Online, Open, and Equitable Education

Lessons from Teaching and Learning during the Global Pandemic

Edited by Nancy K. Turner, Nick Baker, David J. Hornsby, Aline Germain-Rutherford, David Graham, and Brad Wuetherick

ELON UNIVERSITY | CENTER FOR Engaged Learning

Elon University Center for Engaged Learning
Elon, North Carolina
www.CenterForEngagedLearning.org

©2024 by Nancy K. Turner, Nick Baker, David J. Hornsby, Aline Germain-Rutherford, David Graham, and Brad Wuetherick. This work is made available under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International license.

Series editors: Jessie L. Moore and Peter Felten
Copyeditor and designer: Jennie Goforth

Cover art is *Area Broken by Perpendiculars* by Joseph Schillinger. Smithsonian American Art Museum, gift of Mrs. Joseph Schillinger.

Cataloging-in-Publication Data
Names: Turner, Nancy K. | Baker, Nick | Hornsby, David J. | Germain-Rutherford, Aline | Graham, David | Wuetherick, Brad
Title: Online, Open, and Equitable Education / Nancy K. Turner, Nick Baker, David J. Hornsby, Aline Germain-Rutherford, David Graham, and Brad Wuetherick
Description: Elon, North Carolina : Elon University Center for Engaged Learning, [2024] | Series: Center for engaged learning open access book series | Includes bibliographical references and index.
Identifiers: LCCN 2024938941 | ISBN (PDF) 978-1-951414-12-2 | ISBN (PBK) 978-1-951414-13-9 | DOI https://doi.org/10.36284/celelon.oa7
Subjects: LCSH: Distance education | Education, Higher – Computer-assisted instruction | Educational equalization
Classification: LCC LC5803.C65 O55 2024 | DDC 378.1734 On5tu

CHAPTER 11

What We Do Today Will Change What Happens Tomorrow

Learnings from University Teaching during COVID-19 for Post-Pandemic Times

Joerdis Weilandt, Richelle Marynowski, Rumi Graham, Lorraine Beaudin, Sandra Dixon, Stavroula Malla, and Angeliki Pantazi
University of Lethbridge, Canada

As at most higher education institutions worldwide, the declaration of the COVID-19 pandemic (World Health Organization 2020) triggered a sudden migration of all face-to-face teaching to online environments at our university. This shift profoundly impacted our campus community and continues to influence our instructors' educational approaches today. All members of our research team are academic staff at the University of Lethbridge, Alberta, Canada. Established in 1967 on traditional Blackfoot land as a public institution, the university today is a research-intensive institution offering undergraduate, master's, and doctoral programs in a wide range of academic and professional fields to about 8,000 students (University of Lethbridge 2022).

Pre-pandemic, our institution offered primarily in-person instruction, with distance learning available in only a few faculties and departments. We thus had limited expertise and infrastructure dedicated to guide and support instructors and students in the sudden transition to online teaching (Weilandt et al. 2019). With this in mind and guided by a pedagogical transformation lens, our cross-disciplinary research team sought to learn about our colleagues' pandemic teaching experiences in order to identify

ways in which future teaching practices and learning supports at our institution might be strengthened.

Context and Methods

In spring 2021 we invited all colleagues who taught one or more courses at our university between May 2020 and April 2021 (n=699) to complete an anonymous survey on their teaching experiences in this one-year timeframe. Of 122 survey respondents (hereafter "respondents"), thirteen accepted our invitation to engage in a follow-up interview to explore specific issues (hereafter "interviewees"). We analyzed textual survey responses and interview transcriptions to surface themes and issues in the pandemic teaching experiences of our study participants (respondents and interviewees).

