions with immigrant settlement programs, such as LINC, have deeply impacted program delivery and support organizations. When the suspension of in-person LINC classes also meant the suspension of BL in mid-March 2020 as a result of the spread of SARS-COV-2 in Canadian communities, OL became the only option to continue to support newcomer settlement. This development has had a dramatic impact on the project, resulting in a sudden shift in priorities. The teacher training, learner courseware, and support materials were designed for BL, that is, teachers supplementing their in-person classes with online activities. The new reality has been that teachers have needed to use the learner courseware to deliver programming 100% online. In programs where the courseware had already been used for BL, a sudden shift to OL was easier than in other programs, where many teachers decided to take the training and use the learner courseware, but some opted for OL solutions like Google Classroom instead. The project rapidly changed course to meet this unprecedented surge in demand of training and support for teachers to adapt the learner courseware and adopt teaching practices for OL. This transition and its impact are detailed in the following.

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[1] The teacher training and learner courseware can be accessed via the LearnIT2teach project portal at learnit2teach.ca.

2 Methodology

The data used to evaluate the impact of the project activities is generated from a variety of sources: teacher training, learner courseware, and project portal site stats; post-training surveys; development of new courses; LiveHelp call transcripts and anecdotal accounts of mentors; mentor email and support forum messages; and small-scale learner surveys. Comparison of numbers of active users and web traffic statistics from before and since the outbreak of the COVID-19 pandemic for the teacher training, the learner courseware, and the project portal revealed the extent of the response needed to mitigate the disruption caused to program delivery early on. To analyze project efforts relative to its impact on the practices of teachers and the delivery of programs, Guskey (2000) and Grebow (2002) are put to work.

Guskey's Model of Evaluation of Professional Development (2000) is based on the Levels of Learning Evaluation by Kirkpatrick (1994) and provides an evaluation approach that maps the successful outcomes of professional development activities on five levels. These coincide with the varying degrees that participants are involved with the learning content, and the benefits they feel they derived from the training experience:

1. Participants' reaction to the professional development (honoring the learning experience and stimulating others to explore)
2. Participants' learning (success indicators of participant learning)
3. Indicators of organizational support and change (context and the impact of PD experiences)
4. Participants' use of new knowledge of skills in practice (degree to which the new learning is put into daily practice)
5. Participants' learning outcomes (self-perceived outcomes of the learning experience of participants). For the project, Guskey's model has been used to articulate the success of the teacher training, providing a model for vetting interpretations and assessing impact.

Grebow (2002) explains Guskey's model based not on levels but on a continuum, broken into three key phases: I know; I can do; and I can adopt and adapt. Along this continuum, Grebow sees a 25/75 Rule of Learning, a 1:3 ratio of formal to informal learning, as reflected in the introductory quote for this chapter. Assessing the effectiveness of PD as teachers progress over time is usually more time-consuming than using levels and looking for outcomes in the short term. Outcomes often occur and can only be measured over a longer period. However, during the COVID-19 crisis, the rate of adoption and adaptation was accelerated rapidly by the immediate need of moving services online. This rapid acceleration produced measurable outcomes in a much shorter term.

While Guskey's model and Grebow's interpretation are also useful in assessing impact of Education in Emergencies (EiE), it is particularly useful for planning PD by reversing the five levels as Guskey suggests (Kreider & Bouffard, 2005, p. 12). First, the attainable improvements in participants' learning and the evidence that

best reflects these improvements are considered, before stepping back to check if impacts are desirable and if new policies or practices must be implemented to gain these impacts. Next, the types of organizational support or change that are needed to facilitate that implementation must be considered. The rapid response of LINC programs and teachers supported by the project provides a window into what needs to be implemented and supported to build the capacity of programs to respond to future crises.

3   Findings

Since mid-March 2020, when Canadian provinces and territories began instituting stay-at-home orders and closing schools, 512 LINC teachers have taken the teacher training, compared to eight teachers during the prior period, January to March, 2020. The bulk of training requests came in the two weeks following the beginning of the crisis: There were 286 new teachers by the end of March and an additional 226 new teachers from April to June 2020.

Based on post-training survey results, 263 teachers completed Stage 1, 359 teachers completed Pre-Stage 2, and 96 teachers completed Stage 2 of the training to prepare for teaching online. This uptake represents a significant surge of 4.6 times (Stage 1), 5.4 times (Pre-Stage 2), and 6.8 times (Stage 2) times more than before the crisis. After the introductory Stage 1 training, the Stage 2 training levels require teachers to use and adapt an online course. Pre-Stage 2 was introduced to fast track the use of the learner courseware a few years ago to offer teachers access to courses sooner. Many teachers continue to Stage 3 and Stage 4 of the training where they create their own courses.

Between March 15 and June 30, 538 new courses were set up in the learner courseware. Of these, 338 were set up by teachers who were new to the training or, in a few cases, by teachers who restarted the training after a long absence. Enrolments of teachers in courses surged to 5251 in the last two weeks of March, compared to 1085 on average per month in the two months prior.

3.1   Teacher Training

Teachers are asked a series of questions related to quality assurance and their intent to continue the training. Teachers reported a high rate of satisfaction: 83% reported a high rate of interest in the project, 87% would recommend it, and 90% intended to continue the training (Fig. 1).

Statistics from the teacher training site reveal a significant surge in users and training stage courses since mid-March 2020: between 75 and 350 connections on weekdays and around 50–100 on weekends. For comparison purposes, the period before March 10 showed around 25–35 connections on weekdays and five - ten

Teacher Training March 15-June 30	Strongly agree/Agree		
	Stage 1	Pre-Stage 2	Stage 2
My interest in this project is greater as a result of the workshop.	81%	83%	85%
I would recommend participation in this project to a colleague.	85%	85%	92%
I intend to complete more training as part of this project.	90%	94%	86%

Fig. 1 Teacher training from March 15 to June 30

connections on weekends. It signifies an increase of three - ten times in weekday connections and ten times in weekend connections. It also means that more teachers are accessing the teacher training platform on weekends than before. Overall, there were three times more visits, and 2.6 times more bandwidth was used than before the crisis in February 2020.

3.2 Learner Courseware

Statistics from the learner courseware also reveal a significant surge in users and learner courses since mid-March 2020: 4500–6500 connections on weekdays and 1000–2000 connections on weekends. For comparison purposes, the period before March 15 averaged around 1000 connections on weekdays and 500 connections of weekends. This signifies an increase of 4.5–6.5 times of weekday connections and 2–4 times of weekend connections. Visitors increased 1.4 times and bandwidth 6.5 times. While the increase in visitors is significant on its own, it is the surge of engagement of these visitors that is highly remarkable and represents the exploding demand for the learner courseware.

Since March 15, 536 new online courses were set up. More specifically, 338 new courses were set up by 296 teachers who were new to the project. That is, 42 courses were set up by new teachers who set up a second or third course. As a point of comparison, in the 2019–2020 fiscal year, 144 new courses were created in an entire year. Guskey (2000) would agree that this is a highly significant result in terms of impact: The formal training and informal supports provided by the project were a means to an end for adopting and adapting the learner courseware.

3.3 Project Portal

The project portal serves as the central hub for engagement with the project offerings – the teacher training, learner courseware, LiveHelp chat line, blog posts, podcasts, teaching resources, and research. Since mid-March, there has been a significant increase in visitors and page views. LiveHelp, synchronous chat, and offline message systems recorded significantly increased traffic and engagement with teachers

since March 15, 2020. Overall, the number of calls multiplied by a factor of almost 13 since mid-March.

In total, there were 724 live engagements during the period of March 15 to June 30, showing a first increase in demand around March 23 and a significant increase after March 29 with the trend continuing into the next three months. As a point of comparison, between February 1 and March 15, there were 23 live engagements, a 3.8 average per week. Also, the weekly average since March 15 has been 48.3 – that is, a 12.7 times weekly average increase. LiveHelp statistics reveal that durations of engagements were as much as 25 minutes for short calls and two hours 45 minutes for long calls after March 15. Before, short calls peaked at five minutes and long calls at 20 minutes.

3.4 Teacher Feedback

The following comments from teachers illustrate their efforts and engagements with mentors via LiveHelp chat and email support since the outbreak of COVID-19:

> Thank you for your heart-warming and reassuring email. I also would like to tell you that you have set for me an example of continuous patience in dealing with learners. Being overloaded and overwhelmed learning this software and at the same time teaching […], I found myself almost losing it by the end of the day (getting emails from learners at 10 pm). […]

> I would also like to acknowledge the [project] team – they are as you, a great group of committed individuals, instrumental in teacher training. I love the Teacher Forum – it is nice to see how much we as teachers learn and how not intimidated in sharing our success stories and our related problems we all are. I have been enjoying this! Thank you for being here with me!

3.5 Student Feedback

Preliminary results from a study conducted by the project with LINC students show that 72% of learners like learning online with the support of a teacher. Teacher presence is an important feature of online engagement in BL and OL. This also resonates in the findings of another small survey conducted during the COVID-19 crisis with students in an online LINC 3 class. LINC 3 roughly corresponds to Level 3 of the CLB: Students may have been in Canada for less than a year, and their English may be good enough to read the newspaper and understand some of the stories (Centre for Canadian Language Benchmarks, 2013). As in lower and higher LINC levels alike, students rely on the teacher.

As Fig. 2 illustrates, 85% said that the teacher helped them the most with their online course; however, 35% also said that they rely on family members, while 45% learn independently. Also, 55% indicated that they wanted more speaking practice

Is online learning

Response	Average	Total
better than in school?	20%	4
the same as in school?	60%	12
worse than in school?	20%	4

Who is your best helper with the online course?

Response	Average	Total
teacher	85%	17
family member	15%	3

I wish I had more . . .

Response	Average	Total
listening practice	15%	3
speaking practice	55%	11
reading practice	10%	2
writing practice	5%	1
spelling practice	10%	2
pronunciation practice	5%	1

Did you have help from other people (not the teacher) with online learning?

Response	Average	Total
Just a little, at the beginning.	10%	2
My family helps me if I don't understand something, but that's all.	35%	7
My family helps me all the time.	10%	2
I do everything by myself.	45%	9

Fig. 2 LINC 3 online student survey results of June 2020

online. Speaking practice is another aspect of OL that underlines the importance of online engagement with the teacher and other students. 85% also said yes to daily virtual meetings and 55% used mobile phones for these. To access the learner courseware, 30% used mobile phones, but 55% preferred a computer. 45% said that they spend 1–2 hours on homework every day and 80% said they had enough homework.

4   Discussion

The shift to OL has resulted in a flood of LINC providers requesting access to the learner courseware and the training for their teachers and learners. In addition, there are numerous teachers who had previously taken the training and did not continue but have recognized the value of OL for LINC program delivery. They reached out to the project mentors and resumed the training and implementation of learner courses with their students.

An effect of having significantly more teachers in the training has been a spike in the number of courses being requested on the learner courseware site. Previously, in a BL context, there was limited demand for a synchronous virtual classroom. This virtual classroom has proven to be a very popular and important alternative to meeting with students in person. Also, 20 webinars with a focus on leveraging the virtual classroom and other teaching tools in the learner courseware have supported

teachers. A teacher-only discussion forum was created for support and for sharing ideas, supplemented by links to other relevant teaching and assessment resources.

The exponential increase in courses set up on the learner courseware site is a highly significant indicator in terms of the impact of the PD. The formal training and informal supports provided by the project were means to the end of adopting the learner courseware and adapting teaching practices for OL. The 25/75 Rule of Learning (Grebow, 2002), PD activities at a ratio of 1:3 between formal and informal learning, yields most significant impacts on teachers' capacity to use their training experience in their practice and affect LINC program delivery. The project findings to date indicate that the surge in demand in teacher training (formal PD) resulted in mentoring and course development support (informal PD) at a ratio greater than 1:3.

Teacher presence is a hallmark of the Avenue-LearnIT2teach project's vision of BL and OL. The project's previous research by Cummings et al. (2019) had also demonstrated and substantiated Lawrence's findings (2014) of the potential of BL to extend learning and participation in connection with effective teaching practices and presence in OL (Anderson, 2018; Lowenthal, 2009; Scollins-Mantha, 2017; Swan, 2002). Interaction and connectedness with teachers are central to effective practices for developing student engagement online (Cummings et al., 2019, p. 6). OL program delivery can be inspired by the project's BL mantra that puts well-trained and supported teachers at the center of OL instruction.

5 Implications and Recommendations

Following Guskey's (2000) footsteps and recommendations, a focus on what must be implemented to gain the desired impact and the organizational support needed to facilitate implementation is necessary. The rapid response of LINC programs and teachers supported by the project provides a window into what needs to be implemented to build the capacity of programs to respond to future crises:

- OL in times of crisis results in increased demand of PD and supports. Recognition of increased teacher time for evolving professionalized practice (Costa et al., 2016, p. 6) is needed.
- PD needs to be prophylactic to build program capacity to respond quickly and adequately to changing circumstances. Stable funding for delivery programs and support organizations needs to be available.
- PD impact on teaching practice and program delivery remains small without informal learning and supports. A 1:3 ratio of formal to informal learning results in more significant impacts (Grebow, 2002).
- BL is a scalable online solution for teaching and learning. BL can respond to a growing need for OL and can be scaled back again to in-person BL models.
- Contingency plans with crisis management strategies are needed that include scalable BL and OL approaches for program delivery, teacher training, and course development supports.

- BL and OL put well-trained and supported teachers at the center of program delivery. Teacher presence is essential for successful BL and OL implementation and delivery.
- BL can be conceptualized as an alternative teaching paradigm that shapes teacher education (Zeichner, 1983). In-person and online instruction benefits teachers and students.

This chapter answers the call by Burde, Lahmann, and Thompson for more EiE research that addresses the "continued absence of research on education and disaster risk reduction" (2019, p. 82). It extends it to include adult education, specifically immigrant settlement and language learning. The Avenue-LearnIT2teach project's rapid upscaling of formal and informal PD and supports for BL and OL may inform models for crisis responses in the future. This model may aid in reinventing program delivery in ways that meet the needs of programs, teachers, and students in innovative, flexible, and sustained ways.

References

Anderson, T. (2018). *How communities inquiry drive teaching and learning in a digital age*. Contact North. https://teachonline.ca/tools-trends/how-communities-inquiry-drive-teaching-and-learning-digital-age

Burde, D., Lahmann, H., & Thompson, N. (2019). Education in emergencies: 'What works' revisited. *Education and Conflict Review, 2*, 81–88.

Centre for Canadian Language Benchmarks. (2013). *CLB level 3*. Retrieved July 7, 2020, from https://www.language.ca/clb-level-3/

Costa, T., Lohrenz, B., & McNeil, K. (2016). Settlement language priorities and embracing the future, in contact. *TESL, 42*, 1. From http://www.teslontario.net/uploads/publications/contact/ContactSpring2016.pdf

Cummings, J., Sturm, M., & Avram, A. (2019). *The effects of blended learning in LINC: A LearnIT2teach Demonstration Project*. New Language Solutions. https://learnit2teach.ca/wpnew/reports/Demo_Project_Evaluation_Report_WEB.pdf

Government of Canada. (2014). *Language classes funded by the Government of Canada*. Immigration, Refugees, and Citizenship Canada. https://www.canada.ca/en/immigration-refugees-citizenship/services/new-immigrants/new-life-canada/improve-english-french/classes.html

Grebow, D. (2002). At the water cooler of learning. In M. L. Conner & J. G. Clawson (Eds.), *Transforming culture: An executive briefing on the power of learning*. https://marciaconner.com/water-cooler-learning/

Guskey, T. R. (2000). *Evaluating professional development*. Corwin Press.

Kirkpatrick, D. L. (1994). *Evaluating training programs*. Berrett-Koehler Publishers.

Kreider, H., & Bouffard, S. (2005). A conversation with Thomas R. Guskey. *The Evaluation Exchange, XI*(4), 12–14. https://archive.globalfrp.org/evaluation/the-evaluation-exchange/issue-archive/professional-development/a-conversation-with-thomas-r.-guskey

Lawrence, G. (2014). A call for the human feel in today's increasingly blended world. *Contact, Research Symposium Issue*, 128–141. https://www.researchgate.net/profile/Geoff_Lawrence2/publication/273062702_A_call_for_the_human_feel_in_today's_increasingly_blended_world/links/5691651308ae0f9

Lowenthal, P. R. (2009). The evolution and influence social presence theory in online learning. *Online education and adult learning: New frontiers for teaching practices*. https://patrick-lowenthal.com/the-evolution-and-influence-of-social-presence-theory-on-online-learning/

Scollins-Mantha, B. (2017). *Cultivating social presence in the online learning classroom: A literature review with recommendations for practice*. http://itdl.org/Journal/Mar_08/article02.htm

Swan, K. (2002). *Building learning communities in online courses: The importance of interaction*. University of Albany. http://vark-learn.com/

Zeichner, K. (1983). Alternative paradigms of teacher education. *Journal of Teacher Education, 34*(3), 3–9.

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Working Toward Equity and Engagement in an Online Course for Future K-12 Teachers

Antoinette Gagné, Shakina Rajendram, and Dania Wattar

> *"When we made equity the bedrock of our work in the course, a greater sense of community and solidarity was fostered in our online communities."*
>
> *Gagné, Rajendram, and Wattar*

1 Course Transition and Context

The three authors describe and reflect on how, as part of their teaching of a mandatory course within the framework of the Master of Teaching program, they used a range of multimodalities to help TCs learn to support English learners (ELs) equitably in elementary and secondary schools. This course had been originally introduced in 2015, and several hundred TCs had already experienced it as a face-to-face offering taught by a dozen teacher educators. However, in March 2020, when we were just weeks away from the end of the semester, we transitioned this course to online delivery because of the lockdown required by the pandemic. Beginning in May 2020, we began to explore ways to ensure equity and engagement in this online course.

The Master of Teaching (MT) program at the University of Toronto is a 20-month graduate teacher education program with more than 800 TCs. The MT combines the study of educational theories, evidence-based teaching practices for equity, opportunities to conduct and use research, four practicum placements in local schools, as

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well as an optional internship in Canada or abroad at the end of the program. The MT Vision Statement specifies that: "As a community, our faculty, students and graduates share a deep commitment to all learners and the building of a more just, equitable and sustainable world" (OISE, n.d.). The core content of the *Supporting English Learner*s (SEL) course is outlined in the *Accreditation Resource Guide* (2017) as shown in Figs. 1 and 2.

2 Conceptual Framework

We consider our experiences as teacher educators using the Racial Literacy Development Model (Sealey-Ruiz, 2020) as a lens. The components of the framework, as seen in Fig. 3, involve educators being committed to caring for the communities they work in; recognizing the limits of their own ideologies and worldviews; examining the layers of their identities and how their privileged or marginalized statuses can affect their work; developing contextual awareness about the historical forces that shape their communities; exploring deep within themselves to uncover
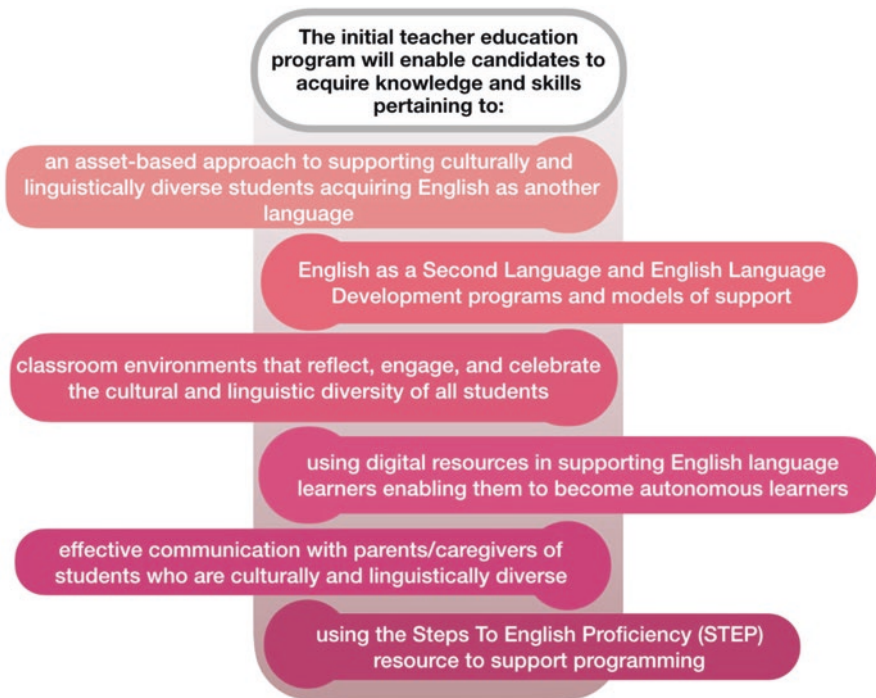
Fig. 1 Suggested content for the course on supporting ELLs from the *Accreditation Resource Guide*, page 21
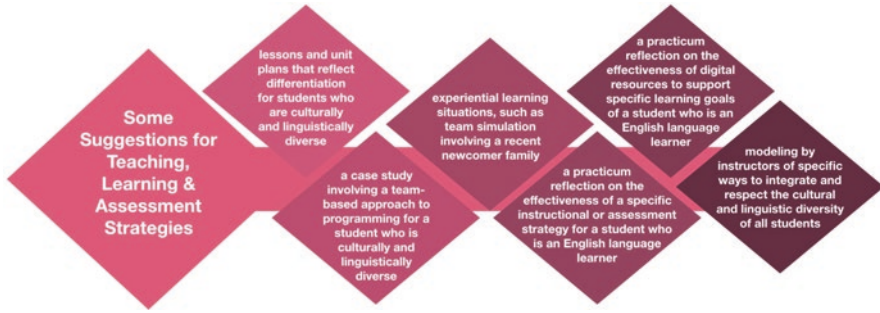
Fig. 2 Suggested learning, teaching, and assessment strategies for the course on supporting ELLs from the *Accreditation Resource Guide*, pages 21–22
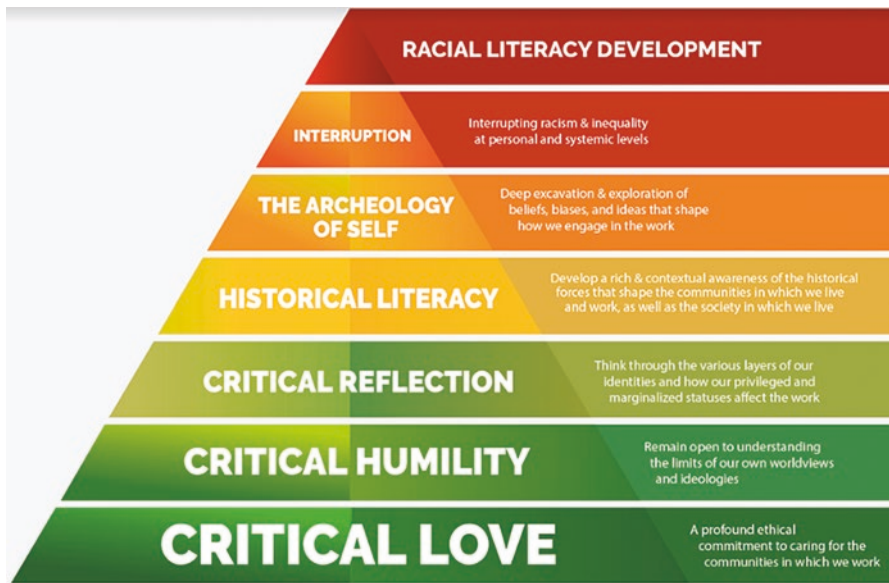
Fig. 3 Racial Literacy Development Model. Reprinted from Yolanda Sealey-Ruiz, by Y. Sealey-Ruiz, 2020, https://www.yolandasealeyruiz.com/archaeology-of-self. Copyright [2020] by Yolanda Sealey-Ruiz

their beliefs, biases, and ideas; and interrupting personal and systemic racism and inequality. In our conversations with each other, we reflected on our role as teacher educators in using equitable and engaging instructional strategies to prepare our TCs to develop the racial literacy necessary for teaching in diverse classrooms (Grayson, 2019).

3 Our Methodology

Multi-ethnography using Pinar's (1975) notion of "currere" is a dialogic method in educational and social research. Pinar understands *currere* as a way to examine one's experiences as curricula that can shape our understanding of particular phenomena. As such, in multi-ethnography, two or more people with overlapping experiences engage in a series of critical conversations followed by several cycles of interpretation to unpack the influence of their own curriculum of life on particular social issues (Norris & Sawyer, 2017; Sawyer & Norris, 2013).

We are the researchers, the authors, and the participants in this multi-ethnography. Our conversations about our attempts to place equity at the center of our SEL course provide a space for analyzing our practice. In Fig. 4, we share aspects of our identities, showing both the convergences and divergences which have enriched our initial professor-graduate student relationship, as well as our subsequent collaborative work on various research projects in our SEL course instructional team over four years.

The three conversations below depict our attempts at making our online course more equitable and engaging for TCs while allowing them to imagine how they might adopt equitable practices with their own K-12 ELs in the future. In our

	Antoinette	Shakina	Dania
Place of Birth	Canada	Malaysia	Syria
Languages	English, French, Spanish	English, Malay, Tamil	Arabic, English
Degrees	1977 Originally certified as a teacher in Quebec 1994 PhD in Curriculum	2010 BEd (Hons) in Teaching English as a Second Language 2013 MA in Special Needs Education 2019 PhD in Language & Literacies Education (LLE)	2006 MEd in Curriculum Studies 2018 Master of Teaching, Certified Teacher in Ontario 2014 PhD in Educational Policy
Current Roles	**Associate Chair** for Student Experience **Course Director** for the Supporting English Learners in the MT Program	**Assistant Professor**, Teaching Stream in the LLE and MT programs **Coordinator** of the Language Teaching field in the LLE program **Course & Curriculum Development Lead** for the Supporting English Learners course in the MT program	**Instructor** for courses including Supporting English Learners and Integrating Technology in the MT program **Research Associate & Project Manager** **MT Online Teaching Coach** **Elementary School Teacher & Academic Consultant**

Fig. 4 Some aspects of our diverse identities

conclusion, we revisit our conceptual lens with our enhanced understanding of the power of multimodality and identity-focused experiences and becoming more "vulnerable" when working with our TCs.

4 Our Conversations

4.1 Conversation 1: Our Transition Process

Dania   When our Winter 2020 semester neared the end and all of our MT courses abruptly went online, my biggest concern was the well-being of my students. This had been a tough year for TCs as they navigated through new provincially mandated Math exams required for certification as well as job action in schools.

The decision to offer all our teacher education courses online for the next year did not trouble me too much as my prior experience with distance education as a student, parent, and instructor made me confident that I could teach online with ease. However, I was concerned about how I could ensure a high level of engagement among TCs while contending with access and equity issues in virtual environments. I knew these would be important challenges for us in the MT program as I had firsthand experience working from home and competing with my spouse and three children for the same Wi-Fi network while also supporting my children in completing their school work remotely.

Antoinette   For several years, as course director, I brought up the possibility of offering some sections of this multi-section *Supporting English Learners* (SEL) course entirely online. Each time, the instructional team voiced their concern about the core course features which would be lost by a move to online teaching. In particular, they mentioned the importance of experiential learning afforded by course instructors modeling practices such as learning centers or small group conferencing. As such, when there was no longer an option, I moved quickly to bring together the instructional team for the multiple sections of the SEL course that we would be teaching online in May and June 2020.

Dania   Yes, I was grateful for these meetings and being able to connect to a team of educators going through similar struggles. I also tapped into resources available on the Teaching Online website (https://wordpress.oise.utoronto.ca/teachingonline/) (OISE, 2020) and attended webinars offered in response to the move online. In addition, my weekly support group meetings with a small group of instructors were very helpful as we shared our experiences on a continuous basis before, during, and after the spring semester. These meetings provided a forum for learning about different tools and strategies to support students while allowing me to reflect on my evolving online teaching practices and the issues of equity, access, and engagement.

Shakina Like you, I was also initially concerned about the transition to online teaching. I was comfortable with technology, but my biggest worry was how I could "humanize" my online teaching. In the physical classroom, it was much easier to engage and create rapport with my students, read the room and adapt my teaching based on students' nonverbal responses, and communicate my enthusiasm and passion for what I was teaching. With the climate being fraught with anxiety due to the COVID-19 pandemic, I realized that my students were facing various personal and professional challenges. It was vital for me to demonstrate to my students that I cared for them and was committed to their online learning.

Antoinette In an attempt to support our TCs during the transition to taking all their courses online, the MT program leadership surveyed the student body to find out about any prior experiences teaching and learning online as well as what devices and type of Internet they could access. Although the majority of TCs reported having some comfort learning online and being able to access the Internet, there was widespread concern over the potential loss of community and the ability to learn from peers and instructors by "seeing" good practices modeled in their classrooms at OISE as well as in partner schools.

Shakina As teacher educators, it was a good opportunity for us to model the skill of adapting one's teaching according to the evolving educational landscape and needs of learners. One practice that I tried to model was checking in with students at the start of each class. Some check-in prompts that I found helpful were sharing a rose, a thorn, and a bud (Gonzalez, 2020) (see Fig. 5), a high and a low (see Fig. 6), discussing what was filling their bucket and what was draining it (see Fig. 6), representing how their day or week was going through an emoji or hashtag, or expressing how they felt through a weather forecast (Raygoza et al., 2020). Checking in with each other helped us to build authenticity and camaraderie into our online community.

4.2 Conversation 2: Planning for Effective Engagement in the Course

Antoinette As it was a given that the instructional team for the SEL course valued the creation of community with equity and engagement as core values, we all agreed on combining synchronous and asynchronous learning with a focus on self-reflection through identity-focused activities and assignments. We hoped this would allow our TCs to understand ELs as complex individuals who live at the intersection of various identities and forms of discrimination.

Fig. 5 Rose, thorn, and bud activity from Mindful Schools. Reprinted from Mindful Schools, by A. Gonzalez, 2020, https://www.mindfulschools.org/inspiration/mindful-reflection/. Copyright [2020] by Mindful Schools

Fig. 6 Temperature check activities created using Pear Deck (2020) (https://www.peardeck.com/googleslides)

Shakina The online modality of the course provided innovative affordances for engaging students. For example, I used Mentimeter (n.d.) (see Fig. 7) and Pear Deck (2020) (see Fig. 6) to transform my static teaching slides into interactive presentations, and Kahoot (2020) to create fun quizzes (Fig. 8). By embedding quizzes, polls, media, exit tickets, and other activities into my slides, I was able to keep students engaged during our synchronous classes while making the critical content

Fig. 7 Interactive slide created using Mentimeter (n.d.) (https://www.mentimeter.com/)

Fig. 8 Quiz created using Kahoot! (2020) (https://kahoot.com/schools-u/)

accessible. For the asynchronous component of our course, I used Edpuzzle (2020) (see Fig. 9) to prepare interactive video lessons that my students could watch and respond to during their self-paced learning, and I used Padlet (2020) (see Fig. 10) to create an online discussion board.

Antoinette Can you give an example of how you adapted one of these identity-focused assignments and created opportunities for meaningful interactions among your TCs?

Shakina One identity-focused assignment required students to talk about their plurilingual repertoires with their peers. Giving students a choice in how to complete this assignment yielded positive results as many of them were inspired to produce
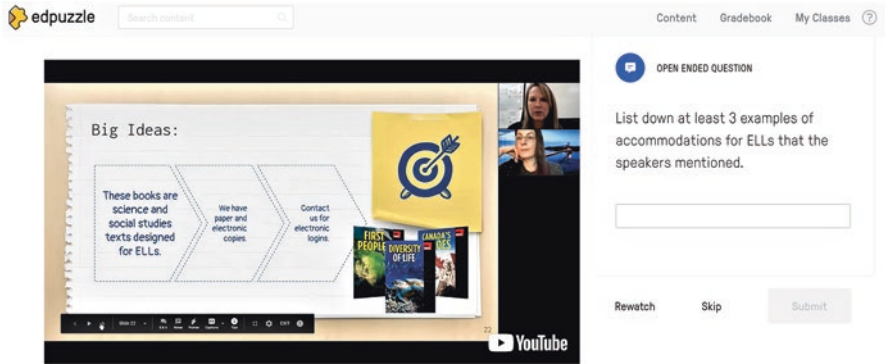
Fig. 9 Video lesson created using Edpuzzle (2020) (https://edpuzzle.com/content)
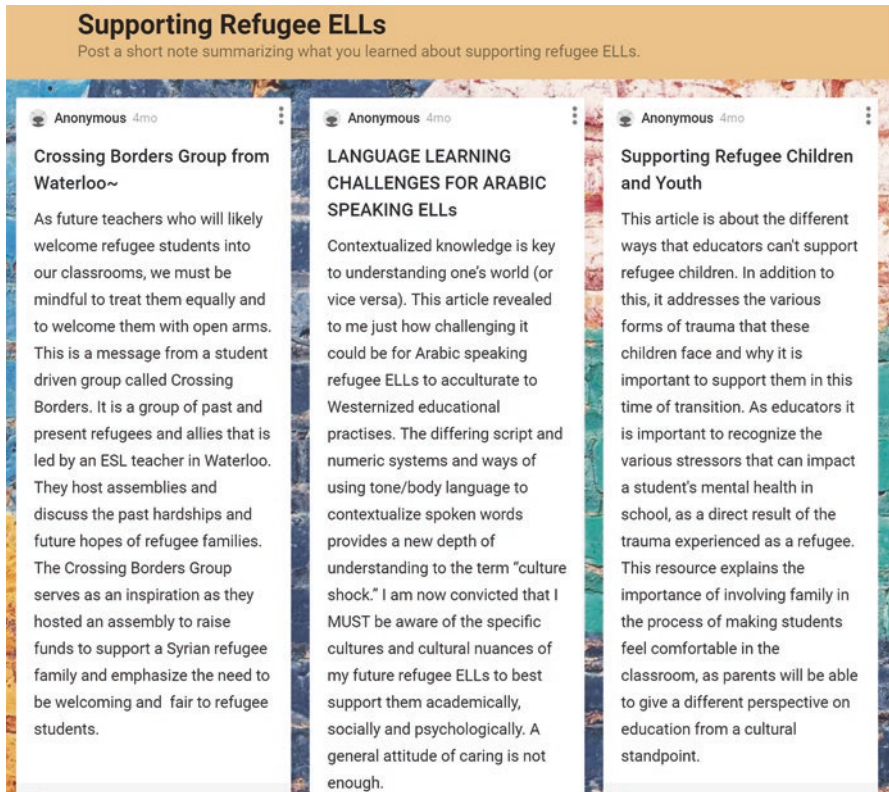
Fig. 10 Discussion board created using Padlet (2020) (https://padlet.com/)

creative pieces such as multimodal videos using Flipgrid (Microsoft, 2020) and Adobe Spark (Adobe, 2020), comics and storybooks using My Storybook (2014) and Pixton (n.d.), letters to their future grandchildren, poetry, spoken word, and songs.

Antoinette Just as we were starting to adjust to online teaching**,** other events were shaking the world and making inequities based on race and socioeconomic status much more evident. As the course director, I became aware that these events were impacting each of our TCs in different ways and realized that I needed to support the instructional team in developing strategies to ensure that each cohort of about 30 TCs felt safe in their new online learning communities.

Dania I was particularly concerned about fostering a safe learning environment for the diverse TCs in my cohort. I frequently used breakout rooms on Zoom to encourage student interaction and collaboration. However, I found the lack of non-verbal cues in the breakout spaces disconcerting because these would normally guide my decision-making as my TCs worked in groups. As a result, I surveyed my TCs about their preferences regarding placement in groups (see Fig. 11). Based on the survey results, I created a number of groups of different sizes that I could easily refer to when generating Zoom breakout groups. My TCs were grateful for the opportunity to share their preferences with me as they reported higher levels of engagement and more in-depth conversations when placed in groups with peers they felt safe with.

Another strategy I used to group TCs involved them choosing a stance on an issue for further reflection and discussion. For example, I redesigned the "four-corner debate" strategy (see Fig. 12) by replacing the physical four corners in a class with breakout rooms. Instead of moving to a physical corner in class, students used the "rename" feature in Zoom (2020) to indicate their stance on an issue. Building these options into the activities increased TC engagement, as well as their ability to consider multiple perspectives on various issues. Several students stayed online after class to tell me how engaging they found the four-corner activity.

Antoinette I think what is most powerful about the activities, apps, and processes you have described is that our TCs get to see you model strategies that they can adapt fairly easily for use in their practice where they will be working mainly online with elementary or secondary school students.

4.3   Conversation 3: Centering Equity in the Course

Shakina One week into our course, the murder of George Floyd took place. This ignited national and global protests and raised awareness about the Black Lives Matter movement worldwide. The issue of antiblack racism was brought to the forefront of discussions around equity and social justice. I knew that I could not stay

Fig. 11 Google Forms (Google, n.d.) used to survey students about their preferences for group placements

silent on this issue in my teaching. It was not enough for me to acknowledge and stand in solidarity with the movement. I needed to look inward and acknowledge my privilege, examine my own racial biases, and work to actively enact an anti-racist pedagogy in my teaching. I also needed to create spaces in my course for my TCs to do the same.