The pandemic forced instructors to quickly move classes online when on-campus teaching and learning were no longer safe. We understand "emergency online teaching" to mean a sudden switch to online delivery to address a crisis in the absence of support and processes designed specifically for online classrooms (Hodges et al. 2020). Like other investigations of teaching during the pandemic (e.g., Howe et al. 2021; Marinoni et al. 2020; OECD 2021; Navigator Inc. 2020; Rutherford et al. 2021; Watermeyer et al. 2021), our study confirmed the taxing nature of shifting to emergency online teaching. Since the lasting effects of COVID-19 may extend beyond those arising from physical illness, including behavioral and emotional challenges (APA 2020; Horesh and Brown 2020; Griffin 2020; Prideaux 2021), it was concerning to hear that our study participants faced significant well-being issues, such as feeling overwhelmed or burned out due to greatly increased workloads, physical distress, and challenges associated with working from home as they strove to sustain student learning and progression through the crisis.

Heightened attention to mental health and well-being is evident in recent education literature on emergency online teaching necessitated by the pandemic (Hodges et al. 2020). The Government of Canada (2020) describes mental health as a state of psychological

and emotional well-being. It can be influenced by a wide variety of factors, such as life experiences, relationships with others, work and school environments, and physical health. A multi-dimensional concept, well-being is viewed as "the balance point between an individual's resource pool and the challenges faced" (Dodge et al. 2012, 230).

We learned from our study that some participants experienced a decline in well-being because the challenges they encountered with emergency online teaching exceeded their emotional and physical resources. These participants found the experience to be "disillusioning" and very "frustrating." At the same time, other participants said their pandemic teaching experiences were "affirming," "grounding," or "illuminating," and engendered significant personal learning, increased confidence, and shifting attitudes that are likely to have long-term effects on their educational practices.

Furthermore, some participants felt that they had experienced or facilitated a transformation in their pedagogical practices. For example, some reported striving to empower their students, build connections and community, provide predictability, and extend flexibility in assessment and expectations. Venet (2021) argues for pedagogical transformation to reach across three central aspects of education: practice, the mindset to know and do better; pedagogy, actions taken to bring change into our classrooms; and policy, requiring leadership-induced shifts in the university system. Drawing from Venet's (2021, 17) equity-centred trauma-informed approach, we frame what is important for teaching, outlining five roles of the online educator as well as recommendations for future practice as they relate to each role.

Findings and Recommendations

This section describes changes our participants (respondents and interviewees) made to instructional practices and barriers experienced while adapting to online teaching. Our findings are organized according to particular roles assumed by our participants in their online teaching during the pandemic.

Reconsidering the Role of the Educator

Zhao and Watterston (2021, 4) identify three key areas of possible post-COVID change in education: "Curriculum that is developmental, personalized, and evolving; pedagogy that is student-centered, inquiry-based, authentic, and purposeful; and delivery of instruction that capitalizes on the strengths of both synchronous and asynchronous learning." While undergoing a form of digital transition forced by a global pandemic, university educators across the globe dealt with stressed students, new technologies, and new approaches to teaching and learning. This environment was rich with opportunities for instructors to reflect critically on the curriculum they developed, their academic discipline as an educational system, and the ways in which they engaged with the system as an educator.

Our study explores strategies employed by participants while carrying out various aspects of their educator role during the pandemic, including creating and delivering content, interacting with students, and advancing their professional growth as teachers. While online teaching and emergency remote teaching are different, much of what our participants learned during COVID-19 has implications for their roles as online educators in general and the future of good teaching with technology specifically.

The online teaching literature defines a variety of roles for instructors (Ní Shé et al. 2019). This chapter discusses five roles—instructional designer, content creator, communicator, community builder, and professional learner—that best align with major themes that emerged from our analyses of the survey and interview data. Figure 11.1 visually represents those roles as shared by our participants regarding their experiences in navigating the online environment during COVID-19. By reflecting on previous practice and categorizing educators' experiences into the various roles, we sought to make meaning of those experiences and synthesize collective learnings to help educators as they navigate the landscape of online teaching going forward.