Step 1: Select an Opinion Statement or Issue
Step 2: Ask students to think about their opinion/ stance and whether they
strongly agree, agree, disagree, or strongly disagree with the statement

4-Corner Activity In a Physical Class	4-Corner Activity In a Virtual Class
Step 3: Create 4 signs that represent the different opinions and place each in a different corner in class (e.g. Strongly Agree, Agree, Disagree, Strongly Disagree)	**Step 3:** When students have decided on an opinion, they are asked to rename themselves with the opinion that best represents their stance_their name. E.g. Strongly Agree_Dania
Step 4: When students have decided on an opinion, they are asked to physically move to the corner that best represents their stance	**Step 4:** Students are placed in 1 of 4 breakout rooms based on their stance (e.g. one breakout room for students who chose "agree")
Step 5: Each group is given time to discuss why they chose this corner and to think about how they can defend their position	**Step 5:** Each group is given time to discuss why they chose this opinion and to think about how they can defend their position
Step 6: After discussion time, each group gets to present their argument then a debate takes place between the 4 different groups	**Step 6:** After discussion time, students are brought back to the main session. Each group gets to present their argument then a debate takes place between the 4 different groups

Fig. 12 Four-corner debate strategy steps in a physical classroom vs. a virtual classroom

Antoinette The marginalization of so many people in Canadian society was brought back into focus as a result of the thousands of Black Lives Matters marches around the world. Like you, I reflected on how we might work with TCs differently to ensure they could see that we were responsive to the loud cries for justice.

Shakina As a starting point, I felt that I should be vulnerable with my students and share my experiences as a woman of color and a first-generation immigrant in Canada. In response, several students began opening up about their own experiences of racism and marginalization, and the experiences of the minoritized immigrant and refugee ELs they worked with. This helped my TCs to see the intersections between language, race, and social class (Flores & Rosa, 2019). The critical dialogues that ensued were essential for centering equity in our work with supporting ELs, and developing pedagogies that challenge racial inequities in the classroom (Kohli, 2014). When we made equity the bedrock of our work in the course, a greater sense of community and solidarity was fostered in our online communities.

Antoinette Although I am a white, cisgender woman with a tenured position at the university, I try to connect with TCs by looking for common ground with them as a parent; a person raised across cultures, languages, and religion; a caregiver; or another aspect of my identity that might allow me to work more effectively with them and support them in learning to support ELs in schools.

Shakina A really helpful resource is the intersectionality diagram (see Fig. 13) which captures the different dimensions of experiences that individuals, families, and communities may encounter. Making reference to this wheel, I told my students that "I have lived in 3 countries on 3 continents, I identify as female, I am a multi-

Fig. 13 Graphic adapted from CRIAW/ICREF's Intersectionality Wheel Diagram published in *Everyone Belongs. A Toolkit for Applying Intersectionality* (2009, p. 6)

lingual, I did my elementary and secondary education in a language other than English, I am a visible minority and an immigrant in Canada, I have experienced discrimination because of my race and languages, etc." My students then took turns doing the same. This helped us to discuss the common identities that we shared, and to understand the perspectives of those with different lived experiences.

Dania I used my experience as an educator belonging to a visible minority in Canada as a springboard to create a space for students to discuss current issues in the classroom. Being vulnerable and sharing my journey as an immigrant in Canada allowed students to connect and share their experiences. Our initial conversation about inequalities was not an easy one to start. However, it helped me humanize the virtual space further and deepen our sense of community despite being physically apart.

Antoinette Witnessing the inequities that exist within our TC population and our graduate teacher education program has made me increasingly aware that I must use my privilege as a professor, curriculum leader, and senior administrator within the university to address systemic discrimination as it exists in various facets of our teacher education program.

5   Conclusion

We see Sealey-Ruiz's (2020) Racial Literacy Development Model as a lens to consider our pedagogical choices within the framework of the SEL course and explore ways to teach with "Critical Love" understood as "a profound ethical commitment to caring for the communities in which we work." As we use this model to map our SEL course, we find that the core topics and activities that survived the shift to the virtual classroom create learning opportunities involving the exploration of self, increased awareness of the varied life experiences of newcomer students and their families, and touch mainly on the "critical reflection" portion of the model where we "think through the various layers of our identities and how our privileged and marginalized statuses affect our work."

In our multi-ethnographic conversations, we have discussed how our own personal and professional identities impact the way we approach teaching this course and what topics we may emphasize as a result of our complex identities. Although we are mindful of the core content and strategies, we have become aware through this experience of how our unique identities influence how we relate to TCs in preparing them to work equitably with diverse learners in schools. We also realize that, as teacher educators, we are at different stages of readiness to support the racial literacy development of TCs within the framework of a single course. As the Master of Teaching program is deeply committed to all learners and the building of a more just, equitable, and sustainable world, we believe that all teacher educators across foundational and teaching method courses in the program need to work collaboratively to operationalize the development of racial literacy across the teacher education curriculum.

References

Adobe. (2020). *Adobe spark.* https://spark.adobe.com/
EDpuzzle. (2020). *Edpuzzle.* https://edpuzzle.com/
Flores, N., & Rosa, J. (2019). Bringing race into second language acquisition. *The Modern Language Journal, 103*(S1), 145–151. https://doi.org/10.1111/modl.12523
Gonzalez, A. (2020, June 21). *A mindful way to reflect: Rose, thorn, and bud*. Mindful Schools. https://www.mindfulschools.org/inspiration/mindful-reflection/
Google. (n.d.). *Google Forms.* https://www.google.ca/forms/about/

Grayson, M. L. (2019). Racial literacy is literacy: Locating racial literacy in the college composition classroom. *The Journal of the Assembly for Expanded Perspectives on Learning, 24*(4), 17–46. https://trace.tennessee.edu/jaepl/vol24/iss1/4/

Kahoot! (2020). *Kahoot!* https://kahoot.com/schools-u/

Kohli, R. (2014). Unpacking internalized racism: Teachers of color striving for racially just classrooms. *Race Ethnicity and Education, 17*(3), 367–387. https://doi.org/10.1080/13613324.2013.832935

Mentimeter. (n.d.). *Mentimeter.* https://www.mentimeter.com/

Microsoft. (2020). *Flipgrid.* https://info.flipgrid.com/

My Storybook. (2014). *My Storybook.* https://www.mystorybook.com/

Norris, J., & Sawyer, R. (2017). Introduction: The efficacy of duoethnography in teaching and learning: A return to its roots. In J. Norris & R. Sawyer (Eds.), *Theorizing curriculum studies, teacher education, and research through duoethnographic pedagogy*. Palgrave MacMillan.

OISE. (n.d.). *Why choose the MT program?* https://www.oise.utoronto.ca/mt/Why_Choose_MT_.html

OISE. (2020). *Teaching online.* https://wordpress.oise.utoronto.ca/teachingonline/

Ontario College of Teachers. (2017). *Accreditation resource guide*. OCT. https://www.oct.ca/-/media/PDF/Accreditation%20Resource%20Guide/Accreditation_Resource_Guide_EN_WEB.pdf

Padlet. (2020). *Padlet.* https://padlet.com/

Pear Deck. (2020). *Pear Deck.* https://www.peardeck.com/googleslides

Pinar, W. (1975). Currere: Toward reconceptualization. In W. Pinar (Ed.), *Curriculum theorizing: The reconceptualists* (pp. 396–424). McCutchan.

Pixton. (n.d.). *Pixton.* https://www.pixton.com/ca/

Raygoza, M., León, R., & Norris, A. (2020). *Humanizing online teaching*. https://digitalcommons.stmarys-ca.edu/school-education-faculty-works/1805

Simpson, J. (2009). *Everyone belongs. A toolkit for applying intersectionality*. Canadian Research Institute for the Advancement of Women.

Sawyer, R., & Norris, J. (2013). *Duoethnography: Understanding qualitative research*. Oxford University Press.

Sealey-Ruiz, Y. (2020). *The racial literacy development model.* https://www.yolandasealeyruiz.com/archaeology-of-sel

Zoom Video Communications, Inc. (2020). *Zoom.* https://zoom.us/

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Fostering Increased Understandings of Educational Caring in Research and Practice: COVID-19 and Beyond

Susan E. Elliott-Johns

> *Kindness in words creates confidence. Kindness in thinking creates profoundness. Kindness in giving creates love.*
>
> *Lao Tzu*

1 Living and Working Through Extraordinary Times

At the time of writing, July 2020, the entire world, and the world of education, is in a state of disequilibrium as we contend with the global pandemic we have come to know as COVID-19. Social life as we knew it has been entirely disrupted by this virus. Six months into a very different way of going about our daily lives here in Canada, we are confronted with numerous questions and associated dilemmas, all related to how we might successfully navigate an uncertain future in the midst of this (ongoing) global crisis. Specifically, the seeking of viable solutions to pragmatic problems in education no longer appears to have the benefit of more traditional approaches to planning processes; rather, rethinking and reimagining all manner of scenarios "in motion" has become the norm.

The pandemic has rapidly overtaken (more familiar) planning processes. It is now essential to be able to plan and proceed ahead of the curve – frequently without having the (usual) prerequisites in place. This is not necessarily a bad thing, in my opinion, as it unleashes opportunities for us to think, act, and learn differently moving forward. That said, as far as teaching for these new and uncertain times is concerned, my inbox continues to be bombarded daily with opportunities to enroll in "short courses" and all manner of professional learning for faculty transitioning to

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online delivery as a direct result of pandemic-related university policies and procedures. Surveying a number of these offerings promising "quick fixes" in terms of best practices brings to mind the lure of tips and tricks, and the technical rational rather than long-term change. Thus far, only one, for example, has indicated recognition of the important role for empathy-based course design and delivery in online education.

A brief review of topics located in current news articles also reveals discussions running the gamut from figuring out how to effectively prepare and teach courses online to thoroughly revamping the entire academic system as we know it – i.e., not simply returning to former routines and procedures *post-pandemic*. Other COVID-19-related issues for Canada's universities include considerations of best practices and ways forward in supporting international students; research funding; mandatory mask policies; complexities inherent in returns to campus life (formal and informal); updates on course delivery models; contact tracing apps; testing, testing, testing; academic misconduct and the challenge of administering exams during a pandemic; and libraries offering curbside pickup. All of these complex issues are currently presenting themselves as integral to planning for future life and times in higher education – not only in Canada but globally.

In the July to August 2020 issue of University Affairs, Moira MacDonald (2020) interviewed seven academics from across Canada, in a range of roles, asking them to reflect on when they realized the world had changed. Their stories offer compelling emic perspectives from folks "caring" for students' health and safety, on yet another "front line":

> Exhausting days, sleepless nights, overwhelming uncertainty and a paramount concern for the welfare of students, faculty and staff, Universities were among the first organizations to shut down in-person operations and pivot rapidly to remote teaching and learning in response to the COVID-19 global pandemic…. These seven stories … demonstrate the ingenuity, tenacity and care that administrators, faculty, staff and students showed for one another and their communities through the most challenging episode faced by universities in decades. (p. 14)

Nested in this broader context, my chapter narrows the focus and examines other potential manifestations of "caring" as part of online teaching and learning in crisis situations. By employing more of a zoom lens, theoretically and through reflexive inquiry, I explore the relevance of relational pedagogy and theory of critical care in higher education teaching spaces. More specifically, drawing on my own practice and positioning myself as a "caring" educator who strives to meet the needs of graduate students through technologically sound innovations and educationally meaningful experiences, I also discuss conceptualizations of hard and soft caring (Antrop-Gonzalez & DeJesus, 2006). Whether in an age of crisis, or in more usual times, I fundamentally believe caring "is the very bedrock of all successful education" (Noddings, 1992, p. 27). Additionally, in my own lived experience, when care is located at the center of learning and teaching processes, this can also build the capacity to move us closer toward transformational education.

2   Concerns and Issues

There continues to be a lack of available research linking caring with learning in higher education contexts (Mariskind, 2014; Zembylas et al., 2014). In 2010, Christensen Hughes and Mighty published a seminal text entitled, *Taking Stock: Research on Teaching and Learning in Higher Education*. At the time, I recall recommendations from this work and their "call to action" being received with great enthusiasm. Ten years later in 2020, sadly, I have not seen a great deal of evidence indicating uptake of the authors' advocacy for significant change within higher education. However, key points in this work still align with my own thinking that we really need to *rearticulate* what we are trying to achieve in our respective institutions of higher education (and, while beyond the scope of this chapter, at *all* levels of organized education), including a commitment to deep and transformational learning, and strive to uncover how we work to accomplish that – and why. In my view, the promotion of engaging, pedagogically sound virtual learning spaces, supported and enriched by an ethic of caring, also continues to be of primary importance.

So, what are some of the characteristics of pedagogical behavior and exemplifiers of caring in practice? How do we interpret and understand the notion of *care* in higher education, and *critical care* relevant in an age of crisis, at that? For example, does care get a "bad rap" as being something of a soft option? Or is it regarded as an integral part of a robust approach to learning and teaching? For me, it's the latter: I truly believe an ethic of care is the soul of teacher-student relationships. To elaborate, I hold, and try to clearly convey *with kindness*, consistent expectations of high academic standards, individual responsibility for learning, effective communication, trust, respect, and collaboration – and a *collective* responsibility for a positive learning environment – whether working online or f2f. The belief that the care I provide to my students makes a difference in their lives and work is one of the driving forces that has kept me teaching for over 40 years.

Antrop-Gonzalez and DeJesus (2006) investigated concepts of soft caring (e.g., a teacher feels sorry for a student's circumstances and lowers expectations accordingly) and hard caring (e.g., consistent demonstration of supportive, instrumental relationships and the sustaining of high academic expectations). Exploring enactments of "hard caring" in theory *and* in practice – for example, what does it look like? sound like? feel like? and why will it be equally important to teaching, learning, and research related to effectiveness of online learning/teaching moving forward, post-COVID-19? – led to some disruption of my own assumptions about the meaning of "caring" when developed as a pillar of authentic pedagogical practice. For example, as Ropers-Huilman (2009) writes, "Power and caring were both part of my responsibility as a feminist educator. I had to discover how to enact them in a way that was useful both for students and for myself." In 1992, Noddings also argued that to be considered an act of care, a teacher's action must also be acknowledged by the student.

As a professor who has worked with graduate students in online environments for several years now, students who are frequently experienced professionals and

hail from a variety of different educational contexts, I contend there is an urgent need to foster more reciprocal relationships between those who consider ourselves "caring" teachers/facilitators, and our students. In other words, it is not enough for me to *assume* students interpret my interactions as such; rather I also need to find ways to effectively incorporate students' conceptions and understandings of "teacher caring" and attend to how these are envisioned and enacted. Opening up "…possibilities that students conceptualized caring in other ways, including caring about issues that were important to them" (McKamey, p. 414), is thus facilitated as a relational aspect of the educational experience. As a result of her narrative analysis of students' stories and meanings related to "teacher caring," McKamey (2011) also posits:

> In this line of thinking, the stories people tell about caring reflect and reveal assumptions that they have about the way the world works, e.g., what knowledge should be valued, what kinds of relationships are important, and what it means to express caring in school. (p. 413)

3 Exploring the Landscape of Educational Care

Jule (2019) argues, along with many of her other contributors, that "schools must be places where students feel safe, accepted, and respected. Compassion may sound sweet, but it is so much grittier than the word often connotes. Compassion involves strength and persistence. It is the hard, everyday discipline of finding ever-new ways to engage all (participants) in the learning experience" (p. 7). It is the everyday work of what I discern as building capacity in digital learning spaces for all my students to be successful – i.e., as a direct result of their feeling safe, accepted, and respected – that I explore and articulate here. As Lindsay (2018) also writes, "How we behave, what we do, and how we interact in the classroom all go to the heart of who we are as educators" (p. 55).

3.1 The Importance of Reciprocity and Meanings of "Caring" Held by Students

The kinds of one-dimensional feedback received in student opinion surveys at the end of courses offer some insights into meanings participants might hold, but these surveys are not designed to foster reciprocal dialogue. When students take the initiative to engage in sending a personal communication, we can sometimes learn a little more about their ways of looking at our work – if we take the time to do so. Selected personal communications of this nature received recently include the following examples:

> Hi Prof. Elliott-Johns,
>   I trust that this message finds you well, though I know that you must be busy with all the marking! I just wanted to send a quick note to thank you for your attentiveness, and for your

valuable feedback on all the work that I have submitted. You fostered such a safe space that made me comfortable enough to share such personal experiences in both my assignments and my discussions. You have been one of the most considerate and perceptive profs that I have had in the program so far, and am very grateful for having you as an educator. I hope in the future to have more courses with you!

Thank you again, for everything.

Kindest regards,

S.

Hi Dr. Susan,

From the bottom of my heart and soul, a million thanks for being an inspiration to our reflexive journey. You have guided in every step of the way and that is something very commendable. Keep inspiring and motivating your students.

Sincerely,

F.

Hi Susan,

Thank you for all your support and patience. This has been a challenging few weeks for numerous reasons, but the course was perfect timing for me too with the content and reflection pieces.

All the best! I hope we cross paths yet again! Thanks for your kindness and all your support as well.

M.

However, these are all "after the fact" and still limited in terms of lending themselves to any meaningful conversation about deeper understandings of caring. For example, it would be helpful to know more about how (and when?) "attentiveness" was perceived and if/how "being an inspiration" was also understood as caring. The perception of "kindness" experienced, while still maintaining the achievement of academic standards, might also be something worth further investigation (Shields & Reid-Patton, 2009).

3.2 Toward Researching Reciprocal Understandings of Caring in Practice

When thinking particularly about examples of "hard caring," reflections led to revisiting previous collaborative self-study research into "storied course outlines" (Elliott-Johns & Tessaro, 2012), and rich insights gleaned into *we teach who we are* (Becker, 2019; Chambers, 2004; Palmer, 1998). For example, analysis of the intentional design of a course outline seeking to meet the needs of all students via the question "Does the course outline imply anything about how teacher candidates will be treated in the class?" rendered the following excerpt from the data:

Susan's outline was crafted to reinforce the idea that teacher candidates would be treated as colleagues with professional standards in place:

Intentional choice of terminology in my course outline and during professional seminars (for example, I prefer to use seminars than "classes". This term conceptualizes a different mindset and related expectations for "professional teacher behavior" as compared

with "university student behavior"). I am a passionate advocate for teacher candidates becoming more critically aware of the myriad ways of knowing, being in the world, and understanding. I endeavor to treat them as adults, colleagues, and encourage them to be critical thinkers who recognize and acknowledge diverse ways of knowing in their own lives and in their work as teachers. (p. 96)

While I see this excerpt as clearly illustrating purposeful efforts to demonstrate care for my students over time, it also signals a critical missing element: the opportunity to capture any of the students' interpretations/understandings of this "care," and perspectives they may also have held. With future research and practice in mind, I adapted the "7 Cs of caring" (Roddy & Dewar, 2016; Dewar, 2011), shown in Fig. 1, as a catalyst for fostering caring conversations as part of reflexive dialogical online learning.

Related to the ethic of caring and development of new discoveries, insights, and possibilities in my own practice – not only during but also post-COVID-19 – I increasingly regard this approach as having considerable research potential. Fostering more reciprocal relationships in coursework with graduate students, thus promoting reflexivity and a relational constructive perspective, might enable further explorations of participants' experiences of my being a "caring teacher."

Roddy and Dewar (2016) developed the 7 Cs approach in furthering their understandings of self-reflection and reflexivity – and the distinctions between these in practice. Their 7 Cs framework includes being courageous (what helps in being courageous?); connecting emotionally (how do I feel about_____?); being curious

The 7 Cs	Questions for reflexive dialogue
Being courageous	*What might help us to feel able to take a risk? *What question is begging to be asked? *What story is longing to be told?
Connecting emotionally	*When did I experience strong emotion? *What if I told others how I was feeling? *How do I feel about being in the group? *How would I like to feel?
Being curious	*What caught our attention? *Where might it be leading us? *When were we most energized? *Who would we like to hear more from? *What assumptions or contradictions have come to light?
Collaborating	*With whom do I feel heard? *Who brings out the best in me? *What might help us come together more? *What ideas/actions would we like to build on? *How do we want to be involved?
Considering other perspectives	*How might I express myself in a way that is considerate of others? *How can we ensure that those who are not present are still included? *What alternative views might we explore?
Compromising	*What would we like to let go of today? *What promises feel possible?
Celebrating	*What do we value? *What do we do well? *What mistakes might we like to celebrate? *What new ideas would we like to bring forward into the future?

Fig. 1 Fostering caring conversations in online learning. (Adapted from Roddy & Dewar, 2016)

(what questions might I ask of myself or others (including readings) that might help inform my understanding?); collaborating (what existing frameworks could help to inform my work?); considering other perspectives (what other perspectives are there about the concept(s) of_____?); compromising (what ideas has it been helpful to let go of?); and celebrating (what aspects of our work in _____ would we like to celebrate?). In turn, each of these could be employed to generate further questions and promote reflexive dialogue/conversation as part of reimagined approaches to authentic caring (see also Fig. 1).

The 7Cs, as utilized by Roddy and Dewar (2016), enabled the development of reflexive questioning and exploration of lived experiences of participants in their development of reflexivity. I suggest they could also further research and practice in discerning new ways of "looking" (Grumet, 1998) at our own work as caring teachers, from the perspective of those we profess to care for, in turn, offering new opportunities to uncover valuable insights as we test and try out conversations about caring with our students – guided by the 7 Cs. As Gehrke and Claes (2017) write, "Leadership is about constantly working on what one discovers about oneself in relationship to others" (p. 382).

4   Concluding Thoughts

It is becoming evident, not only because of COVID-19 but also as a direct result of increasingly innovative (technological) approaches to higher education, that we need to continue co-creating learning experiences and adapting to learning and teaching in reconfigured contexts, locally, nationally, and internationally. Along with other aspects of future research and practice, *caring* needs to be more closely examined and rearticulated. For example, how might our increased understandings of "caring" enrich and enhance lived experiences of graduate studies, moving forward?

In their compelling study, Walker and Gleaves (2016) identified four emergent categories in the data (relationship at the center; compelled to care; caring as resistance; and caring as less than). These four categories were combined in the construction of an integrative model of the caring teacher in higher education, thus theorizing how teachers privileged caring. I too recommend untangling "caring teaching" with the construct of "the caring teacher" as a topic for future research, exploring their finding that "(the) visible recognition as a 'caring teacher' was subject to constant inner clarifications and qualifications about who they were, who they thought they should be, and how they thought they should be acting" (Walker & Gleaves, p. 73).

I believe reimagined opportunities to examine and rearticulate education as shared responsibility and caring as an ongoing process – albeit one seriously disrupted by COVID-19 – must include the promotion of authentic conversations around cultivating an ethic of caring (Noddings, 2012a, b) in creative, imaginative, nontraditional approaches to learning and teaching that invite and include student

voices. The era we are currently living through will, inevitably, present complexities long after COVID-19. Frameworks like "the 7 Cs of caring" offer tools to build capacity for reflexive, transformational learning and teaching moving forward. Furthermore, replication of studies like the one conducted by Walker and Gleaves (2016) will enhance and inform opportunities for deep dialogic learning and uncovering of characteristics of pedagogical behaviors and "caring exemplifiers" in practice (e.g., listening, showing empathy, supporting students, high expectations in standards of work and behavior) – thus also perhaps avoiding the lure of those superficial "tips and tricks" in times that call for caring teachers who possess appreciations of pedagogy for deeper, longer-term approaches to best practices and educational change.

References

Antrop-Gonzalez, R., & DeJesus, A. (2006). Toward a theory of critical care in urban small school reform: Examining structures and pedagogies of caring in two Latino community-based schools. *International Journal of Qualitative Studies in Education, 19*(4), 409–433.

Becker, C. (2019). Always becoming: Life as self-study. In E. Lyle (Ed.), *Fostering a relational pedagogy: Self-study as transformative practice* (pp. 191–200). Brill.

Chambers, C. (2004). Research that matters: Finding a path with heart. *Journal of the Canadian Association for Curriculum Studies, 2*(1), 1–19.

Christenson-Hughes, J., & Mighty, J. (Eds.). (2010). *Taking stock: Research on teaching and learning in higher education*. McGill-Queen's University Press.

Dewar, B. (2011). *Caring about caring: An appreciative inquiry about compassionate relationship centred care*. Unpublished dissertation, Edinburgh Napier University.

Elliott-Johns, S. E., & Tessaro, M. L. (2012). Storied course outlines: Uncovering and understanding assumptions about teaching and learning about teaching. In *Conference Proceedings of the Ninth International Conference on Self-Study of Teacher Education Practices: Extending inquiry communities: Illuminating teacher education through self-study* (pp. 94–97). Brigham Young University.

Gehrke, B., & Claes, M. T. (2017). Leadership and global understanding. In J. Marquis & S. Dhiman (Eds.), *Leadership Today: Practices for personal and professional performance. 371-385*. Springer.

Jule, A. (2019). (Ed.). *The compassionate educator: Understanding social issues and the ethics of care in Canadian schools.* Canadian Scholars Press.

Lindsay, P. (2018). *The craft of university teaching*. University of Toronto Press.

MacDonald, M. (2020). Our pandemic moment. *University Affairs, 61*(3), 12–21.

Mariskind, C. (2014). Teachers' care in higher education: contesting gendered constructions. *Gender and Education, 26*(3), 306–320.

McKamey, C. (2011). Uncovering and managing unconscious ways of "looking": A case study of researching educational care. *Psychodynamic Practice, 17*(4), 403–417.

Noddings, N. (2012a). The caring relation in teaching. *Oxford Review of Education, 38*(6), 771–781.

Noddings, N. (2012b). The language of care ethics. *Knowledge Quest, 40*(5), 52–56.

Noddings, N. (1992). *Caring: A feminine approach to ethics and moral education*. University of California Press.

Palmer, P. (1998). *The courage to teach: Exploring the inner landscape of a teacher's life*. Jossey-Bass.

Roddy, E., & Dewar, B. (2016). A reflective account on becoming reflexive: The 7 Cs of caring conversations as a framework for reflexive questioning. *International Practice Development Journal, 6*(1), 1–8.

Ropers-Huilman, R. (2009). Scholarship on the other side: Power and caring in feminist education. In Robbin D. Crabtree et al. (Eds.). *Feminist pedagogy: Looking back to move forward*, 40-58. John Hopkins University Press.

Shields, C., & Reid-Patton, V. (2009). A curriculum of kindness: (Re) creating and nurturing heart and mind through teaching and learning. *Brock Education, 18*(2), 4–15.

Walker, C., & Gleaves, A. (2016). Constructing the caring higher education teacher: A theoretical framework. *Teaching and Teacher Education, 54*, 65–76.

Zembylas, M., Bozalek, V., & Shefer, T. (2014). Tronto's notion of "privileged irresponsibility" and the reconceptualization of care: implications for critical pedagogies of emotion in higher education. *Gender and Education, 26*(3), 200–214.

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The Evolving Role of the Teacher-Student as a Guide in the Quest for Purpose

Ludovica Mazzucato

> *I believe that the answer to all questions is this. That if a tiny ant can climb to the top of that tree and navigate through the depth of its roots, then it must be possible to ascend as it is to descend.*
>
> *Ludovica Mazzucato*

1   The Measure of All Things

We may endlessly fear the unknown, pondering where we lost control. Alternatively, we may ascend to new perspectives. One minuscule entity, named COVID-19, cracked the walls of our systems, pushing us to direct our collective efforts to rise from what once made sense and no longer does (Hegel, 2019 ed.; Wahl, 2016 ed.) and to create a new normal that places the human being at the center (Kattsoff, 1953).

In times of such transitions, educators embrace the flexibility of a changing reality (OECD, 2020), enabling the sprouting of a dialogic nature of the language in the classroom (Bakthin, 1981 as cited in Burbules and Bruce, 2001; Burbules, 1993; OECD, 2020), thus propelling the system toward a collaborative co-construction of knowledge to craft opportunities for current and future generations (Athayde et al., 2017; Schwab, 2016). In a sense, COVID-19 has placed the human being back at the center of our educational systems, exemplifying Protagoras's thoughts that "[o]f all things the measure is Man, of the things that are, that they are, and of the things that are not, that they are not" (Plato, Theaetetus 151e, VII.60, i.e., DK 80B1). Through these reflections, I argue that COVID-19 triggered a mass shift in our educational system, much like an example of the universal law of entropy, thus moving beyond isolated cases of teachers-students and toward a systemic change of education,

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where this collaborative, cross-disciplinary, and open-ended approach to the teaching-learning process is gradually gaining momentum, ultimately shaping the role of the teacher-student as a guide.

In this regard, the student-teacher aims to foster the independent quest (Brennifer, 2007) for mastery (Arrien, 1993; Lao Tzu, 2019 ed.) of critical knowledge, beyond hierarchical roles (Burbules & Bruce, 2001) or compartmentalized curricula (Luthra & MacKenzie, 2020). The teacher becomes the student and vice versa, exchanging also, and above all, guidance in learning to learn (Wood, 2000) in order to be one's own teacher (Mayes, 2005), identifying the questions that matter in one's life (O'Donohue, 1997), living the spirit of a quest, following the self-existent fire (Plato, 2008 ed.), and mastering the self-awareness that leads to higher consciousness (Giles & Yates, 2014; Mayes, 2002). In other words, the student-teacher as a guide understands that in education as in life (Clandinin & Connelly, 1987), it is the courage and depth of the questions that provide meaning to the quest itself (Sagan et al., 2013) ed.).

1.1   Conceptual Background

In this exploratory work, I reflect upon the impact of COVID-19 in accelerating the dynamics shaping the role of the educator (Table 1) and explore the evolution of education toward a model of continuous inquiry for paths of expansion, wisdom, and experiential learning (Dhand et al., 2016) that unite life skills and academic outcomes (Table 2).

In addition, this investigation opens a debate about the trends (Harrigan, 1986) that shift our way of conceiving education as the Homo concors move into a truly accessible platform of knowledge (Faure et al., 1972). These dynamics materialize the role of the teacher as a guide toward understanding and fulfilling the student's life purpose (Faure et al., 1972). I mainly draw a parallel between life skills and academic learning outcomes (Table 2), and how they are configured by the same questions that inspire our very search for knowledge and growth as collective humankind (Combs & Krippner, 2008).

1.2   Methodology and Recommendations

The research is based on informal qualitative approaches and secondary data in the form of conceptual review and working hypotheses. The methodology poses limitations in terms of application for immediate decision-making and generalization. The reasoning behind deploying this methodology is to provide insights vital to further investigations and gain knowledge of the phenomenon while maintaining a deliberately creative approach, thus allowing for innovative outcomes. The research paves the way for further research through systematic case studies.

Table 1 The dynamics shaping the role of the teacher as a guide in the co-creation of an inquiry path

Trend	Impact	Applied skills and learning outcomes
(I) Cross-pollination	Fluid contamination of knowledge fields – both theoretical and applied.	• Flexibility • Curiosity • Resilience • Vision quest • Creativity • Compassion
(II) Digital, remote, and decentralized learning	Widened access to opportunities, such that the student-teacher is empowered to choose a path based on the criteria relevant to their life's mission.	• Cross-cultural communication • Empathy • Dialogic pedagogy • Empowerment • Accountability • Self-reliance
(III) The learning renaissance	The renaissance of the joy of learning. The teacher and the student exchange roles in a continuous negotiation, co-crafting a new, shared space of discovery – the *epsilon-naught.*	• Self-worth • Collaboration • Dialogic pedagogy • Divergent communication • Vision quest • Accountability • Trust
(IV) Accessibility, vastness, and extemporaneousness	Access to virtually infinite realms of knowledge. The process of learning is open to contradicting previous layers of understanding.	• Curiosity • Humility • Appreciation • Patience • Self-motivation • Time management • Negotiation • Self-worth • Compassion

2   Key Dimensions of Teaching-Learning as a Collaborative Journey

While COVID-19 may be identified as the trigger that accelerated the shift from pre-constituted roles to a collaborative learning process, here I offer an introduction to the dynamics that give birth to an evolved spectrum of learning-teaching skills and competencies to be mastered in this process (Table 1). This framework focuses on the open-ended inquiry and is supported by the concept of teacher-student as a guide.

The considerations included in Table 2 stem from the aforementioned analyses. Here, life learning and formalized education interconnect to impact the students and

Table 2. The key dimensions of teaching-learning as a collaborative journey

Realm of quest	*Epsilon-naught*: the co-created space	Manifestation	Learning activities
(I) The journey and the purpose	*Learning to make sense of time*	Focusing on the extemporaneous nature of exploration to master the lessons relevant to the negotiation of time and space. Appreciating and mastering one's sense of time as a perceived, subjective measure of both action and nonaction. Moving beyond expectations and the dichotomy of a mindset of punishment-reward/right-wrong and expectations.	(A) Inner time: timed presentations and reflections on time perception. (B) Collective time: assign the same activity to the individual and the team to allow them to experience the perception of time – alone versus in a group. (C) Time flow: no-clock activity/class to experience the perception of time flow versus time measurement.
(II) Knowledge and wisdom	*Learning to contextualize*	Learning how to connect knowledge through cross-pollination. Applying creative and critical thinking to identify salient moments of learning. Unlocking opportunities for further development by translating subject-specific knowledge into wisdom applicable to other areas of life. Appreciating one's past, honoring the present, and trusting the future as one fluid dimension. Finding meaning in one's use of talents and abilities for self-growth.	(A) Cross-referenced mind maps: students create visual recaps of the content, including references to other subjects/areas. (B) Screening: students identify keywords and create questions using these keywords. (C) The metaphor: introduce a theme, e.g., the universal laws of physics in the marketing course. Students are asked to research the theme and find connections within the course subject.

Table 2. (continued)

Realm of quest	*Epsilon-naught*: the co-created space	Manifestation	Learning activities
(III) Mindful questions and intention setting	*Learning to manifest opportunities*	Learning to articulate mindful questions that trigger changes in perspective. Manifesting the answers in the form of further inquiry. Accessing a process of continuous development like a spiral where every ring denotes a deeper understanding to the point of being able to extrapolate concepts applicable to other areas (cross-pollination).	(A) The HW: ask the how and the why of the subject matter, e.g., why does the team take this decision? How does the demand change in this context? (B) The spiral: select a theme, and ask a first why question to which the students answer with another why question rather than a conclusion. This continues in a spiral of queries leading to the core of the matter (this exercise is also recommended for "(5) Becoming one's own teacher")
(IV) Contrast and mirroring	*Learning to be visionaries*	Learning to formulate ideas, concepts, and images by removing the obstacles to the visionary mind. Challenging the concept of innovation, by removing the underlying assumptions that (a) to find a truly groundbreaking solution, there must be a problem (contrast); and (b) if ideas are excellent, they must already exist and therefore they lack uniqueness (mirroring).	(A) Self-assessment: the student selects the assignment, fulfills the task, presents, and explains the reasons for their choice. (B) No-limitation project: the student is asked to carry out a task where there are no set limitations of time, subject, format, length, or guidelines, besides presenting the work to the class at the end of the course.

Table 2. (continued)

Realm of quest	*Epsilon-naught*: the co-created space	Manifestation	Learning activities
(V) Becoming one's own teacher	*Accountability, guidance, and power delegation*	Learning to deploy coaching skills to increase self-awareness and accountability. Expanding the notion of knowledge and guidance beyond hierarchical roles and predetermined dynamics. Empowering each other to co-craft the path of inquiry Empathizing. Experiencing a renewed sense of awe in the quest for knowledge.	(A) Learn by teaching: the student teaches others by preparing part of the class content. (B) Quiz yourself: the student creates questions and answers about the content. (C) Appreciate feedback: students provide feedback by articulating questions and comments. (D) Empathize: the student coaches the peers and takes accountability for the outcome of their learning efforts.

teachers as members of society, seeking to expand their consciousness in such a way that comprises diversity within identity, the universal within the singular (Faure et al., 1972), and expression within inner reflection. They recognize and empower each other's worth beyond the hierarchical roles. In that shared space, epsilon-naught, they advance the quest for knowledge. Extrapolated from my own experiences in the role of teacher-student as a guide in and outside of the classroom, this (Table 2) also provides examples of relevant learning activities.

2.1 Cross-Pollination

In light of COVID-19, the evolution of the educational landscape paves the way for a new role of the teacher by pushing the boundaries of curricula, delivery modes, and expectations. An increasingly complex world demands flexibility. It requires the distinct ability to connect the dots (Table 2) across domains (Athayde et al., 2017; Rubenson, 1982; Smith, 2001) expanding beyond subject-matter expertise into the process of cross-pollination (Dhand et al., 2016; Kupferschmidt, 2000; Vandebroek et al., 2020), as described in Table 1, to unlock collective innovation. "Uniting Homo Sapiens and Homo faber is not enough; such a man must also feel in harmony with himself and others" (Faure et al., 1972, p. xli). For the Homo concors, siloed knowledge does not suffice.

Therefore, society seeks a learning methodology that allows us to move swiftly and effectively across industries to shape the life's journey or Bildung (Hegel, 2019 Ed.). In a contextualized undertaking of a global, highly interconnected and

negotiated reality, teaching becomes the act of co-creating the quest for questions relevant across multiple topics and timelines. In this perspective, learning-teaching becomes the art and the science of mirroring the potential of the seed that already holds the essence of the tree (Saban, 2006), so it may grow in its own legacy and path, rooting through purpose and branching through diverse tools. The goal is to enable every student to find and fulfill their life purpose beyond their professions, titles, and careers, and toward a human-centered model. The UNESCO explains this: "[t]his age, which has been called that of the finite world, can only be the age of a total man: that is to say, man entire and all of man" (Faure et al., 1972, p. 39).

2.2   *Digital, Remote, and Decentralized Learning*

The COVID-19 emergency prompted institutions to accelerate their digitalization to offer students access to high-quality education (Bernard et al., 2004; Li & Lalani, 2000; Taparia, 2020; Wuensch et al., 2008; HolonIQ, 2020) while coping with the sudden shifts in their daily lives (UNESCO, 2020). Education becomes available in a different temporal dimension (Barberà & Clarà, 2014; Bates, 2018; Burgh et al., 2006), and the teaching-learning process evolves into co-creation (Amhag et al., 2019; Eger, 2018; Taparia, 2020), in accordance with the teacher's and the student's individual life paths in and outside of the classroom.

   As knowledge becomes increasingly decentralized and truly accessible (Winstone et al., 2020), students and educators find themselves empowered to choose educational entities based on the criteria relevant to their lives' determinants, purpose, and pursuits rather than the geographical location. As pointed out by the UNESCO, "[t]he scientific-technological revolution […] places problems of knowledge and training in an entirely new light, giving an entirely new possibility of thought and action; and, for the first time, it is truly universal" (Faure et al., 1972, p. xxv). At our fingertips, we hold the portal to the questions that matter, the access to the relevant inquiry paths, and the inspiration of fellow expeditioners willing to journey through the process with us. These dynamics help the shift from focusing on the destination of the learning process as the acquisition of consolidated knowledge to the journey of uncovering multiple methodologies of inquiry (Golding, 2013) via the path less traveled.

2.3   *The Learning Renaissance*

Learning permeates our lives as a practice of reflection (Hudson, 2002), professional development, thirst for understanding, and, lastly, as the choice to navigate in previously unknown waters. This ever-evolving student who deliberately chooses to pursue development is one that seeks the guidance of the teacher who co-constructs the inquiry (Burbules and Bruce, 2001) across fields and timelines to the point of

being in omnia paratus. In this light, educators and students experience contentment in the mutual understanding that each of them already holds all the knowledge they seek. Nonetheless, they choose to further the inquiry together.

In this realm of renewed appreciation for the JOY of learning rather than the duty, there is nothing predetermined other than the structure the student-teacher negotiate. Together, they craft an entirely new context for the emerging knowledge, rather than imposing expectations on each other. Students and teachers learn side by side, becoming one in their individuality and exploring the questions that matter (Burbules and Bruce, 2001). They become visionaries in the process of open-ended inquiry.

Almost in return to Platonism (Plato, 1997 Ed.), the student-teacher set out to ask themselves whether there is a self-existent fire. They embrace the Socratic process and share the understanding that the invisible source, the fire, is the journey of inquiry itself, the experience of aporia (Burbules, 2000), and not all that exists is yet intelligible at the time of departing for the path (Plato, 2008 Ed.). Through this lens, self-discovery, learning about oneself, appreciates as a currency and becomes a measure of abundance, wealth, and health of the economic system. When the reality of the *Homo concors* shifts and frees itself from the dichotomy of reward-punishment, learning returns to be a joyful experience, and ipso facto, it comes into being as the purpose of life in the essence of dialogic pleasure and expansion.

2.4   *Accessibility, Vastness, and Extemporaneousness*

The trends I have outlined before imply that the teacher-student witness before them a vastness of knowledge that is, in nature, both accessible and extemporaneous. These three dimensions become vectors in designing the toolkit of the teacher-student (Table 1). As pointed out by the UNESCO, the "[s]cientific-technological revolution conquered the mental world of time, through immediacy, and space through cybernetic connectedness" (Faure et al., 1972, p. xxv). We awaken to the opportunities of our connectedness and inner relativity of timing/space.

Choosing to engage in teacher-student co-creation of the educational or inquiry path means to surrender to the awe of discovering realms of knowledge somewhat unfamiliar to the subject-matter expertise of the traditionally formed educator. In the role of guide on the path of exploration, the educator empathizes with the over-whelming undertaking of the student – that is, despite reading all books ever written, we would still barely touch just a few of the layers of human knowledge (Johnson, 1973). This humbling experience also creates a renewed, contemporary, empowering dimension. The teaching-learning process becomes mutually satisfying for both the teachers and the students in recognition that their respective worth is not dictated by the hierarchical relationship (Gilliam, 2017), but rather their ability to appreciate each other's guidance in uncovering the questions that lead to greater innovation.

With openness to contradicting the status quo (Burbules and Bruce, 2001), the student-teacher allow each other to exchange roles in a continuous negotiation, creating a third space (Gutierrez et al., 1995) of discovery. I will name this space *epsilon-naught*, where new connectivity (Saban, 2006) can be generated by seemingly divergent but dialoguing and intertwined paths (Vygotsky, 1978) traced by the inquiring teacher-student. With no expected outcome, there is no predetermined future. With the collaborative takeoff on this flight of inquiry (Saban, 2006), there is no untouchable past but, rather, mutually negotiated understanding of its implications on the questions that matter (Micari & Calkins, 2019; Novella, 2010). As such, the quest process nudges the students and teachers to stay present (Friesen, 2014) beyond time. In other words, they experience the extemporaneousness of knowledge. While digital tools and technologies (Turney et al., 2009) allow them to record and access information in asynchronous mode, the relationship between that data and the context will de facto never be the same in any moment other than the now, much like Heisenberg's uncertainty principle illustrates. An instant before, it was different. A time-lapse after, it will be changed. In other words, it is not the dots that matter in the journey for knowledge, but how those relations are interpreted, shared, and negotiated in the epsilon-naught space during the present moment (Table 2).

3   Conclusion

> "What is spoken of the unchanging or intelligible must be certain and true; but what is spoken of the created image can only be probable; being is to becoming what truth is to belief" (Plato, 2008 Ed., 29c).

In this instance, I have illustrated the trends shaping the role of the teacher-student, namely, the cross-pollination, vastness, extemporaneousness, and accessibility of knowledge, and the increasingly remote, decentralized, and digital nature of the learning experience. In doing so, I highlighted the learning outcomes and the learning-teaching scenarios that manifest as a result of these dynamics. I recognize that the teacher-student relationship has been shifting from pre-constituted roles to a framework of collaborative guidance and co-creation, where the roles unite in a spiraling process of a continuous quest. This co-crafted space of exploration – the *epsilon-naught* – aims at the pursuit of an inquiry into life purpose while securing the sustainable progress of the collective (Trede & Jackson, 2019) as an interrelated path. Lastly, in recognizing that COVID-19 accelerated the trends shaping the role of the teacher-student, thus triggering a systemic change, I draw our attention to the opportunity that lies within us when we embrace the unknown of what is, although it may not be visible yet.

References

Amhag, L., Hellström, L., & Stigmar, M. (2019). Teacher Educators' Use of Digital Tools and Needs for Digital Competence in Higher Education. Journal of Digital Learning in Teacher Education, 35(4), 203–223. https://doi.org/10.1080/21532974.2019.1646169

Arrien, A. (1993). *The four-fold way: Walking the paths of the warrior, teacher, healer, and visionary*. Harper San Francisco.

Athayde, S., Silva-Lugo, J., Schmink, M., Kaiabi, A., & Heckenberger, M. (2017). Reconnecting art and science for sustainability: Learning from indigenous knowledge through participatory action-research in the Amazon. *Ecology and Society, 22*(2), 36. https://doi.org/10.5751/ES-09323-220236

Atkinson, J. M. (1992). Shamanisms Today. *Annual Review of Anthropology, 21*, 307–330. https://doi.org/10.1146/annurev.an.21.100192.001515

Baillie, J. B. (1932). *Hegel's phenomenology of the spirit. The phenomenology of mind* (2019 Ed.). Digireads.com

Barberà, E., & Clarà, M. (2014). The temporal dimensions of E-learning. *E-Learning and Digital Media, 11*(2), 105. https://doi.org/10.2304/elea.2014.11.2.105

Bates, T. (2018). The 2017 national survey of online learning in Canadian post-secondary education: methodology and results. *International Journal of Educational Technology and Higher Education, 15*, 29. https://doi.org/10.1186/s41239-018-0112-3

Bernard, R., Abrami, P., Lou, Y., Borokhovski, E., Wade, A., Wozney, L., Wallet, P. A., Fiset, M., & Huang, B. (2004). How does distance education compare with classroom instruction? A meta-analysis of the empirical literature. *Review of Educational Research, 74*(3), 379–439. https://www.jstor.org/stable/3516028

Brennifer, O. (2007). *Other ways to discover philosophy. In Philosophy: A school of freedom*. UNESCO Publishing.

Burbules, N. C. (1993). *Dialogue in teaching*. Teachers College Press.

Burbules, N. C. (2000). Aporias, webs, and passages: Doubt as an opportunity to learn. *Curriculum Inquiry., 30*, 171–187. https://doi.org/10.1111/0362-6784.00161

Burbules, N. C. (2004). Rethinking the virtual. *E-Learning and Digital Media, 1*(2), 162–183. https://doi.org/10.2304/elea.2004.1.2.2

Burbules, N. C. (2008). Tacit teaching. *Educational Philosophy and Theory, 40*, 666–677. https://doi.org/10.1111/j.1469-5812.2008.00453.x

Burbules, N., & Bruce, B. (2001). Theory and research on teaching as dialogue. In V. Richardson (Ed.), *Handbook of research on teaching* (4th ed., pp. 1102–1121). American Educational Research Association.

Burgh, G., Field, T., & Freakley, M. (2006). *Ethics and the community of inquiry*. Cengage Thomson.

Clandinin, D. J., & Connelly, M. (1987). Teachers' personal knowledge: What counts as 'personal' in studies of the personal. *Journal of Curriculum Studies, 19*(6), 487–500. https://doi.org/10.1080/0022027870190602

Combs, A., & Krippner, S. (2008). Collective consciousness and the social brain. *Journal of Consciousness Studies., 15*, 264–276. https://bit.ly/2OVgA3W

Cooper, J. M. (1997). *Plato: Complete works*. Hackett.

Dhand, A., Luke, D. A., Carothers, B. J., & Evanoff, B. A. (2016). Academic cross-pollination: The role of disciplinary affiliation in research collaboration. *PLoS One, 11*(1). https://doi.org/10.1371/journal.pone.0145916

Eger, L. (2018). *Blended learning at higher education: case study from faculty of economics*. In L. Tomczyk, A. Ryk, & J. Prokop (Eds.), *New trends and research challenges in pedagogy and andragogy*. Uniwersytet Pedagogiczny w Krakowie. https://doi.org/10.24917/9788394156893.4

Friesen, N. (2014). Telepresence and tele-absence: A phenomenology of the (In)visible Alien online. *Phenomenology & Practice, 8*(1), 17–31. https://doi.org/10.29173/pandpr22143

Giles, D., & Yates, R. (2014). Enabling educational leaders: Qualitatively surveying an organization's culture. *International Journal of Organizational Analysis, 22*(1), 94–106. https://www.emerald.com/insight/content/doi/10.1108/IJOA-11-2011-0526/full/html

Gilliam, C. (2017). Foucault and the force of power-knowledge. In *Immanence and micropolitics: Sartre, Merleau-Ponty, Foucault and Deleuze* (pp. 95–130). Edinburgh University Press. www.jstor.org/stable/10.3366/j.ctt1n7qj2j.7

Golding, C. (2013). The teacher as guide: A conception of the inquiry teacher. *Educational Philosophy and Theory, 45*(1), 91–110. https://doi.org/10.1080/00131857.2012.715387

Gutierrez, K., Rymes, B., & Larson, J. (1995). Scripts, counter scripts, and underlife in the classroom: James Brown vs. Brown v. Board of Education. *Harvard Educational Review, 65*, 445–471. http://hdl.handle.net/1802/23558

Harrigan, P. (1986). A comparative perspective on recent trends in the history of education in Canada. *History of Education Quarterly, 26*(1), 71–86. https://www.jstor.org/stable/i215654

Hudson, B. (2002). Holding complexity and searching for meaning: Teaching as reflective practice. *Journal of Curriculum Studies, 34*(1), 43–57. https://doi.org/10.1080/00220270110086975

Johnson, R. (1973). Education in Classical Greece. *The School Review, 82*(1), 131–141. https://www.jstor.org/stable/i245150

Jowett, B. (Ed.). (2008). *Plato. Timaeus. Cosmology.* (2008 Ed.). Project Gutenberg.

Kattsoff, L. (1953). Man is the measure of all things. *Philosophy and Phenomenological Research, 13*(4), 452–466. https://www.jstor.org/stable/i310274

Kupferschmidt, K. (2000). 'A completely new culture of doing research.' Coronavirus outbreak changes how scientists communicate, *ScienceMag*. https://www.sciencemag.org/news/2020/02/completely-new-culture-doing-research-coronavirus-outbreak-changes-how-scientists

Faure, E., Herrera, F., Kaddoura, A.R., Lopes, H., Petrovsky, A., Rahnema, M., & Ward, F. (1972). Learning to be: the world of education today and tomorrow [Faure report], UNESCO, Paris, http://unesdoc.unesco.org/images/0000/000018/001801e.pdf

Goddard, D., & Torode, S. (2019). *Lao Tzu. Tao Te Ching.* (2019 Ed.) Independently published.

HolonIQ (2020, January 28). *$87bn+ of Global EdTech funding predicted through 2030. $32bn last decade. Global EdTech Venture Capital will nearly triple over the next decade.* HolonIQ online. https://www.holoniq.com/notes/87bn-of-global-edtech-funding-predicted-to-2030/

Li, C., & Lalani, F. (2000). The COVID-19 pandemic has changed education forever. This is how. *World Economic Forum*. https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid19-online-digital-learning/

Luthra, P., & MacKenzie, S. (2020). 4 ways COVID-19 could change how we educate future generations. *World Economic Forum*. https://www.weforum.org/agenda/2020/03/4-ways-covid-19-education-future-generations/

Mayes, C. (2002). The teacher as an archetype of spirit. *Journal of Curriculum Studies, 34*(6), 699–718. https://doi.org/10.1080/00220270110118816

Mayes, C. (2005). The teacher as shaman. *Journal of Curriculum Studies, 37*(3), 329–348. https://doi.org/10.1080/002202704100022939

Maschietto, F. L., Vairo, J., Crochetiere, W., & Marshall, C. (2007). *Elena Lucrezia Cornaro Piscopia (1646–1684): The first woman in the world to earn a university degree* (6th ed.). Saint Joseph's University Press.

Micari, M., & Calkins, S. (2019). Is it OK to ask? The impact of instructor openness to questions on student help-seeking and academic outcomes. *Active Learning in Higher Education*. https://doi.org/10.1177/1469787419846620

Novella, K. (2010). Getting beyond anaemic love: from the pedagogy of cordial relations to a pedagogy for difference. *Journal of Curriculum Studies, 42*(4), 539–572. https://doi.org/10.1080/00220270903296518

O'Donohue, J. (1997). *Anam cara: A book of Celtic wisdom*. Cliff Street Books.

OECD. (2020). Education responses to COVID-19: Embracing digital learning and online collaboration. *OECD Policy Responses to Coronavirus (COVID-19)*. https://www.oecd.org/coronavirus/policy-responses/education-responses-to-covid-19-embracing-digital-learning-and-online-collaboration-d75eb0e8/

Petwer, D. J. (2006). Lesson planning and the student teacher: re-thinking the dominant model. *Journal of Curriculum Studies, 38*(4), 483–498. https://doi.org/10.1080/00220270500363620

Polanyi, M. (1962). *Personal knowledge: Toward a post-critical philosophy*. University of Chicago Press.

Rubenson, K. (1982). *Interaction between formal and non-formal education.* Paper for Conference of the International Council for Adult Education, Paris.

Saban, A. (2006). Functions of metaphor in teaching and teacher education: A review essay. *Teaching Education, 17*(4), 299–315. https://doi.org/10.1080/10476210601017386

Sagan, C., Druyan, A., Soter, S., Malone, A., Weidlinger, T., Haines-Stiles, G., Kennard, D., & Polytel International. (2013 ed.). *Cosmos: A personal voyage*. Cosmos Studios.

Schwab, K. (2016, January 16). The fourth industrial revolution. What it means and how to respond. *World Economic Forum*. https://www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond/

Smith, M. K. (2001). *What is non-formal education? The encyclopedia of pedagogy and informal education*. InFed.org. https://infed.org/mobi/what-is-non-formal-education/

Taparia, H. (2020). The future of College is online, and it's cheaper, *The New York Times.* https://www.nytimes.com/2020/05/25/opinion/online-college-coronavirus.html

Trede, F., & Jackson, D. (2019). Educating the deliberate professional and enhancing professional agency through peer reflection of work-integrated learning. *Active Learning in Higher Education.* https://doi.org/10.1177/1469787419869125

Turney, C. S. M., Robinson, D., Lee, M., & Soutar, A. (2009). Using technology to direct learning in higher education: The way forward? *Active Learning in Higher Education, 10*(1), 71–83. https://doi.org/10.1177/1469787408100196

UNESCO. (2020). *Education: From disruption to recovery*. Unesco.org. https://en.unesco.org/COVID-19/educationresponse

Vandebroek, I., Pieroni, A., Stepp, J. R., et al. (2020). Reshaping the future of ethnobiology research after the COVID-19 pandemic. *Nature Plants, 6*, 723–730. https://doi.org/10.1038/s41477-020-0691-6

Vygotsky, L. S. (1978). *Mind in Society. Development of higher psychological processes*. MIT Press.

Wahl, J. (2016). D. A. Schrift & A. I. Moore (Eds.), *Transcendence and the Concrete: Selected Writings*. (1st ed.). Fordham University Press.

Winstone, N., Balloo, K., Gravett, K., Jacobs, D., & Keen, H. (2020). Who stands to benefit? Wellbeing, belonging and challenges to equity in engagement in extra-curricular activities at university. *Active Learning in Higher Education*. https://doi.org/10.1177/1469787420908209

Wood, K. (2000). The experience of learning to teach: Changing student teachers' ways of understanding teaching. *Journal of Curriculum Studies, 32*(1), 75–93. https://doi.org/10.1080/002202700182862

Wuensch, K., Aziz, S., Ozan, E., Kishore, M., & Tabrizi, M. H. N. (2008). Pedagogical characteristics of online and face-to-face classes. *International Journal on E-Learning, 7*(3), 523–532. Waynesville, NC USA: Association for the Advancement of Computing in Education (AACE). https://www.learntechlib.org/primary/p/24201/

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Developing English Language Teachers and Language Teaching in a Time of Pandemic

Gary Motteram

The best technology is the one you already have, know how to use, and can afford.

Michael Trucano

1 Introduction

As COVID-19 spread across the world in the early part of 2020, teacher educators like me wrestled with the question of the moment: "How best to support teacher development and language teaching in a time of pandemic, particularly in terms of technologies?"

This chapter presents recommendations for supporting teacher development and language teaching in these critical times. It is based on an analysis of what we can learn from running English language teacher (ELT) development programs in fragile, hard-to-reach, and conflict-affected countries (sometimes referred to as difficult circumstances (Kuchah & Shamin, 2018)) and my own background in distance education. The recommendations are mostly based on projects that I have been involved in since 2013. There is a lot to be learned from these experiences. I start by exploring the fields of Information and Communications Technology for Development (ICT4D) (Trucano, 2013) and Emergency Education (EE) (Strecker, 2020) to consider what advice these fields can offer in general about how to make effective use of digital technologies to support education in developing countries (Heeks, 2018). The chapter also considers debates in ELT and development and goes on to explore how these topics have been applied in recent projects and what we can learn from them (Motteram, 2019; Motteram & Dawson, 2019; Motteram et al., 2020a). It will then apply these findings to COVID-19-affected areas in the global south, but also

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relate them back to contexts in the global north where there is limited access to technology by both students and teachers alike, for example, in the Teaching of English to Speakers of Other Languages (TESOL) to refugees and asylum seekers in the UK.

1.1 Unpacking English Language Teaching (ELT) and Development

When we start to talk about ELT and development and relate this to the field of teacher development, terminology can get confusing, particularly when you consider ELT teacher development as one element in the broader discussion of country-level education systems development, or poverty relief, or managing the impacts of crises like a pandemic.

ELT as a field has been concerned with teacher development in the global south over many years, but this focus has not always been a part of mainstream activity. To make matters more complicated, there is an appropriate critical evaluation of the role that English in general plays in the world. The role of English in the UK's colonial past has been a reason why some have questioned why the teaching of English has become so central in many countries (Pennycook, 2007). This is an important consideration not only in former colonial countries like India and Nigeria but also in a country like China, or a region like South America, where English exerts so much influence on the education system. This is linked to the ongoing debate about English as a Medium of Instruction (EMI) (Coleman, 2017) where the language of education in an increasingly broad range of contexts is English, to the detriment of local languages, but also to educational development (Briggs et al., 2018). In some countries, we see a political desire for an increase in English Medium Instruction, even at the primary level, often backed up with a parental desire, but the realities of classroom teaching are very different. For example, the bilingualism described in a school brochure may be at best, in actual practice, a teacher translating an English textbook into the de facto local lingua franca, Urdu, in Pakistan's case (Manan et al., 2017). For those that can afford it, this has led both to expensive high fee bilingual schools and low-cost fee-paying schools operating alongside the state education system (Srivastava & Walford, 2016). This has a number of impacts on state education systems and their ability to operate effectively.

In the last five years, there has been an increased focus on the global south. This is evidenced by the number of papers at large conferences and in journals that have focused on teacher development and the role of English in the global south and in conflict-affected contexts. Also, there has been a shift in project funding with, for example, the Global Challenges Research Fund in the UK, or the e-Cubed funding from the Inter-agency Network for Education in Emergencies (INEE).

Part of the reason for this shift in funding and activity toward teacher development is the belated recognition that teachers do play an important role in quality education, as defined in the Sustainable Development Goals that were agreed on in 2015, for example, in this specific target SDG4c:

> 4.c By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States. ("Goal 4 .:. Sustainable Development Knowledge Platform," n.d.; "Who we are | Education within the 2030 Agenda for Sustainable Development," n.d.)

2 ICT4D and Emergency Education

Information and Communications Technology for Development (ICT4D) is a commonly accepted term that has been used for many years in the world of development informatics and focuses on the role that technology might have in a range of development activities in the global south. These projects can focus on a broad spectrum of activity from mobile banking, the use of mobiles to support agriculture, drone use in disaster relief, and technologies to support health projects, to name a few. The term ICT is known in ELT, but not the 4D part for support of technology use, except for among a few particularly interested people. However, there is a rich back catalog of studies in ICT4D, and it was to these that I turned when I began my work in Pakistan (Motteram, 2019).

2.1 Adopted ICT4D Guidelines

I came across the work of Trucano (2013). It offers helpful lists for teacher development and technology use in language teaching and education (see below). This summarized a good deal of my own thinking and was a useful set of guidelines for any project I was going to work on. They also seem to be very relevant in a time of pandemic:

1. The best technology is the one you already have, know how to use, and can afford.
2. Start down and out, and then move up and in.
3. Treat teachers like the problem… and they will be.
4. It is the content, not the container.
5. If you are pointed in the wrong direction, technology may help you get there more quickly.
6. Anticipate and mitigate, *Matthew effects*.
7. To succeed in doing something difficult, you may first need to fail (and learn from this failure).

8. Put sustainability first.
9. We know a lot about worst practices – we should make sure we do not repeat them.

Another more recent set of guiding questions comes from the work of Strecker (2020). When setting up a new program of activity, Strecker suggested we use the following questions to guide our work:

• What's being prioritized?
• What resources do people have?
• How can we ensure that everyone can participate?
• What's first? What's next?
• How can resources today link to programming in the future?
• What are the hidden costs?

Strecker works for UNESCO and focuses on distance learning solutions in contexts of crisis where there are refugees in need of education, but we can equally use these questions in the context of the pandemic where education needs to shift suddenly. The questions start with the immediate emergency, looking at what needs prioritizing to ensure equity, but also thinking ahead to further developments, not just trying to solve the immediate issues.

2.2 What the Distance and Higher Education Literature Can Tell Us

Tony Bates started working at the UK Open University (UKOU) where he was central to the implementation of a range of different technologies into UKOU courses. He has also spent a lot of time working on projects in the global south. While Trucano (2013) looks at technology from the perspective of what is already available, Bates (2019) begins with the students and their needs to determine how to select technologies.

Figure 1, which is Bates' model for the selection of technology (2019), highlights the ease of use (both for the teacher and the learner), what the technology is capable of doing, how this all relates to institutional constraints, and other important issues like security and privacy, for example. This links the technology directly into the design cycle for the creation of learning materials. We can then add to this is the concept of "constructive alignment" (Biggs, 2003). Biggs helped designers of teaching to see the need to focus on the purpose of the tool or resource – what the learning material is trying to achieve; what we want learners to be able to do at the end of a session; and what will be the difference between the start and the end. Once this has been decided, we then focus on the specific activities and a form of assessment that will reveal if the learners have reached the desired outcomes.
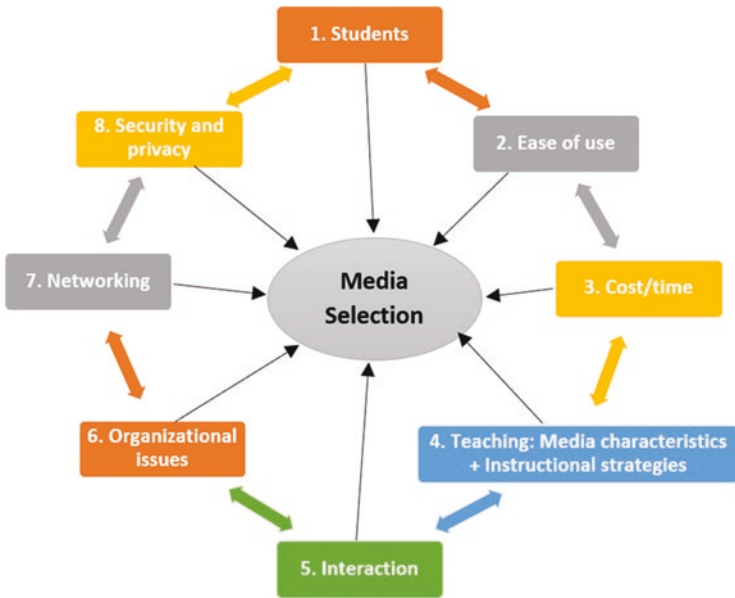
Fig. 1 Bates' model of technology selection (Bates, 2019)

3 Concepts in Practice

The work of Bates over many years, but summarized most recently in Bates (2019), alongside Trucano (2013) and others like Strecker, has been the inspiration and focus for a number of ELT projects since 2013. I began work as a project consultant on a language teacher development project in 2013 in Pakistan (Motteram, 2019). On this project, the numbers of educators that needed to be reached through the use of technology were very high: 400,000 primary school teachers in the region of the Punjab alone. There was a significant security risk, and teacher developers were not able to travel outside of the regional capital of Lahore. The local British Council (BC) office was looking at ways of continuing their successful face-to-face teacher development sessions online. The local Ministry of Education (MoE) uses local teacher centers, often sited in secondary schools, where the teachers from a region were brought together once a month to enable the MoE to undertake administrative tasks and collect data. The BC educators had negotiated with the MoE to run some development sessions, and it was suggested that these could be conducted via *Skype*. The project then started with what was already available in the context and being recommended by the local MoE. The majority of the teachers could then partici-pate, although we were working on a one-to-many basis – at times 1 BC teacher

developer was linked to four separate teacher centers where there were 30–40 teachers in each seminar room. We took ideas from the remote teaching literature that was coming out of the *Plan Ceibal in Inglès* project (Stanley, 2016), and included local remote educators who were trained to act as a local manager of the seminars. The materials that we developed were based on those used in the face-to-face teaching sessions that had already been developed with the local teaching context in mind. The materials developed over time, and while they were based on an original printed manual, these were adapted into PowerPoint slides that could be used to manage the sessions. As well as working with the remote seminar manager, we also started using SMS messages sent directly from the teachers in the seminars to raise questions or to contribute to the discussion. These were sent by the individual teachers to a phone in the BC offices in Lahore. We did this because we became aware through a survey that teachers did have mobile phones and were able to send messages (Motteram, 2019), and we wanted the teachers in the seminars to feel more individually connected.

A second project that built on this work from Pakistan used mobile phones with teachers who are refugees working in the Zaatari refugee camps in Jordan (Motteram et al., 2020b). We chose mobile phones because we were basing our ideas on technology that we believed many refugees possessed (UNESCO, 2013). We knew they were being used in other similar contexts (Mendenhall et al., 2018). We were also exploring the use of *WhatsApp*, which had proved successful in the work we were doing with a teachers' association in Côte d'Ivoire (Motteram & Dawson, 2019). We collected a variety of data but mostly focused on an analysis of the *WhatsApp exchanges. These were the key findings*:

- *One problem with using social tools like WhatsApp* is that while they are good for socialization – and this is positive – it can be difficult to move people to use them for educational purposes (similar issues arise when education has to use tools developed for business (e.g., *Zoom*). So, despite picking a tool that is clearly in common use, the social use tends to dominate over the educational.
- Only a small percentage of the teachers participated actively in the conversations on WhatsApp. Mixing this with online synchronous sessions via videoconferencing would probably overcome this (or face-to-face sessions once the COVID-19 pandemic is over).
- The role of the mentor/teacher/trainer is crucial, but also time-consuming. This is reported in other projects we have done in Côte d'Ivoire, but is very commonly reported in the distance learning literature, too (e.g., Stone & Springer, 2019).
- Despite all this, the teachers did engage with activities, and there was evidence of professional development. We used elements of the technological pedagogical content knowledge (TPACK) model (Koehler & Mishra, 2009) based on Shulman (1986) to explore the data set.
- Providing good Internet access ought to be a part of further projects and, as others have said, should be seen as a human right in the twenty-first century.

3.1   Remote Professional Development During the Pandemic

In a recent presentation, Aubain Adi (2020), a colleague on a number of the projects we have worked on in Côte d'Ivoire, talked about the uses of digital technology in the maintenance of teaching during the COVID-19 lockdown and school closures. He described a variety of activities in countries where some governments took heed of the kinds of practices being suggested in this chapter. He gave the example of Niger, where the government had talked to local teachers about what they thought was the best tool to choose. They suggested *WhatsApp*, which reinforces the recommendations of using the technology that is available, about trusting what teachers say and starting with low tech rather than importing technologies from outside of the context (Trucano, 2013). Adi explained that this had proved successful in keeping education activity going, at least among the teachers themselves. Materials were simple but useful, and the teachers were able to exchange ideas and materials successfully using *WhatsApp* as a platform. In Côte d'Ivoire itself, Adi (2020) suggested there had been mixed results. The education authorities had used television broadcasts linked to the Internet, and even many teachers were unable to access the materials that had been created. There was no liaison with the teachers, parents, or children. They did not explore the resources that were available; they did not start "down and out" – that is, they that did not start with more basic technologies and build from there.

In a project we are just beginning with a local charity that runs ELT classes for refugees and asylum seekers in Manchester, England, we see positive practices that reflect many of the recommendations presented throughout this chapter. Many of the learners in this context also rely on mobile phones and mobile Internet, so the classes have been adapted to provide materials in advance via *Google Classroom*, and use the limited internet time to focus on synchronous classes run over *Zoom* to practice spoken language. Many of these students are trying to move on in their education and so require the standard university entrance examinations in order to start courses. The teaching focuses very much on these specific needs, or supporting their job-seeking skills by teaching them to write CVs or giving them interview practice.

4   Conclusion

We see, reported in this chapter, effective practices that come from the fields of ICT4D and EE that have been successfully taken into the more general world of ELT – for example, looking from the start for options that will be sustainable; picking technologies that the teachers and students have access to and know how to use; valuing the opinions of teachers, parents, and students; trying to include as many people as possible; thinking forward from where we are now; and thinking about costs. Many of these good practices are grounded in many years of experience, and

they have been a very useful filter for the work I have undertaken on a number of projects. These can also be repurposed for effective use of technology in our COVID-19 world as I have shown.

References

Adi, A. (2020). *The online teaching revolution during the COVID-19: A new era for African education – YouTube*. Retrieved from https://www.youtube.com/watch?v=JXwIZJPrlqI&feature=youtu.be

Bates, A. (2019). Teaching in a digital age – The open textbook project provides flexible and affordable access to higher education resources. Retrieved June 28, 2020, from https://opentextbc.ca/teachinginadigitalage/

Biggs, J. (2003). *Teaching for quality learning at university* (2nd ed.). Open University: Society for research into higher education.

Briggs, J. G., Dearden, J., & Macaro, E. (2018). English medium instruction: Comparing teacher beliefs in secondary and tertiary education. *Studies in Second Language Learning and Teaching, VIII*(3), 673–696.

Coleman, H. (2017). Multilingualisms and development | TeachingEnglish | British Council | BBC. Retrieved June 21, 2020, from Conference proceedings online website: https://www.teachingenglish.org.uk/article/multilingualisms-development

Goal 4.:. Sustainable Development Knowledge Platform. (n.d.). Retrieved September 14, 2018, from https://sustainabledevelopment.un.org/sdg4

Heeks, R. (2018). Information and Communication Technology for Development (ICT4D). Routledge.

Koehler, M. J., & Mishra, P. (2009). What is technological pedagogical content knowledge (TPACK)? *Contemporary Issues in Technology and Teacher Education, 9*(1), 60–70. https://doi.org/10.1016/j.compedu.2010.07.009

Kuchah, K., & Shamin, F. (2018). International perspectives on teaching English in difficult circumstances. In K. Kuchah & F. Shamin (Eds.), *International Perspectives on Teaching English in Difficult Circumstances* (1st ed.). https://doi.org/10.1057/978-1-137-53104-9

Manan, S. A., Dumanig, F. P., & David, M. K. (2017). The English-medium fever in Pakistan: analyzing policy, perceptions and practices through additive bi/multilingual education lens. *International Journal of Bilingual Education and Bilingualism, 20*(6), 736–752. https://doi.org/10.1080/13670050.2015.1080659

Mendenhall, M., Skinner, M., Collas, S., & French, S. (2018). Expanding Teacher Support through Mobile Mentoring in Kakuma Refugee Camp: Benefits and Challenges. *Current Issues in Comparative Education, 20*(2), 9–23.

Motteram, G. (2019). Videoconferencing Tools as Mediating Artefacts in English Language Teacher Development in Challenging Contexts. *Journal of Educators Online, 16*(1), 1–15. Retrieved from https://www.thejeo.com/archive/2019_16_1/motteram

Motteram, G., Al-Masri, N., Hamouda, H., & Omarali, S. (2020a). *Exploring mobile support for english language teachers in a context of conflict: Syrian refugee teachers in Jordan* (pp. 56–70). Retrieved from https://www.research.manchester.ac.uk/portal/en/publications/exploring-mobile-support-for-english-language-teachers-in-a-context-of-conflict(72ca7f42-9937-497b-89ce-c5ae52151d93).html

Motteram, G., & Dawson, S. (2019). *Resilience and language teacher development in challenging contexts: supporting teachers through social media*. Retrieved from https://www.teachingenglish.org.uk/article/resilience-language-teacher-development-challenging-contexts-supporting-teachers-through

Motteram, G., Dawson, S., & Al-Masri, N. (2020b). *WhatsApp* supported language teacher development: A case study in the Zaatari refugee camp. *Education and Information Technologies*, 1–21. https://doi.org/10.1007/s10639-020-10233-0

Pennycook, A. (2007). ELT and Colonialism. In *International handbook of English language teaching* (pp. 13–24). https://doi.org/10.1007/978-0-387-46301-8_2

Shulman, L. S. (1986). Those Who Understand: Knowledge Growth in Teaching. *Educational Researcher, 15*(2), 4. https://doi.org/10.2307/1175860

Srivastava, P., & Walford, G. (2016). Non-state actors in education in the Global South. *Oxford Review of Education, 42*(5), 491–494. https://doi.org/10.1080/03054985.2016.1217695

Stanley, G. (2016). Remote teaching: A case study teaching primary school children English via videoconferencing in Uruguay. In *Digital language learning and teaching: research, theory and practice* (1st ed.). Routledge, Taylor and Francis.