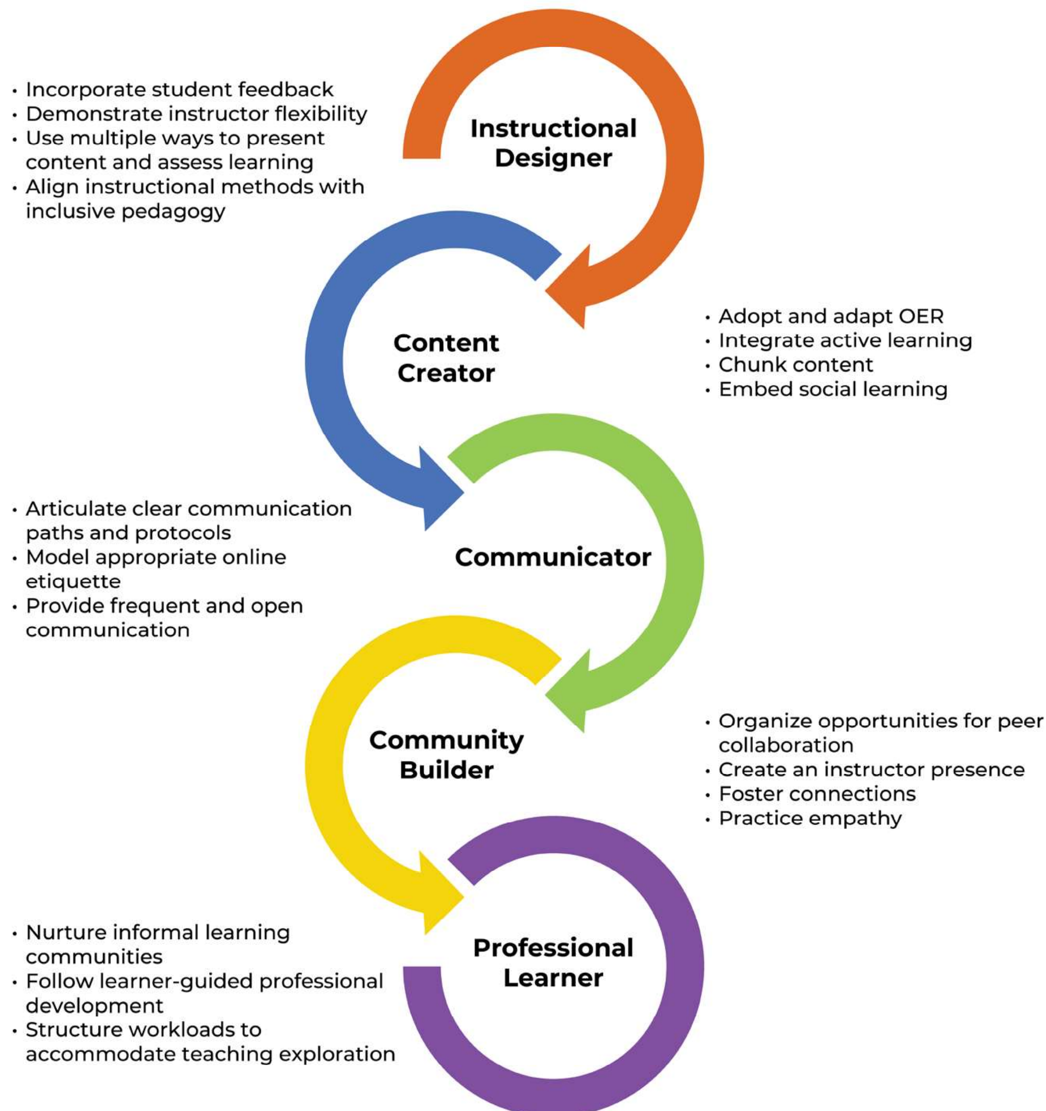

Figure 11.1. Roles of the online educator

Instructional Designer

Effective online learning arises from careful instructional design and planning using a systematic model for design and development (Hodges et al. 2020). Our participants were, for the most part, unfamiliar with teaching online, as 58% of respondents said they had little or inconsistent experience in implementing digital teaching tools. Respondents experienced instructional design challenges as basic as choosing between synchronous and asynchronous delivery, selecting learning management systems and online tools, and

designing assessments. Respondents mainly depended on previous experiences with online teaching and their overall aptitude for using technology in teaching.

In many cases, educators and their students experienced many of the same pressures and challenges during COVID-19. Awareness of shared mental health struggles and of numerous pressing challenges facing all university community members motivated instructors to respond more flexibly to student needs than had been their prior practice. As our participants demonstrated, designing instruction with flexibility in mind took many shapes and addressed many aspects of teaching.

Keaton and Gilbert (2020) observe that flexibility in teacher availability increases the likelihood that students will feel comfortable reaching out for clarification and support from their teachers. An example of instructors' increased flexibility in how students could engage with them is illustrated by this response: "For my regular 'office hours,' I stay after class to chat with students about course material, other topics in science, or life in general. I had more student engagement than in-person, which surprised me." Interviewee 7 noted a similar experience:

> In both of the classes this year, the students could choose how they wanted to engage. . . . So in the first-year class . . . about half the class chose to come to Zoom at least once a week, and about half the class did most of the work asynchronously. That was probably the first big decision I made early on, and, absolutely, they were engaged.

Another form of instructional design flexibility involved late submission policies for coursework. Interviewee 3 noticed a shift in their personal perspective on assignment due dates:

> I have become more aware of the students' needs and what's going on outside of the classroom for them. Not that I was ignorant about [this] before, but I think I didn't care as much as I think I do now. Students

> commented on this at the end of the fall. They appreciated my willingness to be flexible to their situation and to make accommodations to change deadlines to assignments so that they were more manageable or different or that they could accomplish them with the limited resources they had.

Respondents' instructional design choices to introduce more flexibility were also realized through multiple ways of presenting content. Student response was overwhelmingly positive when lecture recordings of live classes were made available because it took pressure off students while note-taking or when absent from class. Instructors adjusted assessments to reduce stress for students in a variety of ways, including creating formative opportunities for students to ask clarifying questions, making tests open book, allowing assignments to be submitted in multiple formats, and extending the time given for online exams. For example, interviewee 9 described how they adjusted a final assignment to better meet students' needs:

> I had a new [final] assignment. And it could be whatever [students] wanted. It could be a video, it could be a formal essay, it could be a slide deck. I had some people do photo essays. I had an Indigenous student do a song, drumming and singing for me. Somebody put together a 10-minute movie of their existence in their world and what they were looking forward to, what they were scared about. It was fascinating because they embraced it, and as one student said, "I started 12 weeks ago [asking myself] how the hell are we going to do this, and I left this course, going oh, that's how you do it."

A recurring theme in how participants spoke of their approaches to instructional design was greater awareness of the need to design instructional practices flexibly to accommodate students' contexts,

experiences, and challenges and empower students with agency in their learning.

Recommendations: Instructional Designer

To support instructors' instructional design efforts, we offer three recommendations: find pedagogical tools that usefully enhance instructional practice when appropriate, incorporate continuous student feedback mechanisms to inform instructional design decisions throughout a course, and align instructional methods with inclusive pedagogies that support maximum flexibility and responsiveness to student needs.

To make sense of their choices, participants needed to see exemplars of how to use tools effectively to meet design needs. One respondent found "examples of online course material in format (Moodle, YuJa, etc.) and in content (exams, quizzes, discussion forums, etc.) . . . [to be] more helpful to me than the theory." Specific examples helped respondents gain confidence in adapting tools and resources to fit their own contexts. In addition, gathering student feedback regularly helped participants make timely instructional decisions and adjustments that benefited students' well-being and learning. Participants also mentioned numerous ways in which building flexibility and options into their teaching practices and assignments were effective in keeping students engaged and on track with their learning.

Content Creator

While closely linked to the role of the instructional designer, the role of the content creator focuses directly on the act of creating instructional materials such as videos, presentations, or learning activities. In the online teaching environment, content is a verb in the sense that great online courses are defined by the act of teaching which embeds course materials into learning interactions between students and the instructor (Henry and Meadows 2008). Creating content is challenging both in designing engaging and meaningful content and in the practical building of the materials.