Stone, C., & Springer, M. (2019). Interactivity, connectedness and "teacher-presence": Engaging and retaining students online. *Australian Journal of Adult Learning, 59*(2) Retrieved from https://search.informit.com.au/documentSummary;dn=592198797344699;res=IELAPA

Strecker, J. (2020). *[Webinar] Distance learning during COVID-19 - YouTube*. Retrieved from https://www.youtube.com/watch?v=MAkh-haxiYk

Trucano, M. (2013). 10 principles to consider when introducing ICTs into remote, low-income educational environments. Retrieved June 16, 2020, from World Bank Blogs website: https://blogs.worldbank.org/edutech/10-principles-consider-when-introducing-icts-remote-low-income-educational-environments

UNESCO. (2013). Policy guidelines for mobile learning. In *United Nations Educational, Scientific and Cultural Organization*. Retrieved from http://unesdoc.unesco.org/images/0021/002196/219641e.pdf

Who we are | Education within the 2030 Agenda for Sustainable Development. (n.d.). Retrieved June 21, 2020, from The SDG Education 2030 Steering Committees website: https://sdg4education2030.org/who-we-are

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Making the Strange Familiar and the Familiar Strange: A Critical Reflection on Teacher Educators and the Coronavirus Crisis

Reem Khalid Abu-Shawish and Michael H. Romanowski

> *We do not learn from experience... We learn from reflecting on experience.*
>
> *John Dewey*

1 Introduction

The worldwide spread of coronavirus disease has significantly changed our lives. We used to leave the house and make sure we had our mobile phone; now we check that we have a mask and hand sanitizer. We sing songs in our heads as 20-second timers to properly wash and clean our hands. Routine trips to the supermarket have become risks as we try to avoid others and touch little and use contactless payments. Social distancing requirements have provided us with opportunities to develop new skills such as quarantine haircuts and, perhaps more importantly, more proficient use of Zoom and Microsoft Teams for online learning/teaching and communications. Pre-corona, we had always counted the days for the release of a new technology widget. Now we anxiously await the possible discovery of a new vaccine. There is no doubt that this crisis has changed our lives, possibly forever.

The COVID-19 crisis has substantially impacted university classrooms. Indeed, it has created many challenges, changes, and inconveniences. The crisis is threatening to change what we perceive as normal. After the crisis is well past, teaching and learning will not likely return to normal. During times of crisis, when the normal has ceased, the opportunities for reflection, awareness, and learning are immense.

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Emergencies can create remarkable spaces for educators to reflect on how systems undergo abrupt transformations that require fundamental changes to our usual ways of working. This space allows us to consider how crises challenge our taken-for-granted assumptions about teaching and learning. More specifically, in this context, teacher educators are forced to review their pedagogy and how students learn and how this crisis could impact the development of preservice teachers. As teacher educators who work with a diverse faculty teaching preservice and experienced teachers and educational leaders, we have experienced these challenges and opportunities for reflection and growth firsthand.

With this in mind, we draw on an approach to interpretation from the German poet Novalis combining this with critical reflection and using it as a framework for our discussion. Novalis was the pen name for Baron Friedrich Leopold von Hardenberg, a poet during the early German period of romanticism (Stanford Encyclopedia of Philosophy, 2014). We challenge and raise questions about our fundamental beliefs about teaching and teacher education, and how this requires re-examination during the coronavirus crisis. This framework is applied to teaching challenges faced by faculty as they were required to make an abrupt shift from the traditional classroom to online teaching and how these demanded re-examinations during the current coronavirus crisis. We offer suggestions that provide space for professors to rethink the shift to online teaching.

2   Framework

The poet Novalis considered Romantic art as bringing a different interpretation approach, defining it as "making the strange familiar and the familiar strange" (Rosen, 1998, p. 174). This concept has been used in a variety of fields such as anthropology (Myers, 2011), ethnography (de Jong et al., 2013), education (Sikes, 2006), and engineering education (Stouffer et al., 2004). It will be used to address teaching and teacher education in this chapter.

The familiar is about the individual as a professional educator. Making the familiar strange is difficult since many might find it hard to identify the taken-for-granted aspects of their pedagogical beliefs. Making the familiar strange seeks to identify the hidden or taken-for-granted to find the strange in conventional practices and possible alternative approaches and practices. In this context, educators must employ critical reflection whereby the individual questions the underlying assumption of ordinary everyday teaching and learning experiences as though they are entirely unaccustomed to their context. Teo (2014) describes the process as one that "destabilizes the existing worldview" (p. 542).

The strange is about deconstructing the usual and using educational imagination to examine what could be in the future. Stouffer et al. (2004) indicate that the strange is about moving outside the dominant paradigms and suspending taken-for-granted understandings. It requires that educators' pedagogical beliefs be reconsidered, re-evaluated, and made strange, opening new agreements and creative changes. Teo

(2014) describes this as the "attempts to make possible and stabilize an alternative one worldview" (p. 542). The strange provides alternative understandings that challenge the normative or traditional schooling structures and classrooms.

3 Critical Reflection

To make the familiar strange and the strange familiar, educators need to implement critical reflection systematically. Research reports that critical reflection is vital in teaching and developing effective teachers (Shandomo, 2010). Critical reflection makes a significant impact on a teacher's knowledge and skills (Brookfield, 1995; Cranton, 1996). Critical reflection helps educators uncover the assumptions that guide their teaching actions, locate the origins, raise questions about these assumptions, and consider alternative ways of acting (Cranton, 1996). Silverman and Casazza (2000) suggest that critical reflection entails challenging the educator's beliefs and hidden cultural assumptions. This type of reflection is not a mere identification of one's practices; instead, critical reflection demands the educator reflect and "deconstruct long-held habits of behavior by looking beyond the behavior itself to their self-image and examining why they do what they do" (p. 239).

Reflection is a meaning-making process that critically frames and reframes individual and societal taken-for-granted assumptions to develop a new perspective or an alternative understanding of culture, schools, and the many complex aspects of teaching (Romanowski et al., 2017). Dewey (1933) considered reflection as a deliberative cognitive process that "involves sequences of interconnected ideas that take into account underlying beliefs and knowledge" (Hatton & Smith, 1995, p. 34). Anderson (2014) posits that reflective practice for educators provides "a new opportunity to reform our pedagogy and increase our professional capacity. The more frequently we seize this opportunity, the greater our epistemological curiosity" (p. 81). Educators begin to make the familiar strange and the strange familiar by engaging in critical reflection and raising questions regarding the purpose, meaning, and consequences of teaching. This leads to rethinking beliefs and understandings in the light of new awareness and knowledge.

4 Pedagogy: Making the Strange Familiar and the Familiar Strange

Pedagogy can be defined as teaching that encompasses purposes, curriculum, and methodology (Aleinikov, 2013; Grimmitt, 2000). Pedagogy centers on the process and strategies used to achieve learning goals. Educators who are mindful of a well-thought-out pedagogy understand the many dimensions of the teaching and learning process. Pedagogy is based on a professor's values and beliefs about teaching,

learning, assessment, and students. An awareness of pedagogy or teaching philosophy is vital, especially in times of crisis that demand change.

4.1 Familiar

Regarding the familiar and pedagogy, Rieg and Wilson (2009) point out that lecture and telling students is a teaching method of choice that is still widely used today. Globally professors have added to the lecture format PowerPoint (PPT) presentations (Brill & Galloway, 2007). Most assume, with little evidence, that the incorporation of this computer technology will increase students' interest and enhance learning (Sewasew et al., 2015). For most classrooms, a "familiar" scene is that of a professor coming to class with their laptop underarm, packed with overloaded PPT slides, getting attached to the university's "smart classroom," and telling students information for the next 60 minutes. The familiar considers students as passive learners, who, with the addition of a visual resource (PTT), will receive and learn verbally transmitted knowledge that will be later assessed likely with a multiple-choice exam. The assumption is that students learn more by following a set course, lectures, and textbooks from an instructor. This assumes that the professor must be present at the center of the learning process for students to learn.

As educators are now forced to begin teaching entirely online, the COVID-19 crisis challenges that familiar. However, the familiar often becomes a victim of what is termed as the status quo bias (SQB) (Samuelson & Zeckhauser, 1988). This cognitive bias relates to individuals desiring that things stay as they are, the status quo. Based on emotion, individuals who cling to the SQB use the current situation as a baseline (status quo), which serves as a reference point. Any change from that point is viewed as a loss (Samuelson & Zeckhauser, 1988). Zimmerman (2006) suggests that teachers in the USA often gain a sense of security from the familiar. Changing well-established patterns can cause resistance. For most of us, change is scary, and many view it as risky with potential damage or loss with a few perceived benefits. When it comes to a crisis and transitioning to online teaching, the SQB attempts to stay close to the baseline. The goal of the status quo bias is that the new situation stays as much as the familiar. This can be done by transferring as much of our face-to-face courses (familiar) as possible to online courses. Thoughts often center on procedural concerns of the classroom with less focus on learning. See Table 1.

4.2 Strange

Viewing the familiar as strange is challenging because familiar is viewed in a strange context. Too often, our thinking about teaching is blurred by the familiarity that we bring to the classroom. This requires thinking that we seldom engage – that is, professors need to employ critical reflection to deconstruct the familiar and offer

Table 1 Questions asked by the "familiar" and the "strange"

The familiar asks	The strange asks
• How can I prevent cheating? • How can I keep accurate student attendance? • What is the best approach to convert my face-to-face course to an online course? • How can I transfer my lectures to the online system? • How can I upload all my PPT presentations? • How will I use my multiple-choice tests? • Can I upload all my readings? • How will the students get the textbook? • How can I record all my lectures? • How many assignments must I add since students have more time?	• How do I transform and refigure my face-to-face class to an online class? • What are the possible alternatives to lecture and PPT? • How would I teach classes if I could not lecture? • How do I support students in finding the best ways to understand the subject matter in an online environment? • How can my class provide ways for students to learn on their own? • How do my students learn and what difficulties do they have during my lectures? • What does my class look like from the students' point of view? • What kind of relationship do I have with my students now, and how will it change if I move the course online? • How is effective online teaching and learning defined? • How can I use active learning strategies in this new teaching environment?

alternative understandings. "The strange" for the above-described lecture delivery type of professor is a professor who is not always telling students and is no longer the center of the classroom. Lumpkin et al. (2015) report that students positively respond to appropriately challenging and meaningful active learning activities. Students do not have to depend on the professor to learn as they can learn independently if taught how and given opportunities. For example, in classroom management courses, the familiar would deliver lectures to students about the "familiar" lecture classroom management theories providing several examples supporting each theory. The "strange" could offer students a short reading on classroom management theories and provide a real-world case study, or have students find a case that illustrates a teacher's classroom management strategies. When it comes to changing teaching and learning spaces, such as the shift to online teaching, the strange asks questions that challenge taken-for-granted assumptions. Possible questions posed by the strange are provided in Table 1.

5   Application

In most teacher education programs, there is a variety of coursework that ranges from traditional lecture-based courses, including components like microteaching (students teaching in a simulated classroom environment), field experiences, and semester-long student teaching experience. Indeed, teacher education programs

face similar challenges that other programs face, but they also must address how to deal with various field experiences where students are learning to teach in schools. With universities shifting to online instruction, some of the practice components of teacher education courses present problematic challenges never faced before.

With that in mind and based on some of our recent experiences during COVID-19, it is difficult for some faculty and students to make a sudden shift from face-to-face teaching to online instruction. More importantly, many educators cling to the status quo bias. We offer the following thoughts and examples for faculty to begin developing their online teaching by changing their pedagogy and making their familiar, taken-for-granted views on teaching strange. The essence of this approach to interpretation, making the familiar strange and the strange familiar, is that an individual provides a unique meaning or interpretation of the phenomenon. This is a source of creativity. We avoid providing recipes for teaching; instead, we leave teaching open to original thinking.

The familiar is teacher-centered, where the professor provides the information, and the class is designed and planned from the professor's viewpoint. There is little consideration given to what their students desire in professors or how they might best learn the course content. The familiar teaches skills of note-taking and listening. The strange views learning from the student's perspective. In other words, the professor viewing the class from the "strange" perspective walks in the students' shoes, especially when designing the class.

In the physical classroom, professors can pick up on nonverbal clues that can guide instruction, but these are missing online. Students see multiple cues in the face-to-face class, but online now, they see a "talking head." The "strange" must anticipate this and plan accordingly. This requires adding a variety of media that students can encounter during the class, such as documents, slides, diagrams, pictures, videos, and other visuals, which may not always be needed in the classroom but can enhance online learning. For example, while teaching a classroom management class and discussing classroom organization, the "familiar" would develop theory and merely point, explain, describe, and use the existing classroom and props as an illustration in the traditional classroom setting. The "strange" would consider not only adding illustrations such as visual notes that are unnecessary in the classroom but would have students create their visual maps linking their classroom organization to theoretical reasons to aid in student learning. In summary, the strange thinks about how the change to online teaching will affect the students, not so much the professors, and then plans accordingly. The strange asks: "If you had to teach a class with no or minimal lectures, how would this be accomplished?"

A core dimension of teacher education programs is field experience. Preservice teachers engage in various types of field experience, including classroom observation, individual and small group, and large group instruction culminating with student teaching. Perhaps the most significant challenge in teacher education is moving field experiences from "brick to the click" classroom. Let us take the classroom and lesson observation. The familiar, in this context, is that the student observes the

teaching and critiques the lesson's various dimensions such as classroom management approaches, teaching strategies, or teacher-student interaction. The familiar analysis identifies both positive and negative teacher behaviors, usually praising the positive and moving on to an extensive critique of the negative to offer suggestions for improvement.

Because of COVID-19, professors had to swiftly shift and address field experiences within their online courses. Several professors quickly secured videos of teachers and teaching for students to critique. However, after watching the taped lessons, students pointed out a few negative teacher behaviors to analyze and indicated their frustration about what to analyze and write about the experience. Nevertheless, since teacher education emphasizes and teaches research-based teaching practices and strategies that have been established as having the highest likelihood of affecting student learning (Fox, 2014), the "strange" required students to identify and provide references to support positive teacher behavior. They were asked why these strategies are effective in a context, to demonstrate that same positive behavior in their classes, citing three different ways or approaches. Finally, students reflected and imagined what the results might be if they used a less effective teaching approach or strategy.

The familiar is planning courses through the lens of face-to-face courses. This mindset is difficult to escape. The strange requires imagination and a new way to design online instruction. The familiar plans lessons for 60 minutes. The strange "chunks" lessons by breaking down class time into 10–15-minute chunks and activities that engage students. That eliminates the need for long pages of text and lengthy videos. More effective practices online will include a text broken up with photographs or charts where students are asked to make meaning from the item. Although the chunking of lessons is taught in most teacher education method classes, professors might not always consider this in their teaching. Planning for online instruction should not be viewed as a lecture online but rather as an active learning online classroom. Although many professors consider active learning as the familiar, active learning in this context takes on new meaning demanding new methods of application.

Keep in mind that fundamental aspects of planning and teaching that are familiar should be retained. Chickering and Gamson (1989) identified seven principles that characterize a philosophy of quality education. These principles have been extensively researched and validated and used in face-to-face courses and online learning (Baldwin & Trespalacios, 2017). These include encouraging faculty-to-student interaction and student-to-student interaction, promoting active learning, communicating high expectations, facilitating time on task, providing rich, rapid feedback, and respecting diverse learning. More specifically, online instructors can use such activities as the Zoom's Polling feature to get real-time student opinions and thoughts that can be used within the class. Students can also be given prompts where they are given a short time to reflect on course content that can be used in the lesson and assess understanding. For example, what is the crucial point of today's class,

and how can this be used in your future classroom? The essence is that the "familiar" has professors telling students, and the "strange" teaches students to tell and explain to us what effective teaching/learning is.

The benefits of engaging and applying this interpretation are many. First, professors reconsider their assumptions and begin to question taken-for-granted beliefs about teaching and learning. Second, professors develop new skills. Students can identify and develop skills that might not have been adequately addressed in the traditional classroom setting if planned by the instructor. The strange considers new skills that can be taught in the new online context. For example, in this context, some students need to develop various self-directed learning skills. This became evident for some professors as they witnessed an increase in emails, unlike traditional settings. These emails requested guidance and direction, illustrating the need for students to develop self-learning skills.

Finally, Ash and Clayton (2009) suggest that critical reflection creates learning by generating questions, confronting bias and limitations, contrasting theory with practice, identifying systemic issues, considering alternative perspectives, and challenging taken-for-granted solutions. Furthermore, critical reflection enables educators to "avoid being stuck in unexamined judgments, interpretations, assumptions, and expectations. The danger of not doing so is to support and challenge the status quo and restrict our own and others' capacity for development" (Lawrence-Wilkes & Ashmore, 2014, p. 59). In the case of education, this involves the development of educators and students.

6   Implications

Novalis' approach to interpretation – making the familiar strange and the strange familiar – provides educators an opportunity to reimagine classroom instruction and teacher education in these new times and circumstances. As stated earlier, we avoid recipes since professors must be allowed to make the right choices that best fit their teaching philosophy and learning outcomes when moving online. With their interpretation of making the strange familiar and the familiar strange, professors need to understand their beliefs about teaching and learning. We read and hear about the "new normal" and education post COVID-19 and speculations about the future of teaching and learning. After significant time passes, teaching may return to most of its pre-COVID-19 forms. However, there will be some dimensions permanently changed, for example, the place of online teaching/learning. The critical question here centers on the issue of sustainability. How will professors continue to utilize Novalis' approach to interpretation as they return to their classrooms? The reflection and awareness developed by professors could prove useful as we continue to reflect on the role digital technology should have in the future of teacher education.

References

Aleinikov, A. G. (2013). Creative Pedagogy. In: Carayannis E.G. (eds) *Encyclopedia of Creativity, Invention, Innovation and Entrepreneurship. Springer, New York, NY.* https://doi.org/10.1007/978-1-4614-3858-8_13

Anderson, E. M. (2014). Transforming early childhood education through critical reflection. *Contemporary Issues in Early Childhood, 15*(1), 81–82.

Ash, S. L., & Clayton, P. H. (2009). Generating, deepening, and documenting learning: The power of critical reflection in applied learning. *Journal of Applied Learning in Higher Education, 1*(1), 25–48.

Baldwin, S., & Trespalacios, J. H. (2017). Evaluation instruments and good practices in online education. *Online Learning, 21*(2). https://doi.org/10.24059/olj.v21i2.913

Brill, J. M., & Galloway, C. (2007). Perils and promises: University instructors' integration of technology in classroom-based practices. *British Journal of Educational Technology, 38*(1), 95–105.

Brookfield, S. (1995). *Becoming a critically reflective teacher*. Jossey-Bass.

Chickering, A. W., & Gamson, Z. F. (1989). Seven principles for good practice in undergraduate education. *Biochemical Education, 17*(3), 140–141. https://doi.org/10.1016/0307-4412(89)90094-0

Cranton, P. (1996). *Professional development as transformative learning: New perspectives for teachers of adults*. Jossey Bass.

de Jong, M., Kamsteeg, F., & Ybema, S. (2013). Ethnographic strategies for making the familiar strange: Struggling with 'distance' and 'immersion' among Moroccan-Dutch students. *Journal of Business Anthropology, 2*(2), 168–186.

Dewey, J. (1933). *How We Think: A Restatement of the Relation of Reflective Thinking to the Educative Process. Boston, MA: D.C. Heath & Co Publishers.*

Fox, D. S. (2014). Research-based instructional strategies in the classroom: The missing link in the school improvement process. In A. H. Normore (Ed.), *Pathways to excellence: Developing and cultivating leaders for the classroom and beyond* (pp. 93–114). Emerald Publishing.

Grimmitt, M. (2000). *Pedagogies of religious education: Case studies in the research and development of good pedagogic practice in Religious Education*. McCrimmon Publishing.

Hatton, N., & Smith, D. (1995). Reflection in teacher education: Towards definition and implementation. *Teaching and Teacher Education, 11(1), 33–49.*

Lawrence-Wilkes, L., & Ashmore, L. (2014). *The reflective practitioner in professional education*. Palgrave Macmillan.

Lumpkin, A., Achen, R., & Dodd, R. (2015). Student perceptions of active learning. *College Student Journal, 49*(1), 121–133.

Myers, R. (2011). The familiar strange and the strange familiar in anthropology and beyond. *General Anthropology, 18*(2), 1–9.

Rieg, S., & Wilson, B. (2009). An investigation of the instructional pedagogy and assessment strategies used by teacher educators in two universities within a state system of higher education. *Education, 130*(2), 277–294.

Romanowski, M. H., Merouani, N., & Coughlin, C. (2017). Teachers' reflective practices within a gulf cooperation council context: knowledge, beliefs and challenges. In I. H. Amzat (Ed.), *Teacher professional knowledge and development for reflective and inclusive practices* (pp. 101–112). Routledge.

Rosen, C. (1998). *The romantic generation*. Harvard University Press.

Samuelson, W., & Zeckhauser, R. (1988) Status Quo Bias in Decision Making. *Journal of Risk and Uncertainty, 1(1), 7–60.*

Sewasew, D., Mengestie, M., & Abate, G. (2015). A comparative study on power point presentation and the traditional lecture method in material understandability, effectiveness and attitude. *Education Research Review, 10*(2), 234–243.

Shandomo, H. M. (2010). The role of critical reflection in teacher education. *School–University Partnerships, 4*(1), 101–113.

Sikes, P. (2006). Travel broadens the mind or making the strange familiar: The story of a visiting academic. *Qualitative Inquiry, 12*(3), 523–540.

Silverman, S. L., & Casazza, M. E. (2000). *Learning & development: Making connections to enhance teaching*. Jossey-Bass.

Stanford Encyclopedia of Philosophy. (2014). *Georg Friedrich Philipp von Hardenberg.* https://plato.stanford.edu/entries/novalis/

Stouffer, W. B., Jeffrey, S., & Oliva, M. G. (2004). Making the strange familiar: Creativity and the future of engineering education. In *Proceedings of the 2004 American Society for Engineering Education Annual Conference and Exposition*. Washington, DC: American Society for Engineering Education, Session 1615.

Teo, P. (2014). Making the familiar strange and the strange familiar: A project for teaching critical reading and writing. *Language and Education, 28*(6), 539–551. https://doi.org/10.1080/09500782.2014.921191

Zimmerman, J. (2006). Why some teachers resist change and what principals can do about it. *NASSP Bulletin, 90*(3), 238–249.

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Emergency Response to Digital Pedagogy: A Simple Blueprint for Transitioning Online

Margaret Rauliuk, Mae Doran, Rima Al Tawil, and Chadia Mansour

Working together toward positive gains, particularly in times of great change, makes us stronger, unites us, and teaches us that the collective 'we' is stronger and much more efficient than the solitary 'I'.

1 Introduction

The global COVID-19 pandemic began in early December 2019 in Wuhan, China, which has resulted in partial or full closures of schools worldwide (The Lancet Child and Adolescent Health [LCAH], 2020) among many other impacts. Teachers working in traditional schools found themselves thrust into a range of online environments, sometimes with little prior knowledge or interest in applying technology in a virtual classroom, and often with limited support. Four students in the Doctor of Education in Distance Education program at Athabasca University developed a blueprint with resources to support and ease the transition into online teaching. What follows is an examination of the blueprint, its application, and the leadership strategies that moved the project forward.

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2   The Context

The pandemic was called in the second half of the 2019–2020 school year. Globally, schools started closing in mid-March, and at the time of this writing, many provinces in Canada have shut down schools indefinitely; schools in most of the world are still closed at the time of writing this chapter (LCAH, 2020). Teachers are scrambling to adapt to a new reality while facing the possibility that both distance and distributed learning may be here to stay.

Both income and education are social determinants of health. Low income has a negative effect on educational outcomes (Silver & Sjoberg, 2019). Many school systems are under-resourced with the added layer of complexity of needing to serve students with reduced access to computers or the Internet (Beaudoin, 2015; Ferrie, Kim, & Sciarra, 2019; Johnson, 2020). A digital divide remains throughout the world in both developed and underdeveloped nations as well as across cultures, woven together by the thread of poverty (Beaudoin, 2015). Keeping kids out of school in times of pandemic can increase their risk of neglect, physical and/or sexual abuse, and risk of child labor, and may decrease the graduation rate (LCAH, 2020). Further, although teachers can be very creative, often with limited resources, they are not always open to new ways of teaching and learning (Beaudoin, 2015), including online delivery. The COVID-19 pandemic has exacerbated all of these existing challenges in the world of education on a global scale. Regions with robust Internet connectivity have the opportunity (and the challenge) of reaching for the new paradigm of distance, distributed, and digital education.

3   How Distance Education Might Be Employed

As students in the Doctor of Education in Distance Education program at Athabasca University, we worked to respond to and support teachers as they transition from the emergency response into digital pedagogy during the COVID-19 pandemic. We developed a high-level blueprint of an online course informed by the project-based learning (PBL) framework (Francom, 2017; Reigeluth, 2016; Savery, 2009). The blueprint consists of four pillars of PBL: learning outcomes, content, application, and evaluation (see Fig. 1).

We launched a video on YouTube containing a descriptive commentary. With the support of Dr. Aga Palalas and the International Association for Blended Learning (IABL), we presented a series of four distance education/professional development webinars to an international audience of educators. The webinar recordings are available on the IABL website. The first webinar introduced the high-level online course blueprint as a whole. In keeping with backward design (Wiggins & McTighe, 2005), the second webinar focused on learning outcomes and their assessment and evaluation; the third presented content and instructional material; the final week concluded with application and practice.

4   Blueprint Details

Whether it is a micro-learning credential, a training instruction, a unit section of a larger course, or a full-blown academic curriculum, educators can adapt their courses into the online learning environment using this evidence-informed blueprint to simplify the process. To provide additional guidance, we created an interactive version of the one-page blueprint including links on most of the button boxes. These can be found at https://www.dropbox.com/s/700easwnzz2e18y/ONLINE%20 COURSE%20BLUEPRINT%20HI-LEVEL%20%2820.04.01%29%20_Final. pdf?dl=0.

4.1   Learning Outcomes (Focusing, Committing)

The first column of the schematic, as shown in Fig. 1, prioritizes learning outcomes, otherwise known as objectives. It also establishes the learning community and activates prior experience through introductory exercises and advance organizers.

The educator presents the learning outcomes (LOs) in clear, measurable, and reachable objectives. The time the learners commit to spend on their own will be rewarded swiftly by attainable achievements, a key engagement factor. This approach supports the educator who must prepare the course design and learning activities remotely and in advance. Measurable LOs scaffold learners who might need another cycle or more practice before demonstrating competency. The time normally spent teaching large cohorts, a great deal of information in person is
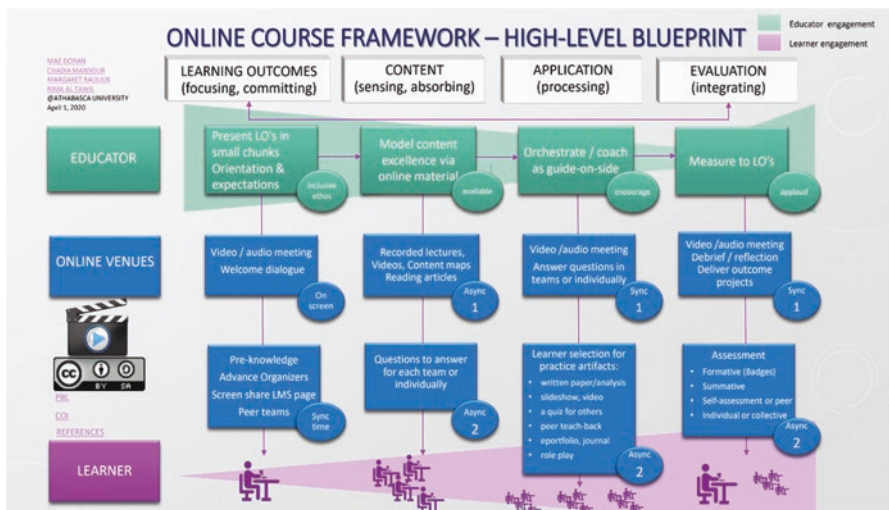
Fig. 1 Online course framework (https://lnkd.in/gYGWvgA)

redirected toward orchestrating shorter learning cycles, concentrated content, self-directed problem-solving, and small group learning activities.

The cohort meets synchronously using audio or video technology such as Microsoft Teams, Zoom, and Google Hangouts as seen in Fig. 1 along the Online Venue rows. The educator is very present and spends upfront time getting to know the learners, creating a community where learners feel safe to experiment and explore learning. Advance organizers prepare the cohort for the online experience through discussing learners' existing knowledge, offering web-conferencing lessons, and/or inviting written introductions. The educator offers a course orientation in a synchronous online (recorded) session where the learners walk through an overview of objectives, activities, and assignments. This supports the learners by demystifying what to expect during the course and helps them plan their time effectively to complete formative and summative assessments. Groups of three or four learners form a team to provide peer support.

4.2 Content (Sensing, Observing)

The second column of the schematic centers around understanding the learning materials and the course content. This phase involves providing the content of the module asynchronously. The learners see what excellence looks like in the skill or concept. The Learning Venue row suggests options for the learning materials and their representative formats such as articles, manuals, content maps, YouTube or other videos, slideshows, podcasts, and online interactive activities, created by or selected by the educator. They access these learning materials from the learning platform or learning management system (LMS). There are online spaces provided to meet and collaborate with their team; the educator is available via ad hoc synchronous requests or at pre-arranged meeting times to answer questions. The last part of this phase assigns questions regarding the content for the small cohort to research.

Providing online course content and instructional material requires a thorough pre-course preparation and a learning management system. This is a three-step process that consists of finding and adapting already existing material, creating instructional material to fill in gaps, and evaluating content.

4.2.1 Finding and Adapting Content and Instructional Material

In the first step, the instructor curates existing material to fit the overall LOs of the course, the module objectives, and the assessment. Drawing from previously designed courses, they also consult other programs and experts' websites or search library databases and relevant open educational resources (OERs). Some learning platforms support apps such as Powtoon and Vimeo and direct links to OERs.

Aligning with the LOs and assessment, any content/instructional material should be (1) current and up-to-date with world events and scholarship without abandoning seminal work in the field; (2) varied and inclusive to different voices, stances, and perspectives; and (3) multimodal.

4.2.2   Creating Content and Filling Gaps

In the second step, the focus is to create content to fill gaps in the existing material. The instructor's creativity comes to the fore through their unique teaching style, responding to different learners' needs, and activating prior learning. Examples include short videos posted within the course on a weekly basis for a high-touch effect; scholarly content triggering critical thinking; presentations for synchronous sessions; links to blogs for weekly summaries; and opportunities for learners to contribute to the course by facilitating and engaging in discussion forums.

4.2.3   Evaluating Content and Instructional Material

The third step is to evaluate the instructional material that is found and created against the LOs. When performing this step, it is important to ensure that the material (1) is varied to maintain student engagement; (2) is current (yet it includes seminal work when needed); and (3) attends to copyright requirements and is accessible. Based on these criteria, educators can create their own rubric to evaluate their instructional material.

4.3   Application (Processing)

The third column, the application phase, is the hands-on, brains-on practice, trial-and-error phase of PBL. The application phase has two distinct serial activities. In the first, the cohort takes time to digest the learning of the content phase, facilitated by questions that increase their understanding of the material. The learners move into practice with support from the educator as a coach. Using synchronous web-conferencing tools, student groups or individuals answer the questions posed, and discuss the learning with the educator, thus encouraging critical thinking and reflection.

Part two of the application phase involves the groups or individuals deciding on practice scenarios to develop artifacts for the application of their learning, focused on a quintessential topic. Some ideas for learner-centric choice for their projects are listed in the application column. The cohort is given time to practice the skills, individually or in the cohort. In contrast to part one, this time allows the learners to puzzle over the application and increase their competence with the skills

independently. At this point, reliance on the learning materials is transferred to the learners who take ownership of applying the learning to hands-on/brains-on skills development.

4.4 Evaluation (Integrating)

This last phase, evaluation, is further informed by the word assessment, often used interchangeably. In the learning-teaching sequence of events, the evaluation phase is often the last task, especially when it involves assessments for marks. However, the educator makes decisions around evaluation directly after identifying the LOs, as per Covey's (1989) "begin with the end in mind" style. In keeping with the backward design (Wiggins & McTighe, 2005) as well as constructive alignment (Biggs, 2003), the educator determines the desired LOs and assessment evidence before planning the learning experience and instructional activities (see Fig. 2).

Under certain circumstances, the educator may choose to conduct a diagnostic assessment before planning the teaching-learning activities to make sure the instructional material and strategies match the learners' specific strengths and needs. Formative assessments allow educators to monitor the learners' ongoing progress toward the LOs. Educators provide personalized and timely feedback, either synchronously during the video conferencing sessions or asynchronously in writing or through recorded audio/video files. Depending on the course design, learners could receive badges for the successful completion of certain tasks. The educator concludes this phase with a summative submission (ending evaluation), which could involve self-assessment or peer-assessment exercises.
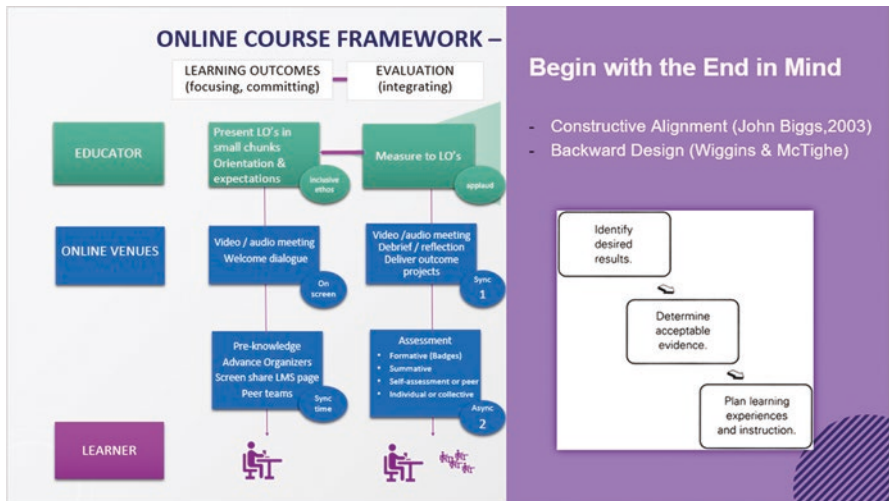
Fig. 2 Begin with the end in mind

As described in the application phase, assessments may take different formats as selected by the cohort, such as electronic tests and surveys, polls, reflective journals, e-portfolios, group projects, presentations, interviews, creative production, or discussion forums. Assigning marks for each instance of evaluation is neither required nor practical. However, when needed, the instructor utilizes grading rubrics that indicate the achievement criteria across the different components of the assessment.

5   Leadership in Digital Pedagogy

The development of these project artifacts and our group process is couched in the context of the fourth industrial revolution (4IR) where teaching and learning are increasingly cloud-based (Yusuf et al., 2020). The COVID-19 pandemic is pushing many educators into the 4IR who may have varying degrees of comfort and expertise in the online environment. Leadership in the 4IR is multi-dimensional. In our small group, we discussed what leadership theories have been at play while we were working on the development and presentation of this blueprint. They include the emergent, distributive, relational, shared, collaborative, and transformational leadership approaches with a sprinkling of complexity, connectivism, and constructionism (Avolio et al., 2009; Brown, 2012). We could not pin down one theory. Bringing a networked lens to leadership acknowledges aspects of many theories that interconnect (Meuser et al., 2016). What we achieved together online in a remarkably short period of time was constructive, collective, collaborative, and relational. Our leadership was "shared" with different individuals taking the lead on different aspects of the project in a "dynamic and reciprocal" manner (Avolio et al., 2009. p. 431). We were accountable; we approached the work with integrity, bringing a generous and nonjudgmental ethos (Brown, 2012). While we drew on established leadership theories, these did not recognize the effect of 4IR or our buzzing in and out of the digital environment at various times and in different degrees to carry the project forward. This is where swarm leadership (Kelly, 2019) comes in.

Swarm leadership is described as "part of a self-organizing and complex adaptive system – it is a collaborative networked effort that adapts and self-organizes (rather than self-manages) in the moment, swarming in on a task of challenge and collectively innovating, organizing, and collaborating" (Kelly, 2019, p. 16). This model considers leadership from a systems approach, where the structure, mindset, and connections influence leadership's behaviors and are influenced by behaviorism, cognitivism, constructivism, and connectivism (Kelly, 2019, p. 62). It is flexible, adaptable, efficient, resilient, and able to respond quickly to changing environments and situations. Under the umbrella of collective leadership, swarm leadership connects people and ideas through collaborative networks, which allow for a quick response in emergent situations (McNulty et al., 2018). McNulty et al. (2018) analyzed the response to the Boston marathon bombings in 2013 through the lens of collective leadership and swarm intelligence and identified five guiding principles that supported interagency collaboration in a crisis that our team found

useful. These principles might hold value for a range of leaders currently managing the pandemic response:

- **Unity of mission** – we saw an urgent and emergent need and looked to provide useful support in a timely manner.
    - **Generosity of spirit and action** – we all felt compelled and called to this work.
    - **Staying in your own lane** – while for McNulty et al., this spoke to interagency collaborations, we recognized the importance of knowing our roles and expectations.
    - **No ego, no blame** – an approach that recognizes that the work is not about any one person and mistakes are important opportunities for improvement.
    - **A foundation of trusting relationships** – as members of an established cohort, we were well placed to bring a cohesive and cooperative leadership response to the crisis (McNulty et al., pp. 25–26).

According to Gloor (2017), the swarm exhibits a collective type of leadership that has a few key members rotating primary roles as they take turns leading the digital network. Since it is a "flexible, emergent, robust, self-organizing system that sweeps down on the crisis and knows exactly how to handle it" (Kelly, 2019, p. 84), it constituted the most suitable approach for our team to address social and educational needs. Further, it continuously offers a creative path for educators to work across distributed learning networks and build both a robust educational experience and stronger communities of practice.

6 Conclusion

The COVID-19 pandemic has rapidly moved education online and is re-shaping pedagogy. As educators transition from an initial emergent response to thinking longer term about online pedagogy, this blueprint offers a simple, stepwise, evidence-informed approach that can be adapted to any course, then implemented, and evaluated. We welcome questions, offer our support, and hope you will share your experience with us. This project emerged as a natural example of swarm leadership (Kelly 2019), which began when we identified our intention to respond to and support our colleagues who are facing unexpected challenges in navigating the digital teaching and learning environment. Our experience continued throughout the webinar development and manuscript preparation.

Since we live in an interconnected world, leadership extends beyond the local environment of the individual, the community, and the society where it is being practiced. Our little swarm experienced this level of connectedness as we reached out to the wider network and engaged with educators from all over the world to share our blueprint and learn about their challenges and successes. Our collective diversity led us to explore innovative approaches for presenting our ideas during the webinars to an international audience, modeling best practices for learner engagement through games and case studies. Those of us who have more experience with teaching online have an opportunity to support our colleagues, demonstrating an inclusive ethos. Working together toward positive gains, particularly in times of

great change, makes us stronger, unites us, and teaches us that the collective "we" is stronger and much more efficient than the solitary "I."

References

Avolio, B., Walumbwa, F., & Weber, T. (2009). Leadership: Current theories, research, and future directions. *Management Department Faculty Publications, 37*. https://doi.org/10.1146/annurev.psych.60.110707.163621

Beaudoin, M. (2015). Distance education leadership in the context of digital change. *Quarterly Review of Distance Education, 16*(2), 33–44.

Biggs, J. (2003). *Aligning teaching and assessing to course objectives. Teaching and Learning in Higher Education: New trends and innovations* (pp. 13–17). University of Aveiro.

Brown, B. (2012). *Daring greatly*. Gotham Books.

Covey, S. (1989). *The 7 habits of highly effective people. Habit 2*. Simon and Schuster.

Farrie, D., Kim, R., & Sciarra, D. G. (2019). *Making the grade 2019: How fair is school funding in your state?* Retrieved from https://edlawcenter.org/research/making-the-grade/

Francom, G. (2017). Principles for task-centered instruction. In C. M. Reigeluth, B. J. Beatty, & R. D. Myers (Eds.), *Instructional-design theories and models: The learner-centered paradigm of education* (Vol. IV, pp. 45–65). Routledge.

Gloor, P. A. (2017). *Swarm leadership and the collective mind: Using collaborative innovation networks to build a better business*. Emerald Publishing Limited; eBook Collection (EBSCOhost). http://0-search.ebscohost.com.aupac.lib.athabascau.ca/login.aspx?direct=true&db=nlebk&AN=1423726&site=eds-live

Johnson, K. (2020). Case study: Leadership & NMU's distance education intervention. In *EDDE804: Leadership and Project Management Seminars*.

Kelly, R. (2019). *Constructing leadership 4.0: Swarm leadership and the fourth industrial revolution*. Palgrave Macmillan. https://doi.org/10.1007/978-3-319-98062-1

McNulty, E., Dorn, B., Goralnick, E., Serino, R., Grimes, J., Borelli Flynn, L., et al. (2018). Swarm intelligence: Establishing behavioral norms for the emergence of collective leadership. *Journal of Leadership Education, 17*(2), 19–41. https://doi.org/10.12806/v17/i2/r2

Meuser, J. D., Gardner, W. L., Dinh, J. E., Hu, J., Liden, R. C., & Lord, R. G. (2016). A network analysis of leadership theory: The infancy of integration. *Journal of Management, 42*(5), 1374–1403. https://doi.org/10.1177/0149206316647099

Reigeluth, C. M. (2016). *Instructional-design theories and models: Volume IV*. Taylor and Francis. https://doi.org/10.4324/9781315795478

Savery, J. R. (2009). Problem-based approach to instruction. In C. M. Reigeluth & A. A. Carr-Chellman (Eds.), *Instructional-design theories and models: Building a common knowledge base* (Vol. III, pp. 143–165). Taylor & Francis.

Silver, J., & Sjoberg, K. (2019). *Reducing poverty to improve educational outcomes: What a school division and a local community can do together*. Retrieved from https://www.policyalternatives.ca/sites/default/files/uploads/publications/Manitoba%20Office/2019/12/LRSD%20Reducing%20Poverty%20to%20improve%20Ed%20outcomes.pdf

The Lancet Child and Adolescent Health. (2020). Pandemic school closures: Risks and opportunities. *The Lancet Child and Adolescent Health*. https://doi.org/10.1016/S2352-4642(20)30105-X

Wiggins, G. P., & McTighe, J. (2005). *Understanding by design*. ASCD.

Yusuf, B., Walters, L. M., & Sailin, S. N. (2020). Restructuring educational institutions for growth in the fourth industrial revolution (4IR): A systematic review. *International Journal of Emerging Technologies in Learning (IJET), 15*(3), 93–110. https://doi.org/10.3991/ijet.v15i03.11849

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Part V
Supporting Mental Health in Times of Anxiety

Poetry and Prose: Mediating and Modeling Faculty Member Mental Health and Wellness

Christine Helen Arnold, Cecile Badenhorst, Jan Buley, John Hoben, and Leah Lewis

What keeps me up at night
is the thought that I will never teach
in a face-to-face classroom again.
No more bustle of bodies,
of words spewing out of bodies,
along with harmless,
respiratory droplets.

Cecile Badenhorst

1 Mental Health and Wellness in Post-Secondary Education

The COVID-19 pandemic in 2020 has resulted in an amplified focus on mental health and wellness for post-secondary education students, educators, and administrators. According to the World Health Organization (WHO) (2004), mental wellness is defined as "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (p. 1). Students are managing stressors that, in many circumstances, have reached abnormal levels, as friends and familial relationships, (un)employment anxieties, medical concerns, routines and schedules, and financial roles and responsibilities, among others, have shifted significantly. As educators and administrators, we are assisting our students with the varying challenges and contradictions that we are experiencing with the expectations that our work will continue during this pandemic situation. We have been actively constructing and monitoring innovative and independent approaches that encourage student mental health and wellness alongside our own requirements.

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An increase in Canadian post-secondary institutions addressing student mental health and wellness on campuses has resulted in an unprecedented demand for innovative programs and initiatives (Henry, 2020; Shapiro, 2018). There is an opportunity to provide leadership regarding mental health and wellness, which has been steered by strategic frameworks, planning guides, and task force reports and recommendations. Associations advising post-secondary educators and administrators have launched support documents such as the Canadian Association of College and University Student Services (CACUSS) and the Canadian Mental Health Association's (CMHA) "Post-Secondary Student Mental Health: Guide to a Systemic Approach" (2013) and the Mental Health Commission of Canada's (MHCC) development of the first standard for psychological health and safety for post-secondary education students (2020).

Limited research has been produced regarding the mental health and wellness of educators and administrators within post-secondary institutions and the support mechanisms available (Gallagher, Roberts, & Rousseau, 2018). These inefficiencies have become readily apparent over the last few months and require case studies and collaborations to identify promising practices to support institutional members alongside student populations. However, we know that the collaborations that we collectively engage within as educators and administrators influence our work with students indirectly through behaviors and attitudes, as well as directly through opportunities to apply these same inventions in our online and remote classrooms.

2   A Case Study in Building Mental Health and Wellness Creative Capabilities

> The noise and busyness of the university hallway is shut out as the door clicks behind me. There's a loaf of warm chocolate date-bread in the middle of the table, and coffee and tea ready for sharing. The window is open and a light breeze causes the blinds to connect softly on the glass. We settle into this space, comfortable in our own skins. There is laughter, an exchanging hug. Someone asks about a member who was absent from the writing community last week. "Is Katie coming today? I hope so. I adored the poem she sent along." "How's your dad doing?" another person asks. "Oh. I found a photo of him and tried writing my piece with that in mind. It was something I've been avoiding." A soft glance is offered. The conversations spark other conversations and there's a safe harbor feeling to this room. We slice the still-warm bread, pour the tea, and open our journals. We're ready to begin.

Creativity is a social process (Woodman, Sawyer, & Griffin, 1993), and there is supporting research about how creativity positively impacts self-esteem and social interactions (George & Zhou, 2001). Creativity involves risk-taking and offers a vehicle for sharing who we are. It can be a place for self-exploration and reflection while helping to reconcile conflict, express emotions, and share what is on our minds with others. When writing is shared publicly, the offerings cut to the core of who we are. Sometimes sharing can be unsettling as we write to find ourselves (Lave & Wenger, 2013). We write to wonder about the world and proclaim our place within it to others. Cochran-Smith and Lytle (2009) advocate inquiry as the driving

force for coming together as a community. Their position is grounded in what they refer to as an "inquiry stance"—the intrigue in another person's writing style and the ways in which those multiplicities affirm what others are capable of doing. The aesthetic core of creativity contributes to the evolution of positioning and emerging knowledge that surfaces in response to creative processing (Leavy, 2009).

Accordingly, seven members of the Faculty of Education situated within a mid-sized research-intensive university in Canada revived our Creative Writing Community as an innovative and independent means of expressing ourselves and our emotions during these unpredictable times. As the narrative above reveals, we once gathered on campus, and that location provided a safe space for sharing our works with one another. With the complexities of academic positions, we were eventually unable to maintain a regular meeting schedule, and creative silence overcame us. However, we recently realized that the mental health and wellness outcome that the Creative Writing Community provided is the solution we require at this moment for ourselves and our students. We recognized that while relationships and interactions between ourselves and our students were once organic in nature (hallway conversations, coffee meetings, and stopping by the door of a colleague), these interactions must now occur using alternative methods, and creative writing is providing a space for this networking that impacts our pedagogies/andragogies.

3   Methods and Methodology

Using qualitative methods, namely, poetic inquiry, this case study examines the experiences of an online Creative Writing Community consisting of pre-service teachers and adult/mature educators and researchers. The Creative Writing Community meets 60–90 minutes weekly, and the structure includes checking in with one another, reading prepared poetry and prose consecutively according to the prompts provided, and engaging in roundtables for constructive commentary. The community consists of seven members, tenured and untenured, at various stages in their academic careers and represents several subdisciplines (Indigenous education, literacy education, arts-based education, counseling education, and post-secondary education).

The poetry and prose shared allow members to voice raw and real encounters that they are experiencing personally and professionally. This combines creative/academic writing as a means of community problem-solving and promoting educator and administrator mental health and wellness. This case study investigates these experiences and analyzes the writing produced during the COVID-19 pandemic in ways that support connectedness. The following research questions guide our investigation:

• What is the importance of relationships and creative/academic interactions during this period of uncertainty?

- How might the practice of creating contribute to our overarching mental health and wellness as faculty members?
- How has the "coming together" as a Creative Writing Community provided us with hope, strengthened us emotionally, and propelled us to think about teaching and learning solutions and strategies during these unpredictable times?

3.1 Poetic Inquiry

Poetic inquiry is a relatively new research method that uses poetry as a source of knowledge and as a means of communicating insights about the individual subject and their relationship with the world. Galvin and Prendergast (2016) describe the method as "an exploration of poetry for and as enquiry bringing forward illustrations of a convergence between epistemology, research methods and poetry" (p. xi). Also known by a number of different names, including research poetry, poetic narrative, ethnopoetry, and autoethnography poetry, poetic inquiry is garnering increasing interest across the humanities, social sciences, and a wide range of other fields, including within the health sciences and professional disciplines (Prendergast, 2009).

As many scholars are quick to recognize, poetic inquiry undoubtedly provides a means of creating well-crafted and aesthetically pleasing poems (Wiebe, 2015). However, the method can also have a strong narrative element and can be used to examine critical incidents in the life of the author or research subject as perceived from the individual's particular standpoint (Wiebe, 2015; Leggo, 2005). Researchers have used the method to examine a broad range of research themes related to political and sociocultural critique, the exploration of social identity, the meaning and significance of artistic creation, the writing process, the nature of teaching, and academic identity (Faulkner, 2018; Burford, 2018).

3.2 Data and Analysis

In the present case study, poetic inquiry is one of our primary methodologies, as it provides an effective means of exploring the experiences of faculty members and garnering creative, academic insights during the current pandemic. The data set for analysis consists of (1) members' poetry and prose pieces composed during the COVID-19 pandemic and (2) members' reflections about their writing and participation. Within this community, the following themes have been revealed:

- policies and procedures impacting teaching and learning directives,
- personal and professional social and emotional confrontations,
- online and remote course and supervision redevelopments,
- knowledge production, scholarship, and research activities,

- social media and communication technologies, and
- work-life balance strategies and struggles.

The poetry and prose pieces and reflections were analyzed by codifying themes and identifying emerging trends. A critical perspective was utilized throughout, which employed researcher reflexivity, collaboration, and peer debriefing (Creswell & Miller, 2000). The members worked together to build the domain structure, uphold broad discrete domains, debate how the domain structure fits the data, as well as introduce new and collapse existing codes. A consensus/core ideas file was created and shared with all members who acted as peer debriefers providing support, challenging researcher assumptions, and pushing the analysis to the next level (Creswell & Miller, 2000; Lincoln & Guba, 1985).

3.3   Conceptual Framework

As a conceptual framework for analysis, the Ecological Framework for Teacher Well-Being by Gallagher, Roberts, and Rousseau (2018) was employed as a lens to analyze community members' experiences as reflected in their personal poetry and prose pieces. The framework consists of seven individual and contextual factors that influence educators and students' well-being through interactions and relationships:

- **Individual factors** (teaching role, personal factors, and knowledge and competencies).
- **Contextual factors** (social and cultural factors, organizational factors and leadership, professional regulations and policy, and practice environment and conditions).

The framework was applied within a post-secondary landscape in this circumstance and demonstrates that while most mental and wellness initiatives occur at the individual level, responsibility cannot be the sole responsibility of educators and administrators themselves. In other words institutions and senior leadership must provide supports and a compassionate culture around teaching, research, and service in order to improve well-being and student outcomes.

4   Themes and Trends

In analyzing the poetry and prose pieces, the content and concepts that emerged within them were coded according to the Ecological Framework for Teacher Well-Being (individual and contextual factors) (see Fig. 1). Reflections regarding the writing and participation within this community were coded according to
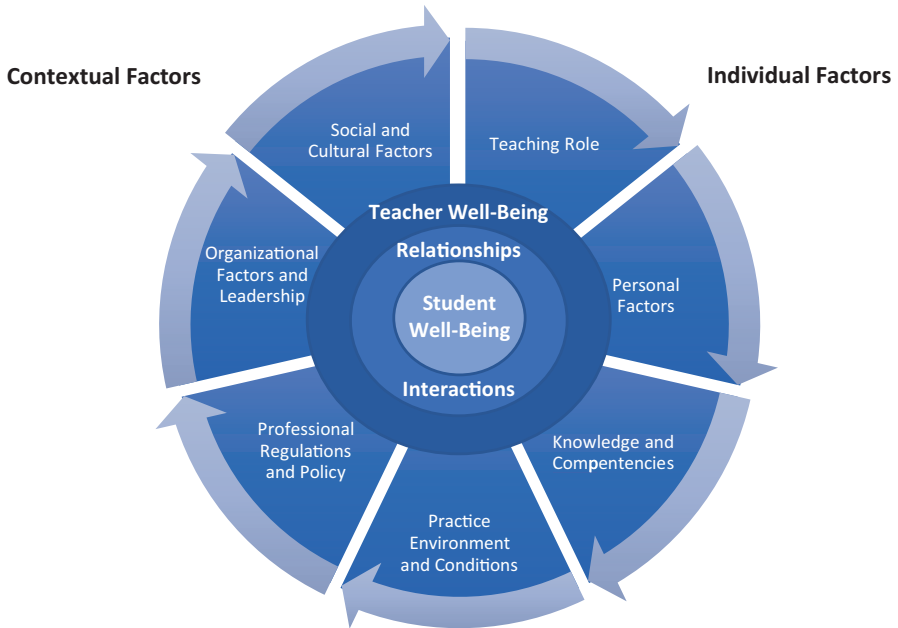
Fig. 1 Ecological framework for teacher well-being. Note: Reproduced from Gallagher, K., Roberts, A. M., and Rousseau, M. (2018). *Teacher well-being: A conceptual framework for early childhood*. Paper presented at the National Research Conference on Early Childhood, Arlington, VA as cited in Roberts, A., & Kim, H. (2019). *To promote success in schools, Focus on teacher well-being*. Washington, DC: Brookings Institution

relationships and mental health and wellness within creative/academic writing. These latter codes characterize our guiding research questions and reveal the process involved in preparing writing and participating within a creative community.

4.1 Ecological Framework for Teacher Well-being

Members' poetry and prose pieces aligned with the highlighted conceptual notions proposed by Gallagher, Roberts, and Rousseau (2018) as represented in Fig. 1, as well as the co-occurrence of both individual and contextual factors informing our mental health and wellness as pre-service teachers and adult/mature educators and researchers. It is interesting to note that prior to the current health crisis and COVID-19 pandemic, these would have naturally been somewhat differentiated and compartmentalized between home and campus domains. The COVID-19 pandemic has demanded a merging of these worlds.

4.1.1 Individual Factors

While all the individual factors within the framework were evidenced in our writing, teaching role and knowledge and competencies embodied the majority of the struggles identified. A level of discovery emerged via our creative writing that included the experience of loss that is faced from working in isolation. These highlight the role that classroom and other learning spaces play in the knowledge-exchange processes vitally core to university learning. Other pressures included the tension of being pre-tenured, grappling with lost time, and forced stoppages on active scholarship:

> This was the time for writing, writing, writing and revising,
>   For thoughts concerning assistantships and hiring,
>   For ruminating new ideas that were intricate and inspiring,
>   For nurturing plants on office window sills that have for long stood still.
>
> This was the time for involvement in committees and councils,
>   For sharing sources and resources with colleagues and critics,
>   For sorting out the fine details and logistics,
>   For funding the next stages and all those desire.

As individuals, we note here thematic recurrences of educator and teacher roles as foundationally meaningful, roles that house an array of interpersonal sites of exchange and knowledge sharing where such activities bring about a sense of belonging, place, and competency. These factors have now been disrupted, and the "…personal aspects of teaching – feeling a restraint" in response, a repeated sentiment among our creative writing highlights the challenge and tension that comes with maintaining rich learning relationships with students. We are grieving the loss of student interaction. Other individual challenges include a sense of struggling with maintaining resilience and belief in one's meaningful sense of self; also, forged competency as an educator, a sense of being "lost" at times, in isolation:

> Anyone?
>   In deep water
>   sensory relaxation
>   Is a delight
>   In the online classroom,
>   Suspended senses mean
>   drowning
>   not waving.

This creative writing allows for personal and supportive exchange to transpire. Previously, it would have taken place in person. Family events including those of a new parent caring for an infant in a province away from family, caring for ill and senior family members, and concerns for family in home countries on another side of the world were revealed.

Another writes about caring for a hospitalized parent; all juxtaposed alongside work, academic productivity, and technical challenges with teaching online. Poetry and prose encouraged engagement with powerful metaphors in such a way that

brought us more accurately toward relaying the experience of disruption, where other forms of academic narrative would not have sufficed:

> They'll tell you to practice capsizing.
>   Don't panic: Have a plan.
>   Know the routes,
>   and who is following you,
>   Question advice.
>   Map out your destination loosely,
>   (even if you don't intend to go there.)
>   And whatever you do,
>   compare notes with others,
>   lest a rock-studded passageway rips out the keel,
>   and they find your body a few kilometres downstream.

4.1.2 Contextual Factors

Contextual factors evidenced in our writing centered on social and cultural factors and navigating the practice environment and conditions. They were relatively silent surrounding organizational factors and leadership. These factors included experiencing a professional and personal loneliness in response to a dramatic shifting of cultural norms from an interpersonal professional reality to a solitary one. One member's poetry included the following description:

> Will we forever now
>   maintain that social distance,
>   separation stretching ahead
>   and between us?
>   No laughing – …

Despite working from home, experiences of workplace expectations through communicated regulations, along with health restrictions, and a confusing lack of clarity presented us with, at times, an intense level of feeling overwhelmed while responding to the pulled identities between familial, social, and professional domains.

4.2   Relationships and Mental Health and Wellness

Members' reflections concerning writing and participation within this community according to relationships and mental health and wellness revealed the importance of sharing personal and private narratives. Confidence and conviction can come from this exercise. Members commented on how the act of writing narratives assisted in the ability to express vulnerability while creating a space where colleagues could be candid about frustrations, fears, and forward-thinking thoughts. Sharing these experiences created a feeling of group cohesion and provided a conduit for engaging in authentic work.

Learning to listen to one another and expressing empathy when intense emotions were conveyed through creative writing were also articulated. Learning appropriate responses and reactions when sharing creative writing and providing feedback to one another were skills that needed to be mastered when meeting virtually. Moreover, members ascertained confidence and conviction, even when they were experimenting with novel and unfamiliar writing genres, conventions, and devices. It was stated that this emphasis on building confidence in others was a key aspect of creating a safe space and provided a welcome contrast to many other academic writing venues. In many ways, it was liberating to create a space where colleagues could collectively work against conventional hypercritical norms present in academic writing circles.

Creative writing was also seen as an approach for confronting instructional and institutional formalities through informal linguistic expression. Through imagery, metaphors, similes, dual meanings, and double entendres, members were able to question and deconstruct current realities. The stresses of knowing that students are counting on educators and administrators to guide them through these policy and procedural motivated moments with a level of connection required for learning were playfully unpacked via metaphors such as "capsizing canoes in the rapids" and "troops wandering wounded from battlefields." It was revealed within these reflections that educators and administrators possess resilience, but maybe not in this emergency circumstance, as these moments require groundbreaking passageways that previous training had not provided.

5   Concluding Pedagogical/Andragogical Solutions and Strategies

All writing at some level involves creative work where authors engage in imagination, new ideas, and language use (McVey, 2008). The binary holding the creative/academic divide is "superficial and nonsensical as our academic identities are informed by our creative pursuits" (Yoo, 2017, p. 446). Working with creative writing—poetry, fiction, and drama—can improve academic writing. Engaging in creative activities results in a willingness to be open about language and ideas, and to explore different access routes to producing writing. We are forced to employ precise language choices, alternative points of view, and an eye for the story at play. Writing skills development, audience attunement, and fluency of writing practice are all positive outcomes of harmonizing creative/academic writing (McVey, 2008).

We have learned community-building exercises that we can apply to our online and remote classrooms through this Creative Writing Community. Creative writing and composition as a pedagogy will allow our students to appreciate the beginnings of the writing process, as these are the places where compositions emerge from sounds, impressions, images, and inspirations (Peary & Hunley, 2015). More specifically, poetry and prose narratives composed in the first person, in which the

writer becomes a character, stimulate the application of course concepts, since students must locate and relate the relevancy of the concepts they are encountering as personally affecting themselves (Peary & Hunley, 2015).

Overall, this innovative and independent means of expression in the time of crisis possesses the potential to promote mental health and wellness among post-secondary education stakeholders. As we learned to listen to one another in more detailed ways, provide feedback in constructive but critical formats, and foster assurance virtually during this time of need, it became evident that this intimate communal structure will be worthwhile when building rapport and reenergizing our students.

References

Burford, J. (2018). Sketching possibilities: Poetry and politically-engaged academic practice. *Art/Research International: A Transdisciplinary Journal, 3*(1), 229–246.

Cochran-Smith, M., & Lytle, S. (2009). *Inquiry as stance*. Teachers College Press.

Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory Into Practice, 39*, 124–134.

Faulkner, S. (2018). Poetic inquiry: Poetry as/in/for social research. In P. Leavy (Ed.), *Handbook of arts-based research* (pp. 208–230). Guilford Publications.

Gallagher, K., Roberts, A. M., & Rousseau, M. (2018). *Teacher well-being: A conceptual framework for early childhood*. Paper presented at the National Research Conference on early childhood, Arlington, VA.

Galvin, K. T., & Prendergast, M. (2016). Introduction. In K. T. Galvin & M. Prendergast (Eds.), *Poetic Inquiry II – Seeing, caring, understanding* (pp. xi–xvii). Sense Publishers.

George, J., & Zhou, J. (2001). When openness to experience and conscientiousness are related to creative behaviour: An interactional approach. *Journal of Applied Psychology, 86*(3), 513–524.

Henry, J. (2020, February). *We need to put campus mental health services in perspective*. University Affairs. https://www.universityaffairs.ca/opinion/in-my-opinion/we-need-to-put-campus-mental-health-services-in-perspective/

Lave, J., & Wenger, E. (2013). Communities of practice in higher education: Professional learning in an academic career. *International Journal for Academic Development., 21*(3), 230–241.

Leavy, P. (2009). *Method meets art: Arts-based research practice*. Guilford Publications.

Leggo, C. (2005). Pedagogy of the heart: Ruminations on living poetically. *Journal of Educational Thought, 39*(2), 175–195.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage.

McVey, D. (2008). Why all writing is creative writing. *Innovations in Education and Teaching International, 45*(3), 289–294.

Peary, A., & Hunley, T. (2015). *Creative writing pedagogies for the twenty-first century*. Southern Illinois University.

Prendergast, M. (2009). "Poem is what?" Poetic inquiry in qualitative social science research. *International Review of Qualitative Research, 1*(4), 541–568.

Shapiro, I. (2018, April). *Mental illness on campus really is 'a thing*. The Conversation. https://theconversation.com/mental-illness-on-campus-really-is-a-thing-94571

Wiebe, S. (2015). Poetic inquiry: A fierce, tender, and mischievous relationship with lived experience. *Language and Literacy, 17*(3), 152–163.

Woodman, R., Sawyer, J., & Griffin, R. (1993). Toward a theory of organizational creativity. *The Academy of Management Review, 18*(2), 293–321.

World Health Organization. (2004). *Promoting mental health: concepts, emerging evidence, practice* (Summary report). World Health Organization.

Yoo, J. (2017). Writing out on a limb: Integrating the creative and academic writing identity. *New Writing, 14*(3), 444–454.

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Addressing the Mental Health and Learning of Students in Canadian Higher Education Institutions During the COVID-19 Pandemic and Beyond: An Integrated Model

Valerie G. Damasco, Grace Karram Stephenson, and Gerald C. Cupchik

1 Mental Health and Learning of Students

Scholars have argued that unanticipated health crises, such as the COVID-19 pandemic, have increased the mental health issues of university students (see Araújo et al., 2020; Odriozola-González et al., 2020; Talidong & Toquero, 2020). At the onset of the pandemic, higher education institutions responded by suspending in-person classes and transitioning to remote learning and other associated activities. This reorganization of academic and student services furthers the neoliberal restructuring of universities and negatively affects the mental health and well-being of students (Moorhouse, 2020; Morgan, 2020). Importantly, when undetected, these issues could significantly impact the learning process (Bryce et al., 2020; Schlesselman, Cain, & DiVall, 2020; Shanahan et al., 2020).

In addition to the challenges associated with the online learning process, students with mental health issues face additional barriers. For instance, they may be less likely to seek support from academic staff in the form of reasonable academic accommodations and face stigma and alienation from peers. This may hinder their motivation to learn and affect their overall well-being (Dryer et al., 2016). Furthermore, without intervention, these issues can decrease their self-efficacy and increase their risk of withdrawing from their program of study (Martin, 2010).

A study conducted by Martin (2010) illustrates how barriers to mental health can impact learning. Students who experience these issues and associated difficulties

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report lower completion rates than those with other disabilities. Several challenges they experience include concentration, time management, class attendance, managing stress, and maintaining physical health (Collins & Mowbray, 2005).

As the COVID-19 pandemic evolves, students continue to endure unique challenges that impact their mental health (Araújo et al., 2020; Odriozola-González et al. 2020). For instance, many experience high levels of anxiety because of the abrupt disruption the situation has had on their studies, closure of institutions, and associated uncertainties. Furthermore, interruptions and the termination of research projects, internships, and on-campus jobs could potentially impact their program of study and postpone graduation. These factors also have significant consequences for their competitiveness in the job market (Rogowsky et al., 2020).

In sum, the complexity of these issues can lead to negative psychological consequences, hindrances to the learning process (Araújo et al., 2020; Morgan, 2020), and termination from their program of study. The ability to be resilient while experiencing adversity is therefore crucial for students in higher education institutions, especially as the pandemic continues to shift the nature of the learning environment and process.

2 Student Retention, Success, Resilience, and Long-Term Sustainability

Student retention and success have become major concerns for universities since the establishment of student services programs and the advent of the marketization of higher education institutions. At the time of writing this chapter in June 2020, universities across Canada had been preparing for the beginning of the 2020–2021 academic year. Anticipated mental health issues and challenges associated with online learning have forced these institutions to determine appropriate programming and supports for their students. Furthermore, this significant period of ongoing change during the COVID-19 pandemic has prompted considerable attention and planning for their retention, success, and long-term sustainability at these institutions.

In October 2020, a survey was sent to 10,000 students returning to the University of Toronto Scarborough campus to share their experiences during the COVID-19 pandemic – 858 surveys were completed. The study was funded by the *Toronto COVID-19 Action Initiative* grant to the first and third authors. In the study, a broad array of measures considers how students negotiate the challenges posed by COVID-19 and its impact on their emotional states and intellectual efforts. The fundamental principle guiding the work holds that a balanced emotional state is fostered by community support and reflexivity regarding proximal (i.e., personal) and distal (i.e., broader social context) situations. Fostering mental health and wellness, amidst both possibilities and constraints, is central to survival and well-being during the pandemic. The narratives embedded within this chapter were extracted from the qualitative data from the survey, reflecting how some students have been

addressing the demands of online learning against the background of ongoing stresses.

Student retention is broadly referred to as the continuation of students at a higher education institution where they complete their program of study. In relation to this, student success refers to the benefits accumulated through study and learning, which could include personal and professional development as well as employment or career opportunities. Success is evaluated based on retention – that is, in terms of whether students are retained through enrollment or graduation. Universities and policymakers frequently use this success metric in performance-based funding models and allocation, which is determined by student enrollment and retention (Polatajko and Monaghan, 2017).

During the COVID-19 pandemic, concerns for retention and determining barriers to learning have been pivotal as students conduct their program of study online. Understanding what these barriers are and how they may affect retention is crucial. According to a study conducted by Hamann et al. (2020), student success declines when a greater percentage of the course load is completed on remote platforms. This association between mental health and online learning was articulated by one of the students who responded to our survey:

> Adapting to online education was very hard on my mental health as I suffer with depression. I would spend most of my time on-campus prior to the pandemic and surround myself with people everyday so I wasn't alone with my thoughts. Since COVID-19 started, I've constantly been stuck in my house for the most part where I have easy access to my thoughts and stress about the future which interferes with my ability to study.

It is predicted that additional concerns will escalate for students with mental health issues as online instruction continues in the foreseeable future (Hamann et al., 2020; Moorhouse, 2020; Morgan, 2020; Zhang et al., 2020). Thus, as universities continue to adopt this trend in learning, increasing the success of online learners also needs to be considered (Hamann et al., 2020).

Connected with retention and success, resilience is broadly defined as stability in mental health despite exposure to various stressors (Gloria, & Steinhardt, 2016). Students need to adapt and cope with ongoing stressors and psychological distress, especially during the COVID-19 pandemic.

According to Chen and Bonanno (2020), based on theoretical models of flexibility, the function of resilience factors is likely to transform as the COVID-19 situation unfolds. Moreover, they emphasize the importance of considering the context in which regulatory strategies are used in response to changing situational demands. In the example below, a student discusses the ways in which they have had to make realistic plans to reduce stress levels, which includes reassessing their workload and enrolling in specific types of courses to balance the difficulties:

> I have struggled to adapt to online learning and struggled to keep up with my course load over the summer term, which resulted in my almost failing astronomy. I decided to take two CR/NCR [credit/no credit] for a few elective courses to reduce my stress levels and to focus on my most difficult mandatory course.

Across universities in Canada, the association between retention, mental health, and resilience has forced educators, professionals, and practitioners in higher education settings to determine how best to assist students (Eisenberg, Lipson, & Posselt, 2016). As the realities and expectations of students continue to evolve during the pandemic and beyond, the role of practitioners and the services they provide will also require modification. To increase retention, Bryce et al. (2020) propose that educators and learning practitioners need to apply resilience and mental health strategies into their approach. However, we argue that it is also crucial that these approaches are culturally relevant.

3   Stigmatization and Barriers to Mental Health Help-Seeking Behaviors

In harnessing resilience and mental health strategies at universities, although supports such as counseling and health services are available on campuses and now through online platforms, students with mental health issues may be reluctant to access them. A student discussed their frustration with finding appropriate supports on campus and longer wait times:

> It is harder to navigate or understand where to find/use resources offered by the school. Also, the uncertainty of getting help when I need it - instead of weeks later. How I coped with it? Frankly, don't rely on this support - except information - talking about in-person/direct communication.

As Kirsh et al. (2016) emphasize, students who experience a decline in mental health and barriers to learning often do not seek support. Furthermore, Dunley and Papadopoulos (2019) explain that despite the availability and benefits of mental health services at higher education institutions, barriers exist at the personal, socio-cultural, and institutional levels which affect mental health help-seeking behavior.

A common barrier to help-seeking behaviors is fear of stigmatization (Nobiling & Maykrantz, 2017). According to Garriott et al. (2017), the effect of stigma on help-seeking behavior varies among people with diverse life experiences. Theydiscovered that the perceptions of first-generation students (i.e., the first individualin a family to receive a postsecondary education) toward counseling are affected byself-stigma, while continuing-generation students are more concerned by how help-seeking would be perceived by others.

Other salient factors, which may not be readily apparent, could either hinder or promote help-seeking behaviors. Undeniably, the needs of each student will vary, and therefore, a standardized approach is incompatible. Mental health programming, such as health promotion and outreach campaigns, needs to account for the multitude of barriers students may face in seeking assistance.

During stressful events such as the COVID-19 pandemic, higher education institutions have introduced several strategies to improve the mental health and well-being of students, the majority of which are deployed online. Scholars note that

online supports and resources may be beneficial as they allow for the maintenance of confidentiality (Kauer et al., 2014). The need for interventions that aim to reduce stigma in the access of mental health supports is therefore crucial, particularly during this time of uncertainty and ongoing change.

As noted from the examples provided above, the effects of the COVID-19 pandemic on students' mental health and learning underscore the urgent need to develop intended courses of action that are equipped to support them during the health crisis beyond. While efforts to reduce stigma are continuously conveyed to students through mental health programming, public health messaging, and health promotion, concerns remain regarding those who are reluctant to access supports. Therefore, the challenge for higher education institutions is to determine outreach strategies and practical ways of assisting these students.

4   Integrated Model to Support Mental Health and Learning

Taking all the factors above into consideration, we propose a model that seeks to optimize institutional support and services to address students' mental health, well-being, and learning needs. An integrated, interprofessional, and innovative model amidst institutional curriculum reform during the COVID-19 pandemic is fundamental. Integrated programs aim to address the relationship between resilience, mental health, and academic success and involve collaboration among academic services, health supports, and other university services. Importantly, this programming model promotes health and well-being as part of the institutional culture (Wu, Connors & Everly, 2020). For instance, it is important for support staff to recognize students' mental health needs and provide effective practices to foster an organizational culture of resilience (Everly, Smith, & Lobo, 2013; Wu, Connors & Everly, 2020).

As students continue their learning on remote platforms and preprare for their eventual return to campus, universities need to be profoundly aware of their experiences and, in turn, implement strategies to improve their well-being, mental health, and build their resilience (Schlesselman, Cain, & DiVall, 2020). Due to changes prompted by the COVID-19 pandemic, increased accountability in institutions, ongoing assessment of programs and services, and adaptation to the resulting shifts caused by the pandemic are essential.

An appropriate process for altering the ways in which services are established, delivered, and evaluated in response to the changing climate of learning is therefore required at universities. First, it is crucial to understand students' mental health needs, their perceptions of help-seeking, coping strategies, and their experiences with campus services. Second, insights from these dimensions should inform the development and implementation of needs-based assessments and the provision of services to enhance their general well-being, academic attainment, and retention.

As noted in the previous section, a standardized approach cannot meet all students' needs. That is, not all students respond to the pandemic in the same way.

Each carries a unique composition of resilience factors, including personality traits, attributional style, social support system, and coping self-efficacy; these individual characteristics become predominantly evident during disasters and traumatic events (Schlesselman, Cain, & DiVall, 2020).

4.1   Self-Regulation to Address Individualized and Interdependent Needs

To examine the perceptions and coping behaviors of students, it is fundamental to begin with the common-sense model of self-regulation, which is a theoretical framework for studying illness and its management (Leventhal, Brissette, & Leventhal, 2003; Leventhal et al., 2012). This model emphasizes that individuals form cognitive and emotional representations of health threats. In turn, such cognitive representations lead to the development of coping procedures to treat and prevent health risks. Individuals then evaluate whether these coping behaviors have achieved their desired outcomes (Rogowsky, Laidlaw, and Ozakinci, 2020). In the example below, a student articulates how they dealt with and coped with their stress, which involved reducing their course load:

> I would not say that I coped with it. Or at least, not in the way I wanted to. This semester and last semester too (Summer 2020), I found myself dropping courses just to keep myself from feeling too overwhelmed. In fact, right now in Fall 2020 I have been reduced to taking part-time schooling because I felt so stressed. I do feel better after dropping those courses though.

Higher education institutions have increasingly become a consumer-driven market where students are provided with a holistic experience. This entails addressing their needs in multiple areas, including learning, mental health, and social environments (Felix and Learner, 2017). According to Felix and Lerner (2017), student needs are becoming more complex and interdependent, with mental health and employment experiences more integrated. This is often incompatible with how services are delivered at universities – that is, they may be separated or disconnected. During times of uncertainty, when student needs are more complex, it is crucial for institutions to provide supports and coping procedures in a comprehensive and holistic manner.

   In response to the integrated needs of students, mental health services in universities should attempt to tailor strategies to individualized needs to improve academic success and retention. Since the onset of the COVID-19 pandemic, mental health programming in higher education institutions has evolved from the delivery of services and supports provided by a designated department to an institution-wide effort. During the COVID-19 pandemic and beyond, the need to support students remotely and within online classrooms requires collaborative participation from various individuals, stakeholders, services, and departments at higher education institutions.

4.2   Institutional Regulation for Integrated and Collaborative Service Delivery

Integrated models of service delivery within higher education institutions encourage collaboration between various stakeholders and challenges the typical insular and conventional management system approach (Felix and Learner, 2017). This could include support from academic and enrollment services, health units, student affairs, and other relevant personnel. While online support systems are being established and redesigned to meet the learning and mental health needs of students (Moorhouse, 2020; Morgan, 2020), the most effective methods for developing and providing these supports are not always clear.

The implementation of these online support systems requires staff with the knowledge, skills, and receptiveness toward integrated service delivery. Although several programs may adopt an integrated model, their provision should enforce a shared responsibility between administrators, faculty, staff, and students. Such initiatives should also nurture resilience strategies that will assist students in maintaining mental health and well-being throughout ongoing societal changes and future unexpected events. The example below emphasizes how faculty are beginning to adapt pedagogical practices that attempt to foster resilience and well-being during the learning process:

> I get professors want to make sure academic integrity is present in our work, but some amazing professors have chosen to take a better path and talk to students and come to a collective decision as to what works best for both parties. Some professors have chosen to do more participation heavy grading schemes, more but reasonable assignments. They have given a peace of mind and an eagerness to learn and do well on those rather than have anxiety about what we are learning. I wish those professors I talked about would learn from the other ones. I am still coping with this problem.

While specific interventions to increase resilience may not exist, strategic integrated programming can assist students to develop protective factors to promote learning success and retention.

5   Adaptability and Sustainability

Universities in Canada continue to adjust, readjust, and adapt their activities in response to the health crisis. The unpredictable and rapidly changing nature of this situation becomes an ongoing case that demands strategic planning at individual and institutional levels. Future crises are inevitable. In higher education institutions, preparing for the post-COVID-19 world therefore requires reconsideration in anticipation of and response to these events.

As noted in previous sections, resilience involves continued functioning in difficult situations. Wiltsey Stirman et al. (2012) note that many of the initial innovations that have been successful fail to become incorporated into the practices of

institutions and communities. Furthermore, they emphasize that tension exists between the delivery of interventions and the ways in which they are adapted for contexts that differ from those in which they were originally developed. Several service delivery models prioritize intervention rather than the context in which programs are introduced. Other models examine the sustainability of programs and interventions in connection with broader structural and systemic influences.

We recommend a model that involves the parallels and dynamics between "self-regulation" and "institutional-regulation" to support the mental health and learning needs of students during unanticipated crises events. This approach could mutually adapt and evolve to the context and thereby foster sustainability. The notion of "planned resilience" may be more crucial as higher education institutions continue to develop strategies in response to indefinite evolving situations. Innovative models such as the one we propose are therefore fundamental in this regard. Flexibility and adaptation to the situation, which entail working across boundaries in an integrated manner, may prompt more adaptive approaches during the COVID-19 pandemic.

As we have attempted to illustrate in this chapter, the common-sense model of self-regulation (Leventhal, Brissette, & Leventhal, 2003; Leventhal et al., 2012) could be extended to institutional regulation. Both have direct implications for how universities and their students confront different challenges. While some universities may face diminished student retention because of the transition to online learning, students strive to maintain resilience, both mental and physical, in the face of the rapidly changing learning environment. A central idea of the common-sense model of self-regulation (Leventhal, Brissette, & Leventhal, 2003; Leventhal et al., 2012) illustrates how the articulation and delivery of action plans could potentially mitigate uncertainty and associated anxiety. Courses of action at the institutional level involve collaboration between various levels of organizations that provide education and student services. This can extend to creative modes of teaching, learning, and support for student success.

References

Araújo, F., de Lima, L., Cidade, P., Nobre, C., & Neto, M. (2020). Impact of sars-cov-2 and its reverberation in global higher education and mental health. *Psychiatry Research, 288, 112977.*

Bryce, C., Ring, P., Ashby, S., & Wardman, J. K. (2020). Resilience in the face of uncertainty: Early lessons from the COVID-19 pandemic. *Journal of Risk Research*, 1–8.

Chen, S., & Bonanno, G. A. (2020). Psychological adjustment during the global outbreak of COVID-19: A resilience perspective. *Psychological Trauma: Theory, Research, Practice, and Policy, 12*(S1), S51–S54.

Collins, M. E., & Mowbray, C. T. (2005). Higher education and psychiatric disabilities: National survey of campus disability services. *American Journal of Orthopsychiatry, 75*, 304–315.

Dryer, R., Henning, M. A., Tyson, G. A., & Shaw, R. (2016). Academic achievement performance of university students with disability: Exploring the influence of non-academic factors. *International Journal of Disability, Development and Education, 63*(4), 419–430.

Dunley, P., & Papadopoulos, A. (2019). Why is it so hard to get help? Barriers to help-seeking in postsecondary students struggling with mental health issues: A scoping review. *International Journal of Mental Health and Addiction, 17(3), 699–715.*

Eisenberg, D., Lipson, S. K., & Posselt, J. (2016). Promoting resilience, retention, and mental health. *New Directions for Student Services, 2016*(156), 87–95.

Everly, G. S., Smith, K. J., & Lobo, R. (2013). Resilient leadership and the organizational culture of resilience: Construct validation. *International Journal of Emergency Mental Health, 15(2), 123–128.*

Felix, E., & Lerner, C. (2017). The why, what, when, where, and how of student service innovation. *Planning for Higher Education, 45*(2), 54–64.

Garriott, P. O., Raque-Bogdan, T. L., Yalango, K., Ziemer, K. S., & Utley, J. (2017). Intentions to seek counseling in first-generation and continuing-generation college students. *Journal of Counseling Psychology, 64*(4), 432–442.

Gloria, C. T., & Steinhardt, M. A. (2016). Relationships among positive emotions, coping, resilience and mental health. *Stress and Health, 32*(2), 145–156.

Hamann, K., Glazier, R. A., Wilson, B. M., & Pollock, P. H. (2020). Online teaching, student success, and retention in political science courses. *European Political Science.*

Kauer, S. D., Mangan, C., & Sanci, L. (2014). Do online mental health services improve help-seeking for young people? A systematic review. *Journal of Medical Internet Research, 16*(3), e66.

Kirsh, B., Friedland, J., Cho, S., Gopalasuntharanathan, N., Orfus, S., Salkovitch, M., et al. (2016). Experiences of university students living with mental health problems: Interrelations between the self, the social, and the school. *Work, 53*, 325–335.

Leventhal, H., Brissette, I., & Leventhal, E. A. (2003). The common-sense model of self-regulation of health & illness. In L. D. Cameron & H. Leventhal (Eds.), *The self-regulation of health & illness behavior.* (pp. 42–60). Routledge Taylor & Francis Group.

Leventhal, H., Bodnar-Deren, S., Breland, J. Y., Hash-Converse, J., Phillips, L. A., Leventhal, E. A., et al. (2012). Modeling health and illness behavior: The approach of the common-sense model. In A. Baum, T. A. Revenson, & J. Singer (Eds.), *Handbook of health psychology* (2nd ed., pp. 3–36). Taylor & Francis Group.

Martin, J. M. (2010). Stigma and student mental health in higher education. *Higher Education Research & Development, 29*, 259–274.

Moorhouse, B. L. (2020). Adaptations to a face-to-face initial teacher education course 'forced' online due to the COVID-19 pandemic. *Journal of Education for Teaching*, 1–3.

Morgan, H. (2020). Best practices for implementing remote learning during a pandemic. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas, 93*(3), 135–141.

Nobiling, B. D., & Maykrantz, S. A. (2017). Exploring perceptions about and behaviors related to mental illness and mental health service utilization among college students using the health belief model (HBM) exploring perceptions about and behaviors related to mental illness and mental. *American Journal of Health Education, 48*(5), 306–319.

Odriozola-González, P., Planchuelo-Gómez, Á., Irurtia, M. J., & de Luis-García, R. (2020). Psychological effects of the COVID-19 outbreak and lockdown among students and workers of a Spanish university. *Psychiatry Research, 290.*

Polatajko, M. M., & Monaghan, C. H. (2017). Performance funding of United States' public higher education: Impact on graduation and retention rates. In S. Mukerji & P. Tripathi (Eds.), *Handbook of Research on Administration, Policy, and Leadership in Higher Education* (pp. 496–517). Hershey, PA.

Rogowsky, R., Laidlaw, A., & Ozakinci, G. (2020). 'Having come to university my care was very much in my hands': Exploration of university students' perceptions of health care needs and services using the common-sense model of self-regulation. *Journal of Behavioral Medicine.*

Schlesselman, L. S., Cain, J., & DiVall, M. (2020). Improving and restoring the well-being and resilience of pharmacy students during a pandemic. *American Journal of Pharmaceutical Education, 84*(6).

Shanahan, L., Steinhoff, A., Bechtiger, L., Murray, A. L., Nivette, A., Hepp, U., Ribeaud, D., & Eisner, M. (2020). Emotional distress in young adults during the COVID-19 pandemic: Evidence of risk and resilience from a longitudinal cohort study. *Psychological Medicine*, 1–10.

Talidong, K. J. B., & Toquero, C. M. D. (2020). Philippine Teachers' Practices to Deal with Anxiety amid COVID-19. *Journal of Loss and Trauma, 1–7.*

Wiltsey Stirman, S., Kimberly, J., Cook, N., Calloway, A., Castro, F., & Charns, M. (2012). The sustainability of new programs and innovations: A review of the empirical literature and recommendations for future research. *Implementation Science, 7*(1), 17.

Wu, A. W., Connors, C., & Everly, G. S. (2020, 2020/06/16). COVID-19: Peer support and crisis communication strategies to promote institutional resilience. *Annals of Internal Medicine, 172*(12), 822-823.

Zhang, W., Wang, Y., Yang, L., & Wang, C. (2020). suspending classes without stopping learning: China's Education Emergency Management Policy in the COVID-19 outbreak. *Journal of Risk and Financial Management, 13*(3).

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The School Counselor's Role in a Post-COVID-19 Era

Angela McCoy-Speight

> *Knowing how to respond quickly and efficiently in a crisis is critical to ensuring the safety of our schools and students. The midst of a crisis is not the time to start figuring out who ought to do what. At that moment, everyone involved – from top to bottom – should know the drill and know each other.*
>
> *Margaret Spellings, President of the University of North Carolina System from March 2016 to 2019 and 8th US Secretary of Education from January 2005 to 2009*

1   Background: A Period of Transition

Periods of transition have always been of concern for school counselors (Wright, 2011) – for example, the transition between different grade levels, the transition from school to work, and in recent times the transition from traditional face-to-face learning to remote learning. In the United States, 95% of the country's children (ages 5 through 17) attend some type of schooling outside of the home (Rapaport, 2016). The Department of Education mandates that schools be prepared for all types of disasters; however, as COVID-19 spread across the world, it became apparent that there was a large percentage of schools that were either underprepared or not prepared at all for a biological or health type of emergency (Preidt, 2012). According to the United Nations Educational, Scientific and Cultural Organization (UNESCO) as cited in Strauss (2020), COVID-19 impacted approximately 1.57 billion students worldwide in the preprimary through college levels.

Regardless of the environment (face-to-face or remote), school counselors are responsible for providing ethical, comprehensive programs that support all students

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in the areas of social-emotional, career, and academic development (The School Counselor and Virtual School Counseling, 2017). The position of the American School Counseling Association (ASCA) is that online school counselor programs must be equal to their face-to-face counterparts (ASCA, 2017d). As schools struggled to find equitable ways to finish the school year, the challenge for school counselors continued to be how to effectively reach all students and collaboratively develop partnerships with stakeholders that would ultimately lead to successful academic outcomes.

2   Initial Challenges

Virtual school counseling is not a new phenomenon (ASCA, 2020). However, for many traditional K-12 school counselors, there were initial challenges and concerns in multiple areas such as:

- Finding and using platforms that complied with confidential, legal, and ethical requirements,
- Becoming proficient with technology,
- Finding effective ways to promote effective communication with both students and their parents,
- Remotely accomplishing those tasks associated with career, academic, and social-emotional development, and
- Establishing a counseling protocol for remote crises.

3   Compliant Online Platforms

As school counselors envision their online sessions, prior thought will have to be given to developing scripts that can be read prior to each session that will further inform and remind students and parents of the limitations, privacy, and rules regarding confidentiality. As school counselors consider their online platforms, the best practice would be to use the platform designated by the school district (ASCA School Counselor, 2020). As school districts consider compliant online platforms, general criteria should be considered, for example:

- The platform's guidelines in respect to the collection and processing of personal information
- Ease of use for all stakeholders
- Ease of accessibility (i.e., using familiar devices or devices already owned)
- Obtaining parental permission
- Cost
- Security

4   Developing Technology Proficiency

Technology proficiency is a skill that must be added to the list of necessary skills for effective post COVID-19 school counselors. Mason et al. (2019), in their qualitative survey of school counselors (N=49), found that school counselors were more likely to use technology as a way of organizing their program than they were to make presentations or communicate with their stakeholders. One surprising result of the survey was the number of school counselors who reported that they did not use technology in their program at all. Some reasons for the gap between those who use technology and those who did not were varied, but it could be that (a) they felt uncomfortable or lacked enough proper training to use technology; or (b) there were ethical reasons; or (c)they were concerned with maintaining boundaries. Nevertheless, Cronin et al. (2018) found that the school counselors who frequently used technology in their programs rated themselves high in the areas of stakeholder partnerships. Whether students are physically located within the school building or not when "technology is used with "intentionality and purpose, it can expand the school counselor's reach and efficiency in serving all students, and increase access to resources, thus contributing to overall student achievement" (Mason et al., 2019, para. 1).

Regardless of the COVID-19 outcome, school counselors can add and continue to use technology to build and maintain positive relationships and partnerships. Social media and websites can be used to keep stakeholders informed, and video-conferencing can be used not only for counseling sessions but also as a way to expose students to a variety of guest speakers that might not otherwise be available. Technology can allow for events to be attended "live" or recorded so that stakeholders may view at their convenience. Technology provides an additional opportunity for parental involvement.

5   Effective Communication: Creating Access and Stability

School counselors communicate with students and parents on a myriad of nonconfidential topics. In many schools, the school counselor's office is the "soft" spot. School counselors (as well as office staff) are often some of the most accessible people for parents to contact since teachers might not be available during instructional time. During times when schools may be unexpectedly closed, communication is crucial as parents and students seek out information and assistance. In primarily online schools, communication is noted as a critical part of student retention and satisfaction (Whittemore, 2008). School counselors can communicate both synchronously and asynchronously by offering set office hours using video-conferencing software, updated websites, newsletters, phone calls, reminder texts, and emails. Without a doubt, schools will not "look" as it did pre-COVID-19. Gone

may be the days when entire student bodies are on the campus at the same time. The use of platforms that students and parents are already familiar with can help with seamless transitions to a "new" normal.

5.1 Social Media, Newsletters, and Websites

School counselors will have to consistently use a variety of platforms in their comprehensive programs to keep students and their parents informed. Frequently updated newsletters, social media, and websites are places where stakeholders will go to obtain information. An app that can be useful and easy to update for such purposes is *Smore*. *Smore* (2011) allows individuals to develop and publish online newsletters, presentations, and announcements in minutes. The site also allows the link to be shared privately or publicly. Data analytics are maintained. *Smore* can be added to an existing school counselor's website or used as a stand-alone product (Smore, 2011).

5.2 Parent and Student Communication Through Emails

Schools and school counselors currently communicate with students and parents via email on a variety of nonconfidential topics. Having a reliable parent and student email addresses database can allow for more individualized communication and increased parental involvement. For example, some schools provide their students with "school emails." By also providing parents with "school emails," school counselors, teachers, and administrators would have a reliable way to communicate with both students and parents. Emailing students and parents can be an effective way of sharing nonconfidential information. When emailing entire groups, the blind carbon copy (Bcc) function can be used to keep email addresses private.

5.3 Phone Communication

Traditional communication, such as the phone, should not be overlooked. With approximately 61% of individuals owning a mobile phone and almost 45% owning a smartphone (Turner, 2020) worldwide, the phone may be one of the most familiar and reliable ways to communicate with stakeholders. School counselors should have phone numbers (not personal phone numbers) where they can be reached and where they can contact students and parents. There are multiple apps available that allow for a second phone number so that the school counselor's personal phone number can remain private. When possible, school districts may want to obtain additional phone numbers that allow for caller ID. Caller ID allows parents and

students to know that someone from the school is calling and may result in more students and parents answering their phones instead of not picking up or blocking an unknown caller. School counselors should "advertise" their contact phone numbers and emails on multiple platforms. Parents and students can also be asked to add the school counselor's phone number to their contacts.

Cronin and others (2018) posited that technology is an effective way to communicate with a school's diverse population. By using multiple platforms that are available on multiple devices, school counselors can not only increase their availability and presence but also encourage effective two-way communication with all stakeholders. The value of relationships and human connection within the school setting cannot be underemphasized, and although students and teachers may not always be located physically in the same building, with the assistance of technology, students and other key adults can stay informed.

6   The Three Domains of School Counselors

School counselors are responsible for developing and delivering programs that encourage student growth and development in three domain areas: (a) academic development, (b) career development, and (c) social-emotional learning and development (ASCA, 2019). The ASCA model recognizes that these three areas are interconnected and should be emphasized equally in order to encourage positive student success (Schenck et al., 2010 as cited in ASCA 2017a, b, c). For school counselors, successful delivery of these three domains was the primary challenge when large numbers of students were not physically able to attend school.

7   Career and Academic Development

Career and academic development are two of the three domains where school counselors develop and deliver programs that positively impact student growth (ASCA, 2019). Schools are generally measured by the academic success of their students, and school counselors assist in this area by aligning their annual student outcome goals with the school's goals (ASCA, 2017b). Pre-COVID-19, school counselors accomplished many of their academic and college counseling sessions individually and in-person with their students and parents. Career and college counseling often took the form of individual and small group counseling, on-campus college fairs, and visits from college representatives, community employers, and military recruiters. In fact, the National Association for College Admission Counseling (NACAC) (2019) conducted a Counseling Trends Survey that indicated that public high school counselors spent approximately 20% of their time with college admission counseling and 23% of their time with scheduling school courses (Clinedinst, 2019). For high school counselors, the timing and impact of COVID-19 in mid-March 2020

affected not only graduation but also how college counseling, parent nights, and course registration for the coming year were accomplished. Online registration programs, along with video-conferencing technology, can allow students, parents, and counselors to discuss registration and postsecondary goals.

8   Social-Emotional Learning (SEL)

Social-emotional learning and development is a third domain where school counselors impact student growth (ASCA, 2019). Social-emotional learning (SEL) is the process of guiding individuals toward managing their emotions, learning to make responsible decisions, understanding and demonstrating empathy, setting and achieving positive goals, and developing positive relationships (ASCA, 2017c; Prothero, 2020; Yoder et al., 2020). Human beings are social beings, and the very call to "socially" distance from each other has emphasized the importance of feeling connected to others and of building and maintaining relationships (Yoder et al., 2020). To further emphasize the importance of SEL, Edge Research, during the recent COVID-19 school closures, found that parents were more concerned with their child's missed social interactions than with the possibility of a family member contracting the coronavirus (Learning Heroes, 2020).

The uncertainty of COVID-19 will, without a doubt, result in children returning to school with varied wellness needs. Meeting those needs will require the combined efforts and resources of schools and communities (Yoder et al., 2020). As part of the school's leadership team, school counselors can coordinate with other school professionals to ensure that SEL activities are equitably and seamlessly delivered. SEL activities can be included in school counselor and classroom lessons using a variety of online sites and resources (Yoder et al., 2020) – for example, school webpages, newsletters, Zoom, Google Hangouts, crisis hotlines, and various apps. Activities should be age- and grade-appropriate. SEL remains a vital part of the school counselor's role during remote learning situations. SEL is intertwined with career and academic development in that before effective learning can happen, the social-emotional needs of students must be met (ASCA, 2017b, c).

9   Remote Crisis Situations

Although students may be at home, they may still share feelings or intentions that may be concerning with educators. All stakeholders should be aware of the protocol for supporting students in crisis. Like the protocols that are in place when schools are fully operational, "remote" protocols must be developed prior to an emergency. Crisis response teams should be established that include school counselors as active members (ASCA Toolkit, 2020). The protocol or plan should be shared with everyone throughout the school year and include community partners such as fire, police,

mental health organizations, and other first responders. Contact information should be included on school and school counselor websites, newsletters, and email signature lines (ASCA Toolkit, 2020).

10 The Challenge of Returning to School

10.1 Referrals

After months of "stay-at-home" orders and physical distancing, one of the biggest challenges that will face school counselors will be to support students' mental and physical well-being. As schools make decisions regarding reopening schools, additional school counselors may be needed in all grade levels. Some students and their families may not be prepared to immediately return to a face-to-face school environment, creating a need to support students who physically attend school and those who elect to continue remote learning. Credible face-to-face and remote community resources should be made available to students. Regardless of how academics are being delivered, no student should have interrupted access to school counselors or other mental health resources.

As students return to school, school counselors will need some type of student self-report assessment that will allow school counselors to identify at-risk students and establish some type of triage system. Teachers can help introduce the form and its use by demonstrating its use on the first day of school. The form needs to be able to quickly identify a student's need to see a school counselor or other professional support person. The form can include variations of three questions: (a) "is this an emergency?"; (b) "is this a concerning issue that needs to be addressed today"; (c) "is this a routine issue that does not have to be addressed today?" The form can be developed via Google from where the responses may be sent directly to the school counselor's email. In schools with multiple counselors, all responses should be made available to all of the counselors and administrators. When possible, the "form" could be pushed to the student's electronic devices as an app.

11 Reconnecting with At-Risk Populations

Populations that school counselors need to quickly identify and contact are students who may be absent when schools reopen, such as homeless children, school refusers, and truant and anxious students. Students with disabilities should also be high on the school counselor's list of students to reconnect with as they have lost not only instructional time but may have also lost therapy and counseling services, thus making their transition back to school more difficult (Jenco, 2020). Another at-risk population is those students who may fall into the category of having one or more

adverse childhood experiences (ACEs). Broadly speaking, ACEs are categorized as abuse, neglect, and family events (i.e., incarcerated family members, mental illness, or divorce). This group is of concern as reporting agencies have reported fewer reports since schools have closed due to COVID-19. Historically, individuals outside of the home have made the most reports regarding child abuse, with educators being the largest group. In 2018, educators made approximately 4.3 million referrals. That number has declined significantly since schools have closed and stay-at-home orders have been implemented (Schmidt & Natanson, 2020; U.S. Department of Health & Human Services, 2020). Addressing the multiple needs of students as they return to school will challenge schools and emphasize the need for multidisciplinary teams. School counselors cannot accomplish these tasks alone and will need teachers, administrators, and community resources (ASCA Toolkit, 2020).

12 Implications and Recommendations

Remote school counseling programs come with a unique set of challenges in the areas of (a) finding and using appropriate platforms; (b) developing technology proficiency for students, faculty, and staff; (c) maintaining effective communication; (d) remotely accomplishing those tasks associated with career, academic, and social-emotional development; and (e) establishing a protocol for remote crisis situations. Even in emergency situations where the physical school building is closed, school counselors working together with other stakeholders can continue to deliver a comprehensive program for all students with the same fidelity that was accomplished – pre-COVID-19. It is recommended that school counselors prepare for future emergency events by developing and routinely using multiple platforms that encourage communication and provide timely information such as social media, newsletters, emails, websites, reminders, and phone calls. Updated remote crisis protocols that are coordinated with teachers and administrators regarding a referral process need to be routinely used. Also, maintaining community partnerships and engaging in professional development that enhances our technology skills are recommended.

Although the recent health issue that caused schools to close may be a different type of crisis than what many schools had previously practiced for, it is still a crisis that school counselors and all other stakeholders must prepare for ahead of time.

References

American School Counselor Association. (2017a). Planning for Virtual/Distance School Counseling During an Emergency Shutdown. https://www.schoolcounselor.org/asca/media/asca/home/EmergencyShutdown.pdf

American School Counselor Association. (2017b). The School Counselor and Academic Development. https://www.schoolcounselor.org/asca/media/asca/PositionStatements/PS_AcademicDevelopment.pdf

American School Counselor Association. (2017c). The School Counselor and Social-emotional Development. https://www.schoolcounselor.org/asca/media/asca/PositionStatements/PS_SocialEmotional.pdf

American School Counselor Association. (2017d). The School Counselor and Virtual School Counseling. https://www.schoolcounselor.org/asca/media/asca/PositionStatements/PS_Virtual.pdf

American School Counselor Association. (2019). *ASCA national model: A framework for school counseling programs* (4th ed.). Author.

ASCA School Counselor. (2020). American School Counselor Association, *57*(5).

ASCA Toolkit: Crisis Planning and Response During a Pandemic/Virtual School Counseling. (2020). https://www.schoolcounselor.org/school-counselors/professional-development/learn-more/crisis-planning-and-response

Clinedinst, M. (2019). *2019 State of College Admission*. National Association for College Admission Counseling. https://www.nacacnet.org/globalassets/documents/publications/research/2018_soca/soca2019_all.pdf

Cronin, S., Ohrtman, M., Colton, E., Crouse, B., Depuydt, J., Merwin, C., & Rinn, M. (2018). School counselor technology use and school-family-community partnerships. *Journal of School Counseling, 16*(6), 1–27.

Jenco, M. (2020). AAP guidance on school re-opening addresses physical and mental health, instructional time. *American Academy of Pediatrics.* https://www.aappublications.org/news/aapnewsmag/2020/05/05/covid19schoolopening050520.full.pdf

Learning Heroes. (2020). *Parents 2020: COVID-19 closures, a redefining moment for students, parents, and schools*. https://r50gh2ss1ic2mww8s3uvjvq1-wpengine.netdna-ssl.com/wp-content/uploads/2020/05/LH_2020-Parent-Survey-Partner-1.pdf

Mason, E. C. M., Griffith, C., & Belser, C. T. (2019). School counselors' use of technology for program management. *Sage Journals, 22*(1). https://doi.org/10.1177/2156759X19870794. https://journals.sagepub.com/doi/full/10.1177/2156759X19870794

Preidt, R. (2012). Most U.S. schools unprepared for pandemics: Study. *MedicineN*et. https://www.medicinenet.com/script/main/art.asp?articlekey=161944

Prothero, A. (2020, March 30). How to teach social-emotional learning when students aren't in school. *Education Week, 39*(29) https://www.edweek.org/ew/articles/2020/03/30/how-to-teach-social-emotional-learning-when-students.html?cmp=eml-eb-summread1-06232020&M=59598402&U=&UUID=a6bed90588abc8af2dedb4a09b95d5fe

Rapaport, L. (2016, September 20). Are U.S. public schools prepared for an emergency? *Health News. Reuters* https://www.reuters.com/article/us-health-schools-emergency-preparedness-idUSKCN11Q2MI

Schmidt, S., & Natanson, H. (2020, April 30). With kids stuck at home, ER doctors see more severe cases of child abuse. *The Washington Post*. https://www.washingtonpost.com/education/2020/04/30/child-abuse-reports-coronavirus/

Smore (2011). *Smore*. Smore.com

Strauss, V. (2020, May 7). Millions of children out of school because of coronavirus in the world's poorest countries may never go back, expert says. *The Washington Post.* https://www.washingtonpost.com/education/2020/05/07/millions-children-out-school-because-coronavirus-worlds-poorest-countries-may-never-go-back-expert-says/

The School Counselor and Virtual School Counseling. (2017). https://www.schoolcounselor.org/asca/media/asca/PositionStatements/PS_Virtual.pdf

Turner, A. (2020). *How many smartphones are in the world?* BankMyCell. https://www.bankmycell.com/blog/how-many-phones-are-in-the-world

U.S. Department of Health & Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. (2020). *Child Maltreatment 2018*. Available from https://www.acf.hhs.gov/cb/research-data-technology/statistics-research/child-maltreatment. https://www.acf.hhs.gov/sites/default/files/cb/cm2018.pdf

Whittemore, B. (2008). Crucial Communication with the Online Student Begins Before Enrollment in a Course. *Journal of Instruction Delivery Systems, 22*(4), 28–32. https://web-a-ebscohost-com.libraryservices.yorkvilleu.ca/ehost/pdfviewer/pdfviewer?vid=15&sid=6ff46875-3c13-4ae0-877b-246012f59958%40sdc-v-sessmgr02

Wright, R. L. (2011). *Introduction to school counseling*. Sage.

Yoder, N. Posamentier, J., Godek, D., Seibel, K., & Dusenbury, L. (2020). *From response to re-opening: State efforts to elevate social and emotional learning during the pandemic*. Committee for Children. https://casel.org/wp-content/uploads/2020/06/State-Covid19-Response-CASEL-CFC.pdf

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Measuring Optimal Psychological Conditions for Teaching and Learning in Post-COVID-19 Education

Robert Laurie, William Morrison, Patricia Peterson, and Viviane Yvette Bolaños Gramajo

> *Well-being will no longer be dismissed as a fad. It's an essential precondition for achievement, especially among our most vulnerable children.*
>
> *- Andy Hargreaves (2020)*

1 A Context of Change

As the COVID-19 pandemic struck the world in early 2020, educators and policy-makers scrambled to make the best of a difficult and unpredictable turn of events. While there was a swift reaction to changing conditions and directives from governments and health agencies across Canada, the desire to ensure that students receive high-quality educational experiences remained paramount. Education systems and schools forged ahead, often basing their changes on existing challenges and priorities.

The most striking change educators had to face due to COVID-19 school closures was the shift from in-person delivery to remote online teaching and learning approaches. Although many educators were already transitioning to more online instructional approaches prior to the pandemic, the sudden arrival of COVID-19 forced an immediate and abrupt transformation of educational practices for all educators (Will, 2020). It quickly became apparent that most teachers had not received the necessary training and/or access to technology to ensure a seamless transition to their new teaching methods, nor were they aware of the impact of such a shift on

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interactions and relationships among students and educators. Similarly, students who had functioned primarily in in-person-classroom settings had limited experience in navigating and actively engaging in structured online learning formats (Scott, 2020).

Hodges et al. (2020) distinguish between emergency remote teaching (ERT) and online learning, with the former defined as a temporary shift of instructional delivery to an alternate delivery mode due to crisis circumstances. This distinction clearly describes the situation caused by COVID-19. Code et al. (2020) report that the change to ERT caused by COVID-19 has had a negative impact on student motivation and engagement and has contributed to educators questioning the effectiveness and sustainability of online learning approaches. They recommend a blended approach of in-person and online teaching for educators to increase student interaction, enhance instructional effectiveness, and, ultimately, facilitate learning.

While many reports highlight the impact of COVID-19 on educational instructional and learning approaches, fewer consider the affective domain of learning inclusive of students' interests, attitudes, emotions, and motivations. Teachers' and students' basic psychological needs have not changed because of the effects of the pandemic. It is reassuring that some educational researchers and professional leaders are affirming the importance of the affective domain and the impact of linking concepts related to basic psychological needs and resiliency assets to student learning and educator well-being (Azurín, 2020; Campbell, 2020; MacMahon et al., 2020; Rappoport et al., 2020; Whittle et al., 2020).

2 Positive Education

The term positive education describes empirically validated interventions and programs from positive psychology that impact student well-being and learning (White, 2014; White & Murray, 2015). Positive education is characterized by the use of strength-based methods instead of a sole focus on deficit-based approaches. Research in the field of positive education has demonstrated the impact of applying evidence-based positive psychology practices that promote the fulfillment of people's basic psychological needs to build resiliency during times of change or transition. When such practices are embedded within educational environments, students and educators are more likely to be at their best, and to experience a greater sense of well-being and engagement in daily activities and learning contexts (Laurie et al., 2019; Morrison & Peterson, 2015; White & Murray, 2015).

Within Canada, the Positive Workplace Framework or PWF (Peterson & Morrison, 2016, 2018) has been applied to promote and embed the use of positive psychology practices that meet the well-being needs of educators and students, and that enhance the application of their collective resiliency assets. To date, the PWF has been applied in schools in three Canadian provinces.

3   The Positive Workplace Framework, Mental Fitness Needs, and Resiliency Assets

Peterson and Morrison (2016) incorporated the basic psychological needs of self-determination theory (Ryan & Deci, 2000) with elements of team resiliency and positive leadership in the initial development of the Positive Workplace Framework (PWF). For the purpose of this chapter, we will describe the mental fitness and resiliency components of the PWF and demonstrate how they apply to educational contexts with or without COVID-19 constraints.

3.1   Mental Fitness

Mental fitness is comprised of three basic psychological needs:

1. *Relatedness* refers to the universal need to have a sense of connectedness and meaningful relationships with others. In the context of ERT or online teaching, the need for relatedness is amplified because of the lack of physical proximity. Promoting relatedness involves expressing caring attitudes and exercising compassion toward students, as well as maintaining a focus on practices that build and sustain strong student-educator relationships (Anderson & Hira, 2020; Itow, 2020).
2. *Competency* refers to the need to feel valued for personal strengths, to be active in applying them, and to have confidence in doing so in new situations. The use of competency-oriented practices encourages affirming conversations about the value of team strengths and how they can be applied in effectively responding to new challenges. Competency practices are also applied within online educational approaches in which student strengths are explored, valued, and included as key connectors and mechanisms for personalizing learning content and engaging students.
3. *Autonomy support* refers to the universal need for having voice and choice and being an active participant in making decisions that affect personal and collective directions. Examples of autonomy-supportive methods include inviting students to express their perspectives, engaging them in developing and choosing approaches to solve problems, and fostering safe, supportive, and respectful interactions (Peterson & Morrison, 2016; Morrison, 2018).

During the last two decades, positive psychology practices have been associated with enhanced individual and collective well-being, increased engagement, and evidence of thriving (e.g., learning and functioning) (Yu et al., 2020). Within educational settings, the promotion and embedding of mental fitness practices within daily routines are critical for creating learning environments in which emotional health and growth are fostered for students and staff. When the basic psychological

needs of teachers and students are met, the result is a healthy and effective learning environment. Teachers and students must have their psychological needs met to function optimally and thrive (David, 2014).

3.2 Resiliency

Resiliency may be defined as the capacity to persist in the face of adversity and to bounce back when challenges are encountered. Resiliency helps people cope and thrive during difficult circumstances, times of change, or periods of transition. The PWF identifies five team resiliency assets that may be promoted and embedded within educational and workplace settings to support people to be at their best during difficult times:

1. *Relationship assets* involve practices that provide social support, build and restore positive relationships, and demonstrate acts of kindness and caring. Relationships, social networks, and connections with family, friends, and colleagues are the most important resiliency assets. Having strong relationships among educators and students implies being supportive, generous, and helpful toward others, especially during times of change or transition.
2. *Professional assets* involve practices that entail gaining the necessary training or knowledge to address new and emerging circumstances, learning from other team members, and feeling prepared to problem-solve new challenges. Resilient schools recognize that members of their team possess skills and capacities that can be drawn upon during times of change or transition. Professional assets go beyond formal training or job descriptions and may include individual strengths and gifts that can be applied to build resiliency in others during challenging times.
3. *Attitudinal assets* involve practices that increase optimism and a positive disposition even in difficult or challenging situations. Embracing a positive disposition entails perceiving circumstances such as COVID-19 as being temporary rather than permanent conditions. Attitudinal assets may be modeled by identifying positive aspects within existing school routines and interactions and including such content in daily conversations and planning activities.
4. *Emotional intelligence assets* involve practices that enhance one's ability to understand and manage emotions, and to communicate positively with others. Within educational settings, these assets are often referred to as social/emotional learning competencies and are associated with enhanced well-being and self-efficacy in students. Educators can model emotional intelligence assets by being effective listeners, asking thoughtful questions to elicit the perspectives of others, and reflecting others' feelings and expressing empathy.
5. *Adaptation assets* involve practices that facilitate adjustment to changing situations through the promotion of positive coping, healthy lifestyles, and proactive planning. Adaptation assets include actions that are targeted at reducing stress through adjusting or adapting routines or approaches. Adaptation strategies may

also encompass proactive team planning processes for anticipated change, the development of universal coping skills for staff and students, and the promotion of a balanced and healthy lifestyle.

The promotion and embedding of mental fitness and resiliency practices in schools contribute to the creation of positive learning environments where well-being, engagement, and flourishing are evident among students and staff. School environments reflecting such conditions are positively associated with increased student achievement (Dulay & Karadağ, 2017), decreased school bullying, reduced teacher absenteeism, and enhanced teacher collaboration (Debarbieux, 2015). The potential to develop plans and monitor positive changes related to the use of mental fitness and resiliency practices underscores the need for the availability and application of valid and reliable measures that can assist educators in assessing their current strengths and areas in need of development.

4   Measuring Mental Fitness and Resiliency

Within current well-being models, there is a range of measures that assess individual subjective well-being, with most being short self-assessment questionnaires. However, measuring the collective well-being of a school staff by averaging individual subjective well-being scores of participants is not necessarily reflective or indicative of the actual collective staff well-being. For example, individual teachers may rate their personal well-being as low even though their perspectives about the collective workplace environment may be favorable and might be reflected in higher ratings. Given that interpretations of individual well-being are distinct from those of the collective well-being, using measures that assess well-being practices at the group level is warranted.

The PWF uses the Mental Fitness and Resiliency Inventory (MFRI) to measure collective well-being in workplaces. The MFRI is applicable to in-person and online teaching situations (Laurie, 2019). The MFRI contains short descriptions of 32 distinct mental fitness and resiliency practices commonly observed in positive school environments. The online questionnaire is answered by all staff members who are asked to indicate how well each described practice is reflective of their school environment using a five-point Likert scale. Answers are objective and aggregated at the school level. The MFRI has been validated and its psychometric properties are strong (Peterson et al., 2020).

MFRI reports show the extent to which practices related to each mental fitness need and resiliency asset are present and embedded in school/workplace routines and interactions and provide the school's well-being index (WBI) using a nine-point scale. Schools can access a suite of targeted resources to build on their strengths and enhance their workplace environment (WMA Wellness, 2020). Annual use of the MFRI can provide educators and policymakers with the necessary data to inform their decisions and plans for building positive learning environments for both staff and students.

5   Conclusion

Educators and policymakers are in the process of navigating the circumstances, challenges, and changes associated with the emergence of the COVID-19 pandemic and its potential continuation. The sudden shift from in-person teaching to emergency remote teaching and online instructional approaches has amplified existing challenges and strengths related to technology, curriculum methods, and learning approaches. Increased attention has also been drawn to the mental health concerns and well-being of students and educators, and their relevance related to creating positive learning environments during a time of increased challenges and transition. The need for clarity and practical methods for building positive learning environments has become a central theme of current educational exchanges at the school, district, provincial, and territorial levels, especially in terms of how such environments are created within new online instructional and self-directive formats for student learning (Hurst et al., 2013; Liaw & Huang, 2000; Mykota, 2018).

The Positive Workplace Framework applies evidence-based positive psychology concepts (e.g., mental fitness and resiliency practices). It provides practical and feasible strategies for schools and districts for promoting well-being, engagement, and flourishing behaviors among both staff and students. By embedding and measuring practices that allow for everyone to meet their basic psychological needs and develop common resiliency assets, educational jurisdictions can position themselves to emerge from the COVID-19 pandemic with the energy and enthusiasm needed to face the future with confidence.

References

Anderson, E. & Hira, A. (2020). Loss of brick-and-mortar schooling: How elementary educators respond [Special issue]. *Emerald Publishing Limited.* Accessed at https://doi.org/10.1108/ILS-04-2020-0085

Azurín, C. (2020). Beyond COVID-19 supernova. Is another education coming? [special issue]. *Emerald Publishing Limited*. Accessed at https://doi.org/10.1108/JPCC-05-2020-0019

Campbell, P. (2020). Rethinking professional collaboration and agency in a post-pandemic era. [special issue]. *Emerald Publishing Limited*. Accessed at https://doi.org/10.1108/JPCC-06-2020-0033

Code, J., Ralph, R., & Forde, K. (2020). Pandemic designs for the future: Perspectives of technology education teachers during COVID-19. [special issue]. *Emerald Publishing Limited*. Accessed at https://doi.org/10.1108/ILS-04-2020-0112

David, L. (2014, July 16). Self-determination theory (Deci and Ryan). *Learning Theories*. Accessed at https://www.learning-theories.com/self-determination-theory-deci-and-ryan.html

Debarbieux, E. (2015). Du "climat scolaire": définitions, effets et politiques publiques [School climate: Definitions, effects and public policies]. In *Éducation & Formations – Climat scolaire et bien-être à l'école*, 88/89, 11–27. Ministère de l'éducation nationale, de l'enseignement supérieur et de la recherche. Paris, France.

Dulay, S. & Karadağ, E. (2017). *The effect of school climate on student achievement*. Springer. https://doi.org/10.1007/978-3-319-56083-0_12.

Hargreaves, A. (2020). *What's next for schools after coronavirus? Here are 5 big issues and opportunities*. The Conversation. Accessed at https://theconversation.com/whats-next-for-schools-after-coronavirus-here-are-5-big-issues-and-opportunities-135004

Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). The difference between emergency remote teaching and online learning. In *EDUCAUSE review*. Accessed at https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning

Hurst, B., Wallace, R., & Nixon, S. B. (2013). The impact of social interaction on student learning. *Reading Horizons, 52*(4), 375–398.

Itow, R.C. (2020). Fostering valuable learning experiences by transforming current teaching practices: Practical pedagogical approaches from online practitioners. [special issue]. *Emerald Publishing Limited*. Accessed at https://doi.org/10.1108/ILS-04-2020-0106

Liaw, S. S., & Huang, H. M. (2000). Enhancing interactivity in web-based instruction: A review of the literature. *Educational Technology, 40*(3), 41–45.

Laurie, R. (2019). Measuring school well-being: The mental fitness and resiliency inventory and the School Happiness Index (SHI). *EdCan Magazine, 59*(4) Accessed at https://www.edcan.ca/articles/measuring-school-well-being/

Laurie, R., Morrison, B., & Peterson, P. (2019). The Positive Workplace Framework (PWF): A strengths-based approach for thriving schools. *EdCan Magazine, 59*(4) Accessed at https://www.edcan.ca/articles/the-positive-workplace-framework/

MacMahon, S., Leggett, J., & Carroll, A. (2020). Promoting individual and group regulation through social connection: Strategies for remote learning. [special issue]. *Emerald Publishing Limited.*. Accessed at https://doi.org/10.1108/ILS-04-2020-0101.

Morrison, W. (2018, June 22). Three key conditions to create a healthy workplace. *The Globe and Mail*.

Morrison, W., & Peterson, P. (2015). *A review of promising practices in comprehensive, integrated school-based mental health*. J.W. McConnell Family Foundation.

Mykota, D. (2018). The effective affect: A scoping review of social presence. *International Journal of E-Learning & Distance Education / La Revue international de l'apprentissage en ligne et de l'enseignement à distance, 33*(2), 1–31.

Peterson, P., & Morrison, W. (2016). *The positive workplace framework*. Government of New Brunswick, Canada.

Peterson, P., & Morrison, W. (2018). *Positive workplace framework* [conference session]. Family Services Canada Employee Assistance Programs.

Peterson, P., Morrison, B., Laurie, R., Bolaños Gramajo, V., & Morrison, J. (2020). Assessing the factorial structure and internal consistency of the mental fitness and resiliency inventory (MFRI). *International Journal of Workplace Health Management, 13*(2), 153–171. https://doi.org/10.1108/IJWHM-07-2019-0100

Rappoport, S., Rodríguez Tablado, M. S., & Bresanello, M. (2020). *Enseñar en tiempos de COVID-19: Una guía teórico-práctica Para docentes [teaching in times of COVID-19: A theoretical-practical guide for teachers]*. UNESCO. http://www.unesco.org/open-access/terms-use-ccbysa-sp

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and Well-being. *American Psychologist, 55*(1), 68.

Scott, I. (2020). Education during COVID-19: Pivots and consequences. *The Clinical Teacher, 17*, 443–444.

White, M. (2014). An evidence-based whole school strategy to positive education. In H. Street & N. Porter (Eds.), *Better than OK: Helping young people to flourish at school and beyond* (pp. 194–198). Fremantle Press.

White, M., & Murray, S. (2015). *Evidence-based approaches to positive education in schools: Implementing a strategic framework for well-being in schools* (I. Boniwell, Ed., pp. 65–91). Springer. https://doi.org/10.1007/978-94-017-9667-5_4.

Whittle, C., Tiwari, S., Yan, S., & Williams, J. (2020). *Emergency remote teaching environment: A conceptual framework for responsive online teaching in crises* [special issue]. Emerald Publishing Limited. https://doi.org/10.1108/ILS-04-2020-0099.

Will, M. (2020). Teachers without internet work in parking lots, empty school buildings during COVID-19. *Education Week, 39*(32), 17.

WMA Wellness. (2020). *The positive workplace framework website*: http://www.wmawell-ness.com/

Yu, S., Zhang, F., Nunes, L. D., Deng, Y., & Levesque-Bristol, C. (2020). Basic psychological needs as a predictor of positive effects: A look at peace of mind and vitality in Chinese and American college students. *The Journal of Positive Psychology, 15*(4), 488–499. https://doi.org/10.1080/17439760.2019.1627398

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Students' Emotional Considerations and Mental Health During Crises

Negar Sohaee and Ali Ghasempour

> *Don't underestimate the emotional trauma that people are feeling, and the emotional health issues.*
>
> *Governor Andrew M. Cuomo*

1 Students' Emotional Considerations

In the recent COVID-19 pandemic, isolation and quarantine (more extreme forms of social distancing) have precipitated a wide spectrum of mood disorders in person isolated during the pandemic – either isolation periods or 4–6 months after release (Hawryluck et al., 2004; Jeong et al., 2016). These consequences are associated with adverse mental health complications for vulnerable students. Schools across the world should be aware of these manifestations and apply strategies to help manage students getting through this challenging moment by minimizing the negative impacts. With the above objectives in mind, the current research was designed to provide a communication platform addressing mental health concerns related to the COVID-19 pandemic among college and university students. A review of research related to students' mental wellness during and after any pandemic, as well as analysis of the data, exposes the increased psychiatric illness associated with a pandemic such as the COVID-19. The extreme vulnerability and high mortality rate of such pandemics forced professionals in education systems to take on the important role of considering addressing students' emotional circumstances.

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2   Background

Policymakers in public health sectors have curbed individual freedoms by announcing a state of emergency since the recent devastating outbreak globally of "SARS-CoV-2". Mental health is endangered at the expense of providing physiological care. Every other day governor governments of different countries introduce more restricted protocols to reduce the number of people infected by COVID-19. Citizens are forced to make huge changes even in their routine "lifestyle." The new reality of working remotely from home, temporary unemployment, homeschooling, lack of physical contact, and in-person communication will challenge every member of each community, including students. Statistics have shown that students may be more susceptible than others to the psychosocial effects of these pandemics (reference). The individual effect of a pandemic could raise insecurity, confusion, emotional isolation, social phobia, and stigma among students (Pfefferbaum & North, 2020). Economic loss, school and work disclosure, inadequate resources for medical responses, and deficient distribution of necessities also raise a red flag about the mental health of students.

During such crises, a portion of the students is versatile and does not surrender to psychopathology (Zhai & Du, 2020). This means generally, when all students are overly exposed to aversive details such as stressors, only a fraction of them find the capacity to accommodate and adapt. Conventionally, natural disasters and mass devastation are the primary concerns in post-traumatic stress disorder (PTSD) which emerges from exposure to trauma. However, in medical conditions from natural causes such as infectious disease, for example, dangerous disorders do not meet the flow rules for injury required for the diagnosis of PTSD in which presentation of other psychopathologies such as affective mood disorders may follow (Torales et al., 2020).

The WHO estimates 30–50% of the population of the world have suffered from diverse psychological distress post-COVID-19. Individuals are more at risk of suicidal ideation, suicide attempts, and deaths by suicide (Dutheil et al., 2020).

Statistics have revealed during this viral epidemic that students face numerous emotional outcomes, including stress, insomnia, depression, irritability, confusion, anger, fear, frustration, boredom, and stigma. Some groups may be more vulnerable than others to the physiological effects of a pandemic. Health Canada announced that vulnerable people include but are not limited to anyone who is (Public Health Agency of Canada, 2020):

- an older adult,
- at risk due to underlying medical conditions (e.g., heart disease, hypertension, diabetes, chronic respiratory diseases, cancer), or
- at risk due to a compromised immune system from a medical condition or treatment (e.g., chemotherapy).

According to the Public Health Agency of Canada in 2020, anyone who has the following criteria will be considered vulnerable populations:

- difficulty understanding or communicating,
- difficulty accessing medical care,

- difficulty doing preventive activities,
- those who are having some economic barriers, or
- those groups of people who are following social or geographic isolation, like in remote and isolated communitiesy.

Some of these criteria are common among students. Therefore, identifying vulnerable students should be a main concern for schools. Prevention efforts such as screening of mental health problems of students, psychological education workshops, and support by mental services should be a major main focus for students at risk of adverse psychological outcomes.

3   Education and Vulnerable Students

Vulnerability has a broad implication in the education system. For this paper, vulnerability was defined as the variability between physical and mental health for those living in standard situations and households characterized by low household incomes (Alwang et al., 2001).

To help educators design unique communication platforms for students who are vulnerable and facing stress during times of crisis, this article categorized students' vulnerability into two main groups: high risk and low risk. The communication platform was designed for each category to assist them in passing through this pandemic thoroughly with the minimum consequences.

Segmentation in this process is multivariable. Educators could screen all students by classifying their responses to adverse factors according to "underlying factors," as well as protective factors or "higher emotional quotient (EQ)." Based on this segmentation, educators could then address students according to high-risk and low-risk mental health disorders.

Student's mental health could be put at high risk by a variety of factors that influenced not only their academic performance but also different spheres of life. These factors include behavior and cognition at the individual level, living and studying at the social level, working conditions, and opportunities and responses at the broader environmental level. Finally, based on the individual, social, and environmental factors and students' stress factors, we could create a communication platform for supporting both groups. This would protect or promote students with mental well-being states versus students with mental health concerns who would like to restore or improve it through appropriate treatment.

4   Concerns

Over the past few years, the explosion of technology in the education system has changed how classes have been organized and how information has been presented to students (Kirkwood & Price, 2013). The current COVID-19 pandemic is forcing

the education system to change quickly to online/remote education. Technologies are used to help in the development and acquisition of knowledge from different remote locations. The Internet and video/audio conferencing, text communications, and software create a virtual learning environment. Therefore, some studies suggest that prolonged school closures and home confinement might have negative effects on students' physical and mental health (Brazendale et al., 2017), although the "Psychological impact of quarantine substantially is wide-ranging and long-lasting" (Brooks et al., 2020).

5   Determinants of Students' Mental Health and Well-Being

Based on the WHO (2005) statement, mental health is a state of well-being is when the individual realizes his or her abilities to cope with the normal stresses of life, to work productively, and to be able to contribute to his or her community with critical thinking and rational decision-making. Mental health is influenced by both individual or social characteristics and economic circumstances.

1. Individual attributes and behaviors: These relate to a person's innate as well as learned ability to deal with beliefs and feelings and to manage him-/herself in daily life (emotional intelligence), in addition to the capability of social activities, taking responsibilities, or respecting the views of others (social intelligence). Individual mental health state could be influenced by genetics and biological factors (Lahtinen et al., 1999; Lehtinen et al., 1997).
2. Social and economic circumstances: It is a definition of the capacity for an individual in an impaction either positive or negative by the immediate social environment (e.g., family members, friends, or colleagues) or by the socioeconomic circumstances in which they find themselves. Education and income are the most influential socioeconomic factors (Allen et al., 2014).
3. Environmental factors: The wider sociocultural and geopolitical environment in which people live can also affect an individual's, household's, or community's mental health status, including but not limited to levels of access to basic needs; exposure to predominating cultural beliefs, attitudes, or practices; and of course social and economic policies formed at the national level (Lynn et al., 2003).

Without hesitation in this global outbreak of COVID-19, the risk factors among colleges/universities' students are high. It is really important to emphasize that those who go on to experience a mental disorder have their own set of risks/vulnerabilities. The impact of mental illness on individuals and their families, the healthcare system, the school, the workplace, and the economy, in general, is extremely significant. Therefore, the benefits of early intervention for someone experiencing or about to experience a mental illness may include:

• Lower risk of relapse
• Reduced vocational/developmental disruption

- Less stressful assessment and treatment
- Reduced need for hospitalization
- Reduced family disruption and distress
- Improved recovery and better attitudes to treatment
- Helps people return to their "normal selves" and restores functioning
- Reduced risk of suicide

6 Conceptual Background

Studying at university is an important life chapter by itself. It is exciting, is transforming, and can be challenging as well; it's not uncommon for students to experience mental health issues during a crisis, and they could be triggered by psychological, physiological, or environmental factors. The COVID-19 pandemic, online/remote classes to perform, technology adoption, social distancing, and financial burdens are the most current influential stress factors that were added up to students' stress bucket. The stress bucket is a reflective psychological tool which helps individuals to visualize and identify what is causing them stress and how they can deal with and reduce it. Figure 1 shows the stress bucket for current university students during the COVID-19 global outbreak (Brabban & Turkington, 2002).

The Stress Bucket

- Academic stress
- Family
- Financial stress
- Anxiety
- Relationship stress
- Lack of sleep

- Difficulty adopting to change
- COVID-19 pandemic
- Online/remote education
- Social distancing
- Difficulties with communication skill
- Unsure what is going to happen

- Rest and relaxation
- Eating healthy food
- Exercise
- Meditation

- Good time management
- Doing something you enjoy
- Spending time with supportive people

Fig. 1 College/university students' stress bucket

Table 1 Students' vulnerable factors

Vulnerability factors	Exposure to infected sources
	Infected family members
	Loss of loved ones
	Physical distancing
	Economic loss
	Depression
	Anxiety
	Psychosomatic preoccupations
	Insomnia
	Increased substance use
	Domestic violence
	Rages
	Job intensity or insecurity
	Unemployment
	Indicators of vulnerability (such as pre-existing physical or psychological conditions)

In this critical moment, students' mental health concern is an important issue for all educators, who are often the first line of defense for their students. Table 1 presents an overview of some of the main individual, social, and environmental risks presenting themselves over the university studying period.

Students' interaction with each other and with faculties in a dynamic way is different, and this interaction will show an individual's mental health state. Table 2 provides an illustrative set of factors that may threaten or protect mental health state, helping us to categorize students to high-risk and low-risk mental health based on the adverse and protective factors as the following.

7 What Teaching, Technological Solution, or Innovation Addressed

Students are perhaps the most affected stakeholder throughout the pandemic time. The education systems are designing and implementing new communication platforms to actively engage students in a productive learning environment. In this scenario, students who are suffering from mental disparities are more vulnerable. Monitoring students' mental health is essential by considering stressors such as exposure to infected sources, infected family members, loss of loved ones, physical distancing, economic loss, and its psychosocial effects such as depression, anxiety, psychosomatic preoccupations, insomnia, increased substance use, and domestic violence, rages, and indicators of vulnerability.

By categorizing students in high risk and low risk, we can design a communication platform for each group. The following steps would be helpful to identify the

Table 2 Mental health determinants (WHO 2012)

Level	Adverse factors	Protective factors
Individual attributes	Low self-esteem	Self-esteem, confidence
	Cognitive/emotional immaturity	Ability to solve problems and manage stress or adversity
	Difficult in communicating	Communication skills
	Medical illness, substance use	Physical health, fitness
Social circumstances	Loneliness, bereavement	Social support of family and friends
	Neglect, family conflict	Good parenting/family interaction
	Exposure to violence/abuse	Physical security and safety
	Low income and poverty	Economic security
	Difficulties or failure at school	Scholastic achievement
	Work stress, unemployment	Satisfaction and success at work
Environmental factors	Poor access to basic services	Equality of access to basic services
	Injustice and discrimination	Social justice, tolerance, integration
	Social and gender inequalities	Social and gender equality
	Exposure to war or disaster	Physical security and safety

vulnerable students, design an effective communication platform, and implement it in the university to help students to engage in school activity and increase their academic performances and improve their mental health:

1. Colleges and universities are responsible for monitoring the mental health of their students. Universities should not only focus on the individual's psychological wellness, but also they should be concerned about the treatment, skill building, and awareness in the campus environment, organizational structure, policies, and practices.
2. Create and design new environmental conditions to guarantee all students are valuable and equal, and the university should offer specific services to students who are encountering mental health issues.
3. Identify vulnerable students, by the vulnerability factors that were mentioned in Table 1. The identification process could be done by creating a questionnaire, and it could be linked to the student's profile. We recommend collecting data at the beginning of each semester will be beneficial for both educators and students. This questionnaire should be editable by students at any point.
4. Categorize students who had experienced or faced at least one of the factors in Table 1 as high-risk students, and the rest will be identified as low-risk students.
5. Evaluate the whole process, and hear the students' feedbacks to improve the platform and apply the students' voices in developing strategy and implementing policy for the school.

6. Involve all faculties, staff, and students in a collective shared responsibility for creating an educational environment that supports students' academic performance and mental health.

Implementing these approaches by focusing on creating a campus community that promotes mental wellness and proper academic performance could utilize a Conceptual Communication Platform (Fig. 2).

The Conceptual Communication Platform was considered the university community as a single entity, creating supportive and inclusive conditions for students to distinguish. This approach promotes a student-centered strategy. This guarantees the contribution of all faculty and staff and shared responsibility for creating campus conditions that help transformative learning and student mental prosperity.

This platform has three stages; the first stage should be followed by all students, like institutional structure, rule regulation, and policy. In this stage, the educational institution should offer basic mental health awareness to the student by performing several professional speakers or offering informative brochures.

On the next level, we will target low-risk mental health students. We will engage them in self-management classes by teaching them to identify the cause of their stress and draw their stress bucket to identify the stress factor indicators. By offering a variety of practical training programs, educators try to develop their students' skills to manage their stress autonomously.
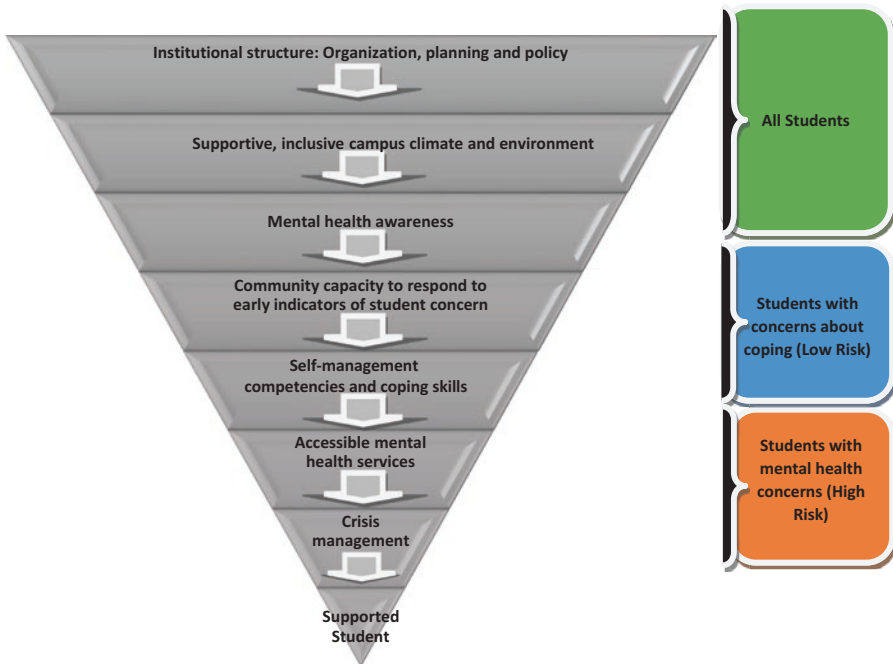
Fig. 2 Conceptual communication platform

The last stage was designed for high-risk students, who need to engage with professional psychiatric, psychologic program advisors, and even financial advisors to evaluate their risk factors and helping them to minimize the mental disorders. Finally, students can get help in which to manage the crisis.

8 Limitations and Recommendations

The communication platform which was designed in all different studies was based on the theoretical analysis. In this communication model, the researcher estimated the effects of individual, social, and environmental factors on vulnerable students' performance. For future research, we do recommend collecting data from students who are suffering from mental issues, and implementing the proposed communication platform and evaluating the effects of current communication on the students' performance.

9 Conclusion

As Suzanne Stavert (2017) noted, change is inevitable, but we must try to embrace these persistent ups and downs and learn to thrive on this roller coaster of transition. Technology has always forced us to constantly adapt to changes. The COVID-19 pandemic is changing the way we live, and it is accelerating the change adoption process all around the world. The education industry also is one of the major sectors that has been greatly influenced during this recent pandemic. Change adaptation is not easy, and people are reacting to change differently. Many people develop and struggle with mental health issues during this time. Designing a supporting communication platform is highly recommended for modulating students' academic performance and adjusting their personal life. It is one of the necessities to smoothen the path of change for each student when natural disasters and disease outbreaks are always around the corner. Providing this communication platform in advance is a great tool for educators to quickly diagnose, respond, and help a student in need and minimize the significant side effects of the related stress and its possible mental illness.

References

Allen, J., Balfour, R., Bell, R., & Marmot, M. (2014). Social determinants of mental health. *International Review of Psychiatry, 26*(4), 392–407.

Alwang, J., Siegal, P. B., & Jorgensen, S. L. (2001). *Vulnerability: A view from different disciplines*. Social Protection: World Bank.

Brabban, A., & Turkington, D. (2002). The Search for Meaning: detecting congruence between life events, underlying schema and psychotic symptoms (Chapter 5). In A. P. Morrison (Ed.), *A casebook of cognitive therapy for psychosis* (pp. 59–75). Brunner-Routledge.

Brazendale, K. et al. (2017). Understanding differences between summer vs. school obesogenic behaviors of children: The structured days hypothesis. *International Journal of Behavioral Nutrition and Physical Activity*, *14*. https://doi.org/10.1186/s12966-017-0555-2

Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *The Lancet*. https://doi.org/10.1016/S0140-6736(20)30460-8

Dutheil, F., Mondillon, L., & Navel, V. (2020). PTSD as the second tsunami of the SARS-Cov-2 pandemic. *Psychological Medicine*, 1–2.

Hawryluck, L., Gold, W. L., Robinson, S., Pogorski, S., Galea, S., & Styra, R. (2004). SARS control and psychological effects of quarantine, Toronto, Canada. *Emerging Infectious Diseases, 10*(7), 1206.

Jeong, H., Yim, H. W., Song, Y. J., Ki, M., Min, J. A., Cho, J., & Chae, J. H. (2016). Mental health status of people isolated due to Middle East Respiratory Syndrome. *Epidemiology and health, 38*, e2016048. https://doi.org/10.4178/epih.e2016048

Kirkwood, A., & Price, L. (2013). Missing: Evidence of a scholarly approach to teaching and learning with technology in higher education. *Teaching in Higher Education, 18*(3), 327–337. http://dx.doi.org.proxy.library.carleton.ca/10.1080/13562517.2013.773419

Lahtinen, E., et al. (1999). *Framework for promoting mental health in Europe*. Helsinki.

Lehtinen, V., Riikonen, E., & Lahtinen, E. (1997). *Promotion of mental health on the European agenda*. National Research and Development Centre for Welfare and Health (STAKES).

Lynn, C. J., McKay, M. M., & Atkins, M. S. (2003). School social work: Meeting the mental health needs of students through collaboration with teachers. *Children & Schools, 25*(4), 197–209.

Pfefferbaum, B., & North, C. S. (2020). Mental health and the Covid-19 pandemic. *New England Journal of Medicine*.

Public Health Agency of Canada. (2020). Vulnerable populations and COVID-19. Available from: https://www.canada.ca/en/public-health/services/publications/diseases-conditions/vulnerable-populations-covid-19.html

Suzanne Stavert. (2017). *The Inevitability of change*, https://www.huffpost.com/entry/the-inevitability-of-change_b_5893632

Torales, J., O'Higgins, M., Castaldelli-Maia, J. M., & Ventriglio, A. (2020). The outbreak of COVID-19 coronavirus and its impact on global mental health. *The International Journal of Social Psychiatry, 66*(4), 317–320. https://doi.org/10.1177/0020764020915212

WHO. (2005). *Promoting mental health: concepts, emerging evidence, practice*. World Health Organization.

Zhai, Y., & Du, X. (2020). Mental health care for international Chinese students affected by the COVID-19 outbreak. *The Lancet Psychiatry, 7*(4), e22.

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The Role of Instructors in Reducing the Impact of COVID-19 on International Students

Ajay K. Garg, Amit Kohli, and Nakul Kaushal

> *Learn as if you were to live for ever.*
> *Mahatma Gandhi*

1 Background

Learning is an ongoing process that begins with birth and continues until death. During the last two decades, education export has been a rapidly growing industry all over the world. International students migrate to different countries with a dream of becoming successful, learning how to live independently, gaining international exposure, and building a strong personality to achieve their goals (Marginson, 2014). However, the COVID-19 pandemic has posed a grave danger for this industry and the education system. Due to COVID-19, universities worldwide have changed from face-to-face to online delivery style (Lau et al., 2020). The shift in teaching patterns is a significant change in the history of education that has impacted both students and instructors. This shift raises the question: Do universities have enough resources to cope with the online learning mode? In this chapter, we will analyze the threats posed by this crisis on the education system and various ways to deal with these challenges, particularly in mitigating the impact for international students.

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COVID-19 was first found in China on November 17, 2019 (Davidson, 2020). It has now spread to over 190 countries. It has created a global crisis and has become a threat to the future growth of individuals and nations (Washington Post Staff, 2020). In reacting to this disease, many countries have imposed travel restrictions. Public health officials have introduced self-isolation and social distancing to control the spread of the disease. About 153 countries closed educational institutions on April 21, 2020, which has impacted 70% of the world students' population (UNESCO, 2020). The impact of this pandemic is more depressing for international students as compared to others. In a foreign country, they live without their families' support, sacrificing a lot for their studies while adapting to a new culture to get a brighter future.

This chapter focuses on changes that occurred in students' lives while going through this global crisis. Ozili and Arun (2020) have discussed the question of how students manage their studies and work simultaneously. Rajkumar (2020) has analyzed the effect on students' mental health during the change of delivery mode by education institutions. International students are undoubtedly worried about their mental health and education. They feel stressed about their families' well-being (Zhai & Du, 2020).

The main question that arises here is: How does this crisis affect international students' mental health and the efforts of an instructor to support these students? We first examine the various factors that have increased the stress and needs of international students in Canada during this COVID-19 situation. We then relate the experiences of a professor (the second author) who has been teaching international students online virtually during COVID-19. This is followed by the actual experiences of an international student (the third author) who recounts the stress factors experienced during COVID-19. Finally, we conclude with recommendations from our experiences about pedagogical strategies that instructors can implement to support these students during these times of anxiety.

2 Impact of COVID-19 Pandemic on Mental Health of International Students

As background to this study, several published articles (Banerjee, 2020; Kalata, 2020; Strauss, 2020), reports from the International Association of Universities (2020), and a survey (Gutterer, 2020) were categorized and reviewed according to the international student online users and their problems during the COVID-19 pandemic and closures of universities. It has been noted that students are going through much mental stress such as anxiety (Sharp, 2020), panic, fear, loneliness, financial strain (Bowden, 2020), and apprehension about change in the learning process (Gomez et al., 2020). Consequently, this situation is leading to significant health and economic crises, particularly for international students. Let us go through various factors affecting the mental health of international students.

3 Factors Affecting the Mental Health of International Students

Mental health is a crucial factor that needs to be addressed during this situation of COVID-19. With various colleges and universities closing their campus and asking the students to leave the campus residences, the situation has become extremely stressful for some international students. They are finding themselves helpless, isolated, and financially burdened. The case is equally grim for international students living off-campus as they see it challenging to get enough work to support their rent and travel expenses. Without a support network, they are feeling panic and more isolated. The following are key factors affecting the mental health of students:

Discrimination: This is a significant factor affecting the mental health of students. In a foreign country, international students are generally seen as outsiders, which is very stressful for them. The situation is particularly grim for Chinese students who may be viewed as virus carriers and are no longer welcomed (Moir, 2020). The situation has resulted in an identity crisis for them.

Financial burden: The major crisis COVID-19 has created for international students is the financial burden (Perkel, 2020). With airports, malls, and restaurants closed, several students have lost their jobs; however, they have to continue paying their tuition fees. Many students have taken education loans back in their country, and they have to pay the installments on time. This financial crisis has created much mental stress for international students. They need to pay rent, tuition fees, and other expenses to continue to stay in a foreign country and study, but the lack of job opportunities has made their task more difficult.

Apprehension about career and future growth: The recession-like situation in global economies has led to limited job opportunities, the closing of campuses, and delay in the visa processes. This has created fear in the minds of international students regarding their careers in a foreign country and future. This has resulted in severe mental stress for international students (Bakx, 2020).

Anxiety: The COVID-19 global pandemic has been stressful to everyone, particularly international students who are stranded thousands of kilometers away from their families with borders shut and no means of air travel. Further, they get dreadful daily news of the spread of pandemic back in their home countries. This anxiety is also causing them mental stress and other mental health issues (Young, 2020).

Loneliness: International students live far away from their support network back in their home countries. Without their families here, they were already feeling lonely; however, the lockdowns and other restrictions have also resulted in them feeling lonelier (Baker, 2020).

Negative emotional spiral: Another critical factor affecting students' mental health is that they start seeing everything from a negative and grim perspective. Due to this, they become more emotional and start missing their families more and fall into the trap of a negative emotional spiral.

Difficulty in concentrating, low motivation, and a state of distraction: Students are facing difficulty concentrating on their studies for various reasons. Many students have lost their jobs leading to more mental stress. Their motivation has become low due to the loss of employment and fear about their careers after graduation. Due to this, they get distracted and become more nervous and depressed (Tress Academic, 2020).

Desperation: Another adverse effect on the student's mental health due to COVID-19 is desperation (Young, 2020). People become desperate when they lose hope and specific track of their goals. During this situation, students think things are going to get worse and won't return to normal soon, which makes them more worried.

Panic and fear: This prolonged period of panic and fear during COVID-19 has worn everyone out. The case is more difficult for international students who are without their support network and are lonely in a foreign country.

In addition, during this stressful time since March 2020, instructors have had to change the regular curriculum and teaching to an online mode, e.g., instead of on-campus classes, they conduct online courses and examinations. They have also changed the evaluations so that, instead of taking a quiz, they depend on case studies and other written assignments. This unexpected change has impacted the design of studies because the students must prepare for the final exam in a different way to score good marks. Moreover, it has resulted in many technical issues. For example, students have had to opt for the high-speed Internet service provider to avoid disruptions during exams and presentations. Students have also faced the problem of making their home environment appropriate for various evaluation criteria such as writing an exam or test in a room alone because they frequently share spaces with other international students. Additionally, students have had to go through financial strain, loneliness, struggle during adaptability, time management, self-motivation, persistence, and proactive coping with these changes.

4   The Role of Instructors in Supporting Students

Instructors play an essential role in the life of a student. They are an indispensable source of knowledge and become a support system throughout the student's journey in achieving their goals. They assist students in learning and developing themselves as strong persons. Their role has assumed a much more critical role in supporting students in this grave time of the global pandemic. The most common problems that students face currently are anxiety and other mental health issues. COVID-19 has changed the methods of learning and information dissemination for both students and instructors. Instructors are using various virtual classroom methods, and students are learning through online live classes. It is not only challenging for students

but also equally challenging for instructors. Schools and universities have arranged mandatory training sessions for instructors to learn different techniques and tools to teach students online by using various online platforms. However, a primary concern is how to use methods that reduce the trauma for the students.

Instructors may need to take the help of supportive mentorships (Gruber, 2020) and professional programs such as the School of Mental Health in Ontario (School Mental Health Ontario, 2020) and other university counseling resources. It has an association with Jack.org which provides the resources to teachers to educate students in dealing with this crisis.

Also, the duration of online meetings and appointments should be fixed for students apart from regular teaching, although this is followed by very few universities. The teachers may also provide specific instructions regarding various assessment and evaluation criteria for online assignments, quizzes, and mid-term and final examinations. The students should be provided emotional support when they face anxiety or stress during COVID-19 (Al-Rabiaah et al., 2020).

5   The Real-Life Experiences of Professors and Students during COVID-19

As a professor teaching undergraduate business courses, there are many ways that I (the second author) have implemented to help international students reduce their stress and anxiety and enhance their learning during these COVID-19 times. I now prefer to use breakout rooms for students to reduce their mental stress during online virtual classes. Providing these tasks for practical training and learning in virtual breakout rooms in classes has an edge over other tools. In my last term, students were given a simulation task that was supposed to be done in a group. For this simulation task, I help students understand how to put their learnings into real practice. According to everyone's availability, I now conduct a virtual meeting for small groups. I have seen students who cannot talk in the larger class were much more comfortable speaking in breakout rooms due to the fewer people and small groups in these activities. Breakout rooms have supported students in completing the group tasks. Students have been more open to sharing their thoughts and solving problems through discussion with group members and instructors.

Apart from group meetings, I have conducted an individual meeting as well for everyone in the class. Students book an appointment with me to discuss their feelings and challenges they have been facing. They also discuss how to divide their work to make the tasks more manageable and what they should do to perform better in their final exams. In my last term, I designed the course not to be overburdened with assignments. Instead, I developed in-class activities. In class every week, each group gives their presentation on what they learned from the chapter. This helps them learn together in teams, be more creative, and focus on developing their

communication skills and gives them the confidence to convince others by putting their thoughts in front of the audience. By applying these techniques, students can prepare for their courses and prepare for future competition and how they should work in teams to get the best results and make decisions.

As a student, I (the third author) would also like to share my experience of going through the same situation when pursuing my master's degree at University Canada West. It all began when the government declared a complete lockdown in the province of British Columbia. This resulted in a change of mode of learning from face-to-face campus learning to online study. I was in my last semester when the government declared the lockdown. Still, with the sudden transition to online delivery, my regular class schedule got changed. Moreover, I had to prepare for technical issues, e.g., I had to change my Internet service provider and buy a new plan with better speed to avoid disruptions during exams and presentations. Earlier, I depended on the university library services for this. Another issue I faced was for making my home environment appropriate for exams. I lived with a family, and our instructor informed us that our exam would be on ProctorU software. For this, we had to make sure nobody would be there in our room or at home. For my exam, I had to inform everybody in my house beforehand that I have an exam so they would go out or stay silent at home. It was very stressful to arrange everything and request others to remain quiet or leave home for a few hours. Additionally, I had to go through financial strain, loneliness, adaptability to these struggles, time management, declining self-motivation, and persistence and, also, develop proactive coping with these changes.

6 Techniques for Stress Reduction

There are various ways that instructors can use to reduce the psychological burden of students and make their studies less stressful. Some of these are as follows.

First, an instructor should create a timetable and communicate that clearly. This method helps the students to reduce their anxiety. Instructors should explain the routine and changes to the students in clear terms and details. A set schedule will help the students to manage their stress and boost their confidence.

As online teaching has reduced the face-to-face classroom interaction of instructors with students, completing their assignments may seem more daunting to students now due to difficulty in understanding the instructions. Precise and step-by-step instructions are helpful. Instructors should provide an accessible platform that is simple to operate by students without facing many difficulties (e.g., Microsoft Teams and Zoom). For online learning classes, instructors may establish direct communication with each student. Instructors should hold weekly discussions in online forums, where students can post their learning from the class. This would help students understand the topic in a deeper and more effective manner.

7 How Instructors Can Make Teaching Sessions More Innovative and Engaging

The instructor may also help students manage their stress by making online learning in virtual classes fun. We recommend these techniques for instructors to make online learning enjoyable for students:

- Instructors should use social media to engage students in online learning. They may use the hashtag (#) to push posts related to course content. Also, adding a specific badge on their course homepage will develop an interest in and focus on specific topics.
- Another way to make education exciting and innovative is by adding gamification features to an online course – for example, by using polls, review quizzes, and questionnaires through such popular apps as Kahoot and Quizlet.
- Instructors should also add a badge of achievement to showcase students' accomplishments during the activities.
- Adding student self-assessment to discussion posts and providing feedback related to their marks during their online class can motivate students.
- Providing quick feedback on assignments and responding to emails in a timely way can generate interest for students in doing their further upcoming coursework and projects.
- Another pedagogical strategy may be included in which instructors conduct live interview sessions via Zoom or MS Teams or phone to explain the written assignments, exams, quizzes, and project works to individual students or groups working on a team project.

8 Conclusion

During this COVID-19 pandemic, students face much mental stress, such as loneliness, anxiety, panic, and financial burden. The impact is more for international students living far away from their homes without any support system. They must manage their studies along with work to pay off their expenses. Their apprehension about their future career and new methods of learning makes their stress levels even higher. It is worth mentioning that the virus leads to significant health and economic crises, particularly for international students. Mental health is a crucial factor that needs immediate attention during this situation. Instructors can play a vital role in managing the stress level of their students. They can use various techniques described above to minimize students' psychological burden and make their studies less stressful. Some of these techniques are predictable routines, personal interaction with the students, and encouraging students to share their problems. Small things like greeting them by their names every day, putting them in small interactive groups, and using active learning tasks rather than a teacher-centered, one-way form

of communication go a long way in keeping the students in good mental health and engaged in their studies.

In addition, our university (Yorkville University) has set up services provided by the Student Success Center to maintain contact and support for international students. Students have been supported in their stress by online mental health counseling sessions provided by professional counseling psychologists in individual and confidential sessions organized by the university. This is service is confidential and may be accessed by the students by submitting a request to Wellness@yorkvilleu. ca. Instructors may refer a student to seek this support and provide the email address to the student to request such support. However, instructors are not privy to the information shared during the counseling sessions. As well, weekly orientation sessions for students about stress management and wellness have been made available to all students via the Student Success Services at the university. Along with the ongoing frontline support of their caring instructors, thus international students have been engaged in overcoming this "new normal" and have had success in persisting with their studies abroad.

References

Al-Rabiaah, A., Temsah, M., Al-Eyadhy, A. A., Hasan, G. M., Al-Zamil, F., Al-Subaie, S., & Somily, A. M. (2020). Middle East respiratory syndrome-Corona virus (MERS-CoV) associated stress among medical students at a university teaching hospital in Saudi Arabia. *Journal of Infection and Public Health, 13*(5), 687–691. https://doi.org/10.1016/j.jiph.2020.01.005

Baker , R. (2020, May 16). *COVID-19 isolation threatening mental health of rural youth*. Retrieved July 27, 2020, from https://www.nationalobserver.com/2020/05/12/news/covid-19-isolation-threatening-mental-health-rural-youth

Bakx, K. (2020, April 09). Pandemic-driven unemployment will undoubtedly break records. How worried should we be about that? | *CBC News*. Retrieved July 27, 2020, from https://www.cbc.ca/news/business/jobs-unemployment-rate-covid-19-1.5526961

Banerjee, A. (2020, April 29). *How professors can help university students during the COVID-19 pandemic*. Retrieved June 04, 2020, from https://www.universityaffairs.ca/career-advice/career-advice-article/how-professors-can-help-university-students-during-the-covid-19-pandemic/

Bowden, O. (2020, May 13). *67% of Canadian students worry they won't get a job due to COVID-19: StatsCan*. Retrieved May 14, 2020, from https://globalnews.ca/news/6935021/coronavirus-student-jobs.

Davidson, H. (2020, March 13). First Covid-19 case happened in November; China government records show - report. Retrieved June 04, 2020, from https://www.theguardian.com/world/2020/mar/13/first-covid-19-case-happened-in-November-China-government-records-show-report

Gomez, C., Kalata, N., Singh, I., & Loiero, J. (2020, March 24). International students feeling isolated and financially strapped as they wait out pandemic | *CBC News*. Retrieved May 14, 2020, from https://www.cbc.ca/news/canada/covid-international-students-universities-pandemic-1.5505222.

Gruber, J. (2020, May 20). *Professors must support the mental health of trainees during the COVID-19 crisis*. Retrieved June 04, 2020, from https://www.sciencemag.org/careers/2020/05/professors-must-support-mental-health-trainees-during-covid-19-crisis

Gutterer, J. (2020, April 01). *The Impact of COVID-19 on international students perceptions*. Retrieved June 4, 2020, from https://studyportals.com/intelligence/the-impact-of-covid-19-on-international-students-perceptions/

Kalata, N. (2020, March 26). Ontario teachers hosting virtual lessons as COVID-19 keeps students out of class | *CBC News*. Retrieved May 22, 2020, from https://www.cbc.ca/news/canada/toronto/ontario-teachers-hosting-virtual-lessons-as-covid-19-keeps-students-out-of-class-1.5508428

Lau, J., Yang, B., & Dasgupta, R. (2020, March 13). *Will the coronavirus make online education go viral?*. Retrieved May 22, 2020, from https://www.timeshighereducation.com/features/will-coronavirus-make-online-education-go-viral

Marginson, S. (2014). Student self-formation in international education. *Journal of Studies in International Education, 18*(1), 6–22.

Moir, M. (2020, May 27). *Despite hesitations, these Chinese students say they still plan to study in Canada*. Retrieved July 27, 2020, from https://www.universityaffairs.ca/news/news-article/despite-hesitations-these-chinese-students-say-they-still-plan-to-study-in-canada/

Ozili, P. K., & Arun, T. (2020). *Spillover of COVID-19: Impact on the global economy*. Available at SSRN 3562570.

Perkel, C. (2020, May 29). *Students decry tuition hikes as COVID-19 pandemic increases financial strain*. Retrieved July 27, 2020, from https://www.kamloopsthisweek.com/students-decry-tuition-hikes-as-covid-19-pandemic-increases-financial-strain-1.24143531

Rajkumar, R. P. (2020). COVID-19 and mental health: A review of the existing literature. *Asian Journal of Psychiatry, 102066*.

School Mental Health Ontario. (2020). *Educators*. Retrieved June 04, 2020, from https://smho-smso.ca/covid-19/educators/

Sharp, A. (2020, April 30). *Nerves, anxiety and hunger for international students during COVID-19*. Retrieved May 14, 2020, from https://www.nationalobserver.com/2020/04/30/analysis/nerves-anxiety-and-hunger-international-students-during-covid-19

Strauss, V. (2020, March 26). *Analysis | A trauma-informed approach to teaching through coronavirus – For students everywhere, online, or not*. Retrieved May 22, 2020, from https://www.washingtonpost.com/education/2020/03/26/trauma-informed-approach-teaching-through-coronavirus-students-everywhere-online-or-not.

Tress Academic. (2020, July 02). *Overcoming low motivation while in lockdown*. Retrieved July 27, 2020, from https://tressacademic.com/overcome-low-motivation/

UNESCO. (2020). *COVID-19 educational disruption and response*. Retrieved April 21, 2020 from https://en.unesco.org/themes/education-emergencies/coronavirus-school-closures.

Young, M. (2020, May 08). *Life during COVID-19 brings increased anxiety, depression for many*. Retrieved July 27, 2020, from https://www.dailycal.org/2020/05/07/life-during-covid-19-brings-increased-anxiety-depression-for-many/

Zhai, Y., & Du, X. (2020). Mental health care for international Chinese students affected by the COVID-19 outbreak. *The lancet. Psychiatry*, *7*(4), e22, Retrieved May 14, 2020, from https://doi.org/10.1016/S2215-0366(20)30089-4.

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Engaging Learners by Supporting Their Emotional Needs During COVID-19 and Crisis Situations

Maha Hamed Alsoraihi

The most important instructional resources will ALWAYS be the Teacher. Not the technology, activities, or programs. THE TEACHER!

Tom Loud. School Founder

1 Background

At the time of COVID-19, learners began feeling lonely, anxious, and isolated. Teachers realized that to face learners' feelings of negativity and uncertainty, they needed to focus on the human behind the computer screen to develop a sense of belonging in online learning communities. Teachers knew that the development of a sense of belonging is key to academic success and achievement.

There is no doubt that using technology in teaching does facilitate content delivery and saves learning time. Clark (1983) claimed that using technology in teaching will facilitate knowledge learning but does not affect learners' achievements. Bonk and Reynolds (1997) found that using the web to deliver online content created activities that would help learners to acquire new information and link it to their prior knowledge using meta-cognitive abilities. Kozma (2001) argued that instructors need to involve learners in real-life situations; and that it is not technology that promotes the need to learn; rather it is the stimulation of real-life situations which fosters learners' interaction and progress. This complements what Ring and Mathieux (2002) explained, that is, to have effective online learning, we must have a high frequency of authenticity, high interactivity, and high levels of collaboration.

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However, online learning has been viewed by many as less supportive emotionally than face-to-face classroom learning and leading to a feeling of isolation (Rice & Love, 1987). Recent studies have explained how positive and negative emotions experienced by online learners support or hinder the online learning process (Conrad, 2002; Hara & Kling, 2003; Rovai & Wighting, 2005). This chapter presents a study of students' emotions at the time of COVID-19 in 2020. It points out effective strategies to help teachers enhance online learning experiences to support learners' emotions at the time of COVID-19 or other crises.

2 Online Learning and Emotions

Emotions play an essential role in online learning because they can hinder or promote learning (Dirkx, 2001; Yorks & Kasl, 2002). Students' emotions are considered by many studies as a motivating factor in creating a sense of purpose and shaping the context of their learning experiences (Drikx, 2006; Merriam & Caffarella, 2007). Other studies have investigated the importance of learners' emotions and how they can be connected to the sense of a community of learning (Hara & Kling, 2003; Rovai & Wighting, 2005). These show how positive or negative emotions support or hinder the learners' online learning experiences. The focus of this chapter is not on emotions per se but on how emotion-based discourses are used and how teachers can help learners to minimize negative emotions and promote positive ones that will support their online learning experience. This emphasis will also help learners build a sense of community and increase their motivation levels by being cognitively present and aware of their emotions during online classes.

3 Case Study

The aim of the study is to explore learners' attitudes and emotional perceptions of remote online teaching at the time of the COVID-19 pandemic. This could not be achieved without investigating learners' emotional status before starting the course and after. This study was essentially a qualitative investigation that collected data through a focus group from the online course participants. Students were aware of the purpose of such groups and the interview discussions. The results of this research propose engaging activities applied during the COVID-19 transition to online teaching to maintain students' high level of engagement and reduce their emotional anxiety during the lockdown phase.

The course length was 15 weeks for nearly 86 undergraduate students in the Linguistics Department at Princess Nourah University in Saudi Arabia. A focus group was created to check on learners' emotions and how they felt about online learning during the pandemic. The main purpose of the student focus group was to

create teaching strategies and techniques that would help learners to overcome their anxiety and the stressful situation created by the pandemic.

The course was delivered entirely online through a learning management system (LMS). The focus group during the online course showed the strategies applied by the researcher-educator to reduce learners' anxiety and stress levels during the pandemic. The students began feeling comfortable with the teaching techniques as the majority expressed their feelings as less confused, more confident of the process, and feeling less isolated. Data collected showed how learners expressed their emotions and how the discussions played an important role in an online learning context. Data findings helped the instructors focus on implementing teaching strategies that could help learners overcome negative emotions associated with the lockdown. Learners' feelings of anxiety and isolation gradually decreased in their writings and communications as we approached the end of the online course. This could not be achieved without a full understanding of learners' emotions and adopting some teaching strategies that would give learners space and time to express such emotions and be cognitively present.

4   Methodology and Focus Groups

There is a paucity of inquiry about learners' emotions, particularly related to online learning contexts (Wosnitza & Volet, 2005). Recent research, however, has shown how negative emotions such as anxiety, confusion, and isolation, together with positive feelings such as excitement and engagement, are expressed by learners in online learning contexts (Conrad, 2004; Hara & Kling, 2003; Rovai & Wighting, 2005). This study investigated learners' negative emotions during COVID-19 time and their impact on the online learning process. It also revealed how learners' negative emotional expressions decreased gradually in their communications by the end of the semester due to the implementation of teaching strategies, including supportive discourse, which helped in minimizing learners' feelings of isolation and anxiety.

Students were instructed weekly on what to read, discuss, and write; with a focus on giving themselves more time and space to reflect and express their emotions concerning online learning contexts. To find out more about such issues, the conceptual framework for distance learning, as explained by Vrasidas and Glass (2002), was used as a foundation in the study. This framework focuses on the importance of learners' understanding of their own emotions and ways of interpreting them.

The data were collected by creating a focus group in which learners were engaged in:

1. writing two journal entries about their emotions during their online learning: one at the beginning of the semester and one at the end,
2. using two semi-structured and virtual interviews: one at the beginning of the online course and one at the end of it, and
3. exchanging emails during the period of nearly 15 weeks

Learners were informed that these journals and emails would be reviewed only by the instructor for research purposes to gain their trust and create a comfortable environment where they could express their feelings freely. Evidence of learners' efforts to understand their feelings such as anxiety and fear was traced and checked. These emotions appeared to be the result of unclear methodology in online learning during the time of COVID-19. For example, one student was terrified of the unstable situation of this process. She wrote: *"I am really scared of this unclear methodology of online learning at this time of COVID-19. This is something that is completely new to me. I feel totally isolated. This technology makes me feel all alone. I feel I know nothing"* (week 1).

Another student wrote in her monthly journal: *"I have no idea where to start and how this online course works. This unknown thing makes me terribly frustrated"* (week 2). Another student sent an email in which she wrote: *"To tell you the truth, I wish I had enough time to explore all these online things that I don't understand. I don't want to look stupid and ask how and where to start. I feel lost"* (week 2).

It seemed obvious when analyzing learners' writings about their emotions that the sudden shift from traditional learning to total online learning due to COVID-19 created confusion in the learning environment. However, as we approached the end of the semester, such negative expressions began to decrease and nearly disappeared from learners' writings and discussions. This seemed to be due to the implementation of the teaching strategies to support learners' emotions and to minimize their fear and anxiety about online learning. The following section discusses these strategies that led to an effective online learning experience.

5   Research Findings

The findings of this study reflect two crucial insights: (1) how learners were engaged in online learning at the time of COVID by expressing and discussing their emotions and (2) how instructors applied effective teaching strategies to minimize learners' anxiety so that learners could be cognitively present in their online learning. The following section explains these strategies.

6   Strategies for Enhancing the Online Learning Experience

Engagement is defined as "active participation and involvement in learning activities" (Mercer & Dornyei, 2020, p. 2). There were three main strategies that instructors applied to enhance learners' online engagement. It is important to remember that such strategies were the outcome of the experienced instructors who witnessed and kept records of their online teaching. The three strategies were (a) creating a psychologically safe environment; (b) modeling leadership and resilience; and (c) empowering learners and supporting their efforts.

7   Creating a Safe Psychological Environment

At the time of COVID-19, learners showed a high level of anxiety. The instructor's role was to support anxious learners in remaining calm and focusing on their education. It was crucial for online instructors to start the teaching process by creating a psychologically safe environment. To do so, instructors implemented techniques to set the stage before starting the teaching process. Examples of these techniques were:

(a) Learners were prepared to join weekly online classes using videoconferencing using such tools as Zoom (or other video-conferencing platforms as WebEx, Adobe Connect, MS Teams, Vedamo, and Blackboard Collaborate). Teachers sent emails and posted announcements where learners' questions could be answered. Also, they developed routine guidelines and actions to help students develop feelings of normality and security.

(b) Teachers started the class with an icebreaker or social check-in by asking students to share their feelings and the challenges they might be experiencing. This not only gave the message that "you are not alone in this crisis" but also created a feeling of safety.

(c) Teachers set ground rules for values with the learners to ensure that they understood the value of confidentiality in their classroom discussions. This helped them to feel secure and protected. This understanding of the value of privacy fostered their online learning engagement.

8   Leadership and Resilience

In the time of confusion during COVID-19, learners looked up to their instructors as leaders who would guide them to the exit tunnel of this crisis. Therefore, it was important for instructors to follow certain steps in meeting their learners' expectations, including:

(a) Building trust with learners by showing them that even instructors are vulnerable and face times of confusion because of the pandemic. Instructors demonstrated this by narrating personal experiences and showing their confidence in the face of adversity. Showing empathy and support to learners in critical times is a fundamental criterion for enhancing academic success.

(b) Developing problem-solving skills. When narrating personal stories, instructors invited learners to be in the context and offer solutions to the problem. A question like "what would you do if you were in the same situation?" encouraged learners to be deeply involved. Another strategy was to ask learners to engage in group discussions and dialogues which would develop their problem-solving skills.

9 Empowering Learners and Supporting Their Participation

Student participation was supported by the following:

(a) Learners' efforts were emphasized. Talent alone by itself will never ensure success. Duckworth (2013) emphasized the concept of persistence amidst struggle. Encouraging and modeling effort and "multiple tries" will lead learners to be more engaged in online classes.
(b) Empowering students by getting them connected and relating the online content to their culture and needs. Instructors posted videos of popular social media figures to relate to their culture and experiences. When learners feel inspired, they will effectively engage.
(c) Empowering learners by asking them to share their examples and stories about their families and peers who demonstrated success in overcoming challenges in times of crisis. Instructors need to acknowledge learners' participation and refer to their comments, examples, and queries.
(d) Empowering learners by encouraging self-reflection and discussion online. This was done by giving a 1-minute writing space in live online classes during their virtual synchronous learning sessions. Learners were given the opportunity to write about what they experienced and how they accomplished their academic goals.

10 Conclusion

Examples from this research show that the level of anxiety and uncertainty in online classes was high at the beginning for many learners. However, it decreased gradually as learners became familiar with the process and the strategies implemented. Instructors needed to use time wisely to teach, motivate, and interact. To enhance learners' engagement in their online learning, instructors prepared learners emotionally to engage with the content by modeling confidence and resilience, creating a psychologically safe learning environment, and implementing strategies whereby students wrote about, shared, and discussed their emotions in a safe and supportive learning space.

References

Bonk, C. J., & Reynolds, T. H. (1997). Learner-centered web instruction for higher-order thinking, teamwork, and apprenticeship. In B. H. Khan (Ed.), *Web-based instruction* (pp. 167–178). Educational Technology Publications.
Clark, R. E. (1983). Reconsidering research on learning from media. *Review of Educational Research, 53*(4), 445–459.

Conrad, D. (2002). Engagement, excitement, anxiety, and fear: Learners' experiences of starting an online course. *The American Journal of Distance Education, 16*(4), 205–226.

Conrad, D. (2004). Building and maintaining community in cohort-based online learning. *Journal of Distance Education, 20(1), 1–20.*

Dirkx, L. M. (2001). The power of feelings: Emotions, imagination, and the construction of meaning in adult learning. *New Directions for Adult and Continuing Education, 89*, 63–72.

Drikx, J. (2006). Engaging emotions in adult learning: AJungian perspective on emotion and transformative learning. *New Directions for Adultand Continuing Education, 109, 15–26. San Francisco: Josse-Bass.*

Duckworth, A. (2013). *The Grit: The power of passion and perseverance*. TED Talk Education. https://www.ted.com/talks/angela_lee_duckworth_grit_the_power_of_passion_and_perseverance?language=en

Hara, N., & Kling, R. (2003). Students' distress with a web-based distance education course: An ethnographic study of participants' experiences. *Turkish Online Journal of Distance Education, 4*(2).

Kozma, R. B. (2001). Counterpoint theory of 'learning with media'. In R. E. Clark (Ed.), *Learning from media: Arguments, analysis, and evidence* (pp. 137–178). Information Age Publishing Inc..

Mercer, S., & Dornyei, Z. (2020). *Engaging Language Learning in Contemporary Classrooms*. Cambridge University Press.

Merriam, S. B., & Caffarella, R. S. (2007). *Learning in Adulthood: A comprehensive guide* (3rd ed.). Jossey-Bass.

Rice, R., & Love, G. (1987). Electronic emotion. *Communication Research., 14*(1), 85–108.

Ring, G., & Mathieux, G. (2002). The key components of quality learning. *Paper presented atth ASTD Techknolwedge 2002 Conference, Las Vegas.*

Rovai, A., & Wighting, M. (2005). Feelings of alienation and community among higher education students in a virtual classroom. *Internet and Higher Education, 8*(2), 97–110.

Vrasidas, C., & Glass, G. (2002). A conceptual framework for studying distance education. In C. Vrasidas & G. Glass (Eds.), *Distance education and distributed learning* (pp. 31–56). Information Age Publishing.

Yorks, L., & Kasl, E. (2002). Toward a theory and practice for whole-person learning: Reconceptualizing experience and the role of affect. *Adult Education Quarterly, 52*(3), 176–192.

Wosnitza, M., & Volet, S. (2005). Origin, direction and impact of emotions in social online learning. *Learning and Instruction, 15*(5), 449–464.

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Cyber-Empathy: Teaching Counseling Skills in the Post-COVID Era

Jocelyn Sherman and Neil Duchac

1 Transformation of Empathy

Multiple definitions of empathy have evolved through the years. Beginning with Rogers, empathy was explained as the ability to "perceive the internal frame of reference of another with accuracy and with the emotional components and meanings" (Rogers, 1959, p. 210). Contemporary definitions explain empathy as "a human capacity consisting of several different facets that work together to enable us to be moved by the plights and emotions of others" (Riess, 2018, para. 6). In fact, as empathy has evolved in its importance in counseling, more encompassing terminology is used – for example, "empathic capacity" (Riess, 2018) as empathy is recognized as comprised of different facets that are both physiological and psychological in nature. By being able to perceive feelings of others, processing them and responding to these feelings, the accuracy of empathy is reinforced in the process. This builds upon previous definitions to reflect an appreciation of the feelings of another or the necessary elements of a relationship and as a broader concept (Smith, 2006).

Today, empathy is considered to have multiple aspects integrating cognitive and affective constructs (Smith, 2006). As Riess (2018, para. 7) emphasizes, the afferent and efferent responses include nonverbal and verbal signals such as body language. This definition is broadened to respect the emotional and cognitive components of individuals in communication. In fact, Siegel (2010) explains empathy as a capacity to develop images of the minds of others which enable us to move from the position of feeling with another to the concept of viewing from another's perspective (para.

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12). This movement is reflective of advances in the mirror neuron system that enable us to act from a stance of predicting the nature of culture and the integration of our sharing.

Neurobiology supports the concept of empathy development through listening, watching, reflecting, and sharing in relationship (Siegel, 2010). There is a powerful focus, indeed, on the understanding of how physiological and psychological forces combine to help us interpret and empathize with others. Jenkins (2019) suggests that these components – affective, cognitive, and sensorimotor elements of communication – can be developed by encouraging closeness between the communicants. From a pharmacological viewpoint, empathy is defined as the ability to feel another's pain. Ratka (2018), along with Siegel (2014), concede that the individual is hardwired for empathy and is impacted by social and cultural factors. In addition, Riess (2018) supports the use of guidelines for strengthening empathic responses through duplication of experiences or supporting the individual by experiencing another's feelings so that one can learn to avoid pain and move toward supporting the person (para. 3). If, as Siegel, Ratka, and Riess conclude, we are hardwired for empathy, how do we harness that and communicate it effectively through distance therapy? The need to develop and make changes to our empathic responses may be considered an integral part of the learning curriculum of counselors in training. Now that post-COVID-19 empathic reflection is substantially provided via telecommunications, understanding the process of empathic responding and the concurrent perception of the client is essential.

2   Development of Compassion

Development of compassion is progressive (Spinrad & Eisenberg, 2017), incorporating attachment and prosocial behaviors. Research continues to expand the understanding of empathy relating it to motivational systems (Gilbert, 2010) and the prefrontal cortex so necessary for emotion regulation (Siegel, 2014). Facial expressions provide a strong sense of understanding nonverbal communication and can be critical in our ability to maintain a client-counseling relationship marked with compassion (Falconer et al., 2019).

Children as young as 12 months evidence empathy (Spinrad & Eisenberg, 2017). In early childhood, the development of empathy supports empathic adult development. Although there are many factors identified as critical in developing compassion, Spinrad and Eisenberg include parental experiences, discipline, modeling behaviors, and socialization efforts. Continuation of the development of empathy and compassion is supported through neurobiology (Siegel, 2010), as well as inclusion within curricula (Riess, 2018). Also, currently with so much global communication and interaction across technological devices, exposure to world issues, cultural differences, intercultural relationships, and academic information, one might assume that the development of empathy and compassion would increase. However, there are challenges in the virtual world and our global connections. Time

spent on screens may have impacted individuals' abilities to respond to others effectively. Communication minus body language interpretation may render our empathic responses less complete. Discussions worldwide through an intercultural network may impact the way we interpret meaning. Rogers may never have imagined that his concept of face-to-face empathic responses would evolve into the ability to communicate thousands of miles away to create relationships interculturally.

3 Empathy from a Distance

Are we able to develop basic skills of empathy without studying faces within proximity to us? Does separation by cyber-distance impact the response to empathic communication that might be present in telehealth counseling situations? We know that media impacts relationships. The use of media and digital work may decrease the ability to interpret changes of expression and emotion (Riess, 2018). Thus, creating a connection is impacted. Riess explains that with an increase in the need for mindfulness as communication steadily increases digitally, the development of empathy may be challenged and require greater awareness of emotional responses. So, as instructors and supervisors, how do we respond to this greater presence of technology while providing empathic communication? Teaching skills and identifying responses more attuned to tone and cadence of voice may become necessary as we lose touch with observing body language, especially when counseling occurs over the phone or computer with no video component present.

Roeser et al. (2018) indicate that individuals develop compassion through cultural and social contextual experiences. They hypothesize based on cultural, intercultural, global models of compassion related to family – in-groups, out-groups, humanity, and sentient beings. When we consider the ability to compassionately respond in multiple spheres and situations, the role of the counselor becomes even more critical in expressing compassion and empathy to support client development. Focus on cognitive, emotional, intentional, and motivational aspects of compassion allows for a broad perspective on the empathic relationship and its multiple aspects (Roeser et al, 2018) . Likewise, Ecklund et al. (2018) explored the emotional clarity of individuals and the way they performed empathically. In one's own understanding of personal feelings, there is an impact on the ability to relate to others and maintain, as the authors indicate, healthy relationships. They assume this is probably more developed in face-to-face interaction and with individuals familiar with each other. Ivey et al. (2013) identify physical distance as one aspect of nonverbal communication within the counseling arena based on Gladstein's (1970) exploration of nonverbal methods of communication. If the responses we engage in are impacted by our physical or lack of physical presence, this presents a challenge for students studying counseling via televisual means; also, it becomes a challenge for the supervisors and instructors teaching and supporting them.

Are we fully present to the client when we are on video and other technological media? Studies have shown that just the presence of a phone can be distracting, and

the lack of communication is impacted even if one does not answer it. "Phubbing" occurs when someone is ignoring a companion as they pay attention to the phone or talking to others while reading their phone (Chotpitayasunondh & Douglas, 2018). Explaining a University of Essex study, Riess (2018) notes that the presence of a phone between individuals interrupts the conversational flow. With a reduction in the quality of conversations, there are impacts related to their feelings of connection between individuals. Even the speed with which a counseling session is conducted and how it may be unexpectedly ended through a disconnection may leave a negative impression on a client. How might this translate to the counselor-client relationship in telecommunication contexts?

Considering other distractions as well – for example, environmental noise, confidentiality concerns with others being present, and expertise with technology, using televisual sessions for client training in supervision may require an adjustment in understanding the process of empathic response so that it is fully perceivable through this medium in this new era of instruction.

4   Counselor Training and Empathy

Gladstein (1970) wondered if empathy was important to the field of counseling. Through a review of different studies, he examined empathy in the context of counseling, and in terms of psychotherapy concluded that empathy was not important in proving successful outcomes for clients. As noted previously, this thinking contrasts with more recent findings. Elliott et al. (2011) explain that empathy has been proven to be important across several different fields. Bayne and Hays (2017) have examined empathy in terms of an exploratory model, noting that it has been defined in different ways and in different contexts. In looking at the definition of empathy, these authors appreciate the simplicity of Kanel's (2015) definition, suggesting that empathy is hearing what the client has said and then reflecting that the client has heard and understood. The element of understanding is what completes the empathic circle. As we consider empathy and the role that it plays in the supervision of graduate counseling students, there are numerous elements to consider.

5   Levels of Empathy

First, empathy in practice occurs on two different planes. There is the empathy that the student shares with the client, and there is the empathy that the supervisor shares with the student. The question arises academically and during this current pandemic: How is empathy different via an online format than in person in an educational format? As this is discussed, it is important to note that much of this information is new and conjecture at this point. Further research needs to be

conducted as much of the discussion is based upon the experience of the individual authors.

As a counselor supervisor, empathy is used with the supervisee. We take the struggles that the supervisee or counseling intern is experiencing and relate those back to them with our understanding of the struggle. This is true when the supervisee is seeing people in person. Further complicating this is when we observe supervisees working with clients at a distance. They are struggling to be empathic due to a lack of cues or the inability to discern cues. As a result, there are different conditions from the usual face-to-face physical session. This is complicated via Zoom and other video-conferencing platforms where we see the supervisee struggling with various elements simultaneously. Technological glitches – even momentary blips of information where the connection has faded – can occur creating a gap in the counselor's understanding of the impact of a comment. Also, observing the environment of the client can be helpful in discerning information about the client, but without this ability to do so, the counselor may be compromised in fully understanding the client's background. Silence may seem more magnified online, and therefore, instead of being a positive moment within the counseling setting, it becomes an obstacle for client and counselor. These conditions lend themselves to a new definition of empathy referred to here as cyber-empathy.

6   Cyber-Empathy

In traditional empathy, there is a tendency to empathize and experience congruence with the situation of others (Jenkins, 2019). Empathy is obtained by utilizing the cognitive, affective, and sensorimotor aspects of a response. As Jenkins recognizes, empathic responses can be changed through manipulation, the closeness between communicants, the focus on the promotion of empathy, and prosocial behavior that strives to improve the welfare of others. The necessity of teaching and understanding empathy is very critical, especially now with distance and technology impacting the counseling relationship.

Cyber-counseling and empathy may not allow for this closeness. As a result, the elements of a response need to be verified more closely. There is an expectation that the counselor checks in more frequently to determine the needs of the client. In addition, a closer attentiveness to tone of voice and cadence is necessary to discern meaning provided by a client. Understanding euphemisms and cultural phraseology should be emphasized through questioning and clarification, especially if visual access to nonverbal language is unavailable.

Cyber-empathy becomes, then, the understanding of a client's situation in a virtual environment with a reduced level of sensorimotor opportunities causing the counselor to seek more virtual reflection of both feeling and content. Virtual empathy alone is not enough for moving a client forward. Instead, there needs to be additional elements of affirmation and understanding. Further reflection must be greatly enhanced in cyber-counseling in contrast to an in-person format.

Mainly, teaching empathy to students in an online format requires that the faculty supervisor be able to share and demonstrate empathy with the student during telehealth communications and videoconferencing. This is accomplished through an established relationship and through the element of time, as well as a demonstration of genuineness and commitment to the educational relationship. Like clients, students recognize faculty members who are inauthentic.

7   Conclusion

Exploring the impact of teaching empathy in the post-COVID era brings some challenges. We call attention to the need to emphasize expressions of empathy and to communicate them more effectively in telehealth environments. This may involve tone of voice, speed, cadence, euphemisms, colloquialisms, and timing of silence. As learning contexts have changed and will continue to evolve, it is necessary for those training and supervising interns in the counseling field to recognize the emphasis of empathic responses and the development of empathic skills. We need to be aware of the obstacles we are experiencing while recognizing the advantages of these alternate forms of communication in telehealth.

References

Bayne, H. B., & Hays, D. G. (2017). Examining conditions for empathy in counseling: An exploratory model. *Journal of Humanistic Counseling, 56*(1), 32–52. https://doi.org/10.1002/johc.12043

Chotpitayasunondh, V., & Douglas, K. M. (2018). The effects of "phubbing" on social interaction. *Journal of Applied Social Psychology, 48*(6), 304–316.

Ecklund, N. S., Leyro, T. M., Mendes, W. B., & Thompson, R. J. (2018). A multi-method investigation of the association between emotional clarity and empathy. *Emotion., 18*(5), 638–645.

Elliott, R., Bohart, A. C., Watson, J. C., & Greenberg, L. S. (2011). *Empathy. Psychotherapy, 48*(1), 43–49. https://doi.org/10.1037/a0022187

Falconer, C. J., Lobmaier, J. S., Christoforou, M., Kamboj, S. K., King, J. A., Gilbert, P., & Brewin, C. R. (2019). Compassionate faces: Evidence for distinctive facial expressions associated with specific prosocial motivations. *PloS One, 14*(1), e0210283.

Gilbert, P. (*2010*). *Compassion focused therapy: Distinctive features. Routledge.*

Gladstein, G. A. (1970). Is empathy important in counseling*? Personnel & Guidance Journal, 48*(10), 823–827. https://doi.org/10.1002/j.2164-4918.1970.tb03292.x

Ivey, A., Ivey, M., & Zalaquett, C. (2013). *Intentional interviewing and counseling: Facilitating client development in a multicultural society*. Brooks Cole.

Jenkins, A. C. (2019). Empathy affects tradeoffs between life's quality and duration. *PLoS One, 14*(10), 1–15.

Kanel, K. (2015). *A guide to crisis intervention* (5th ed.). Thomas Brooks/Cole Publishing.

Ratka, A. (2018). Empathy and the development of affective skills. *American Journal of Pharmaceutical Education, 82*(10), 1140–1143.

Riess, H. (2018). *The empathy effect*. Sounds True.

Roeser, R. W., Colaianne, B. A., & Greenberg, M. A. (2018). Compassion and human development: Current approaches and future directions. *Research in Human Development, 15*(3-4), 238–251.

Rogers, C. R. (1959). A theory of therapy, personality, and interpersonal relationships as developed in the client-centered framework. In S. Koch (Ed.), *Psychology: A study of a science* (Formulations of the person and the social context) (Vol. 3). McGraw Hill.

Siegel, D. J. (2010). *Mindsight: The new science of personal transformation*. Mind Your Brain, Inc.

Siegel, D. J. (2014, November 3). *Mindsight and Neural Integration.* [Video] Naropa University. https://www.youtube.com/watch?v=gyq3NZAULc4

Smith, A. (2006). Cognitive empathy and emotional empathy in human behavior and evolution. *Psychological Record, 56*(1), 3.

Spinrad, T. L., & Eisenberg, N. (2017). Compassion in children. In E. M. Seppala, E. Simon-Thomas, S. L. Brown, M. C. Worline, C. D. Cameron, & J. R. Doty (Eds.), *The oxford handbook of compassion science* (pp. 53–63). Oxford University Press.

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