Some respondents struggled with creating content when the technology failed, which forced them to re-record videos or edit content several times. Other faculty saw the value in rethinking how to present their materials. One respondent wrote,

> Another highlight was that it forced me to prepare the slides completely (i.e., with every diagram pre-prepared). While this is also a disadvantage, since it reduces your ability to conduct interactive lectures and to improvise/respond to student reactions, it was also clearly an improvement. I'd been relying too much on my disciplinary knowledge to produce ad hoc lectures.

In some situations, online teaching experiences helped instructors to recognize the importance of diversifying their pedagogical practices. For example, many instructors began to create instructional content for their online classes after realizing that lecturing to a group of students online can be challenging for both teacher and learner. However, online courses should be more than just recorded lectures or prepared slides. According to Bates (2020a), the immense capabilities of the internet enable instructors to enjoy the freedom to create innovative content.

Scholars agree that classroom differentiation, interactivity, and multimodal methods promote learning participation and outcomes (Bao 2020; Zhao and Watterston 2021). Respondents described a broad range of content delivery from live lectures on Zoom to fully pre-recorded lectures and weekly meetings for Q&A. Many respondents said they incorporated a flipped-classroom design that required students to engage with course content prior to attending classes. Interviewee 9 noted that they reduced the number of class meetings to prevent Zoom fatigue and to give students a "mental health day" to destress from online learning. Destressing measures also benefited instructors who experienced stress, worries, and loneliness during the transition to online teaching (McLachlan 2020; Al Miskry et al. 2021).

It was clear that many faculty members were concerned with both the content they needed to present and their students' ability to manage online learning. As interviewee 2 put it, "What I basically had to identify was how to present the material in small manageable chunks." In addition to chunking materials, content should be created in such a way as to encourage student participation and offer opportunities for social learning. Adoption of tool-based technologies typically reflects a teacher's competency to innovate and design (Gao et al. 2019). Several comments from respondents illustrate their interest in innovative practices and appreciation for social learning: "It [shifting to online learning] has made me think about better ways for students to learn from each other," "Assessment of student learning is more open and adaptable," "I became more student centered," and "I have learned to make my classes more interactive."

Participants used a variety of criteria to select content creation tools, including tool familiarity, accessibility, ease of use, and compatibility with course scope or content, which resulted in a distinct heterogeneity of digital tools employed within the same educational setting. Online tools used by respondents to facilitate content delivery included Zoom and Microsoft Teams to present live lectures, YuJa to record lecture videos, and YuJa and YouTube to share lecture videos. Such tools are considered to be operational technologies rather than pedagogical technologies that emphasize student participation (Gao et al. 2019). Pedagogical technologies used by participants included tools to facilitate group work (e.g., OneNote, Etherpad, Hypothesis) or provide communication channels between educators and students or among students themselves (e.g., Microsoft Teams, Slack, Discord).

Some respondents said they adopted a variety of content creation tools, which suggests that their students were exposed to and required to use different types of technologies. In contrast, other respondents intentionally selected a small number of tools or chose tools bundled in one application, so their students had the least amount of technology to manage, thus reducing students' workload.

Through student opinion surveys, interviewee 3 found that "the consensus was: 'Please, don't make us learn one more tool.'" While creating content, limiting the number of technology tools ensures teaching is focused on content and educational activities rather than learning new technologies.

Recommendations: Content Creator

We offer three recommendations that aim to enhance educators' content creation processes: explore open educational resources (OERs) when available and appropriate, limit the number of new content creation tools, and emphasize content that supports active learning whenever possible.

To alleviate the demands of creating content, institutions should encourage and provide supports for instructors interested in expanding their capacity to adopt and adapt OERs and embrace open pedagogical practices. Open pedagogy invites students to be part of the teaching process and participate in the co-creation of knowledge (BCcampus Open Education, n.d.), while OERs can reduce instructional preparation time and facilitate internal and external collaborations among instructors and institutions (McGreal 2017). We recommend limiting the number of content creation tools to ease the burden of mastering new learning technologies for instructors and students alike and striking a balance between synchronous and asynchronous elements in a course. We also recommend that instructors focus on creating content that integrates active learning opportunities for students to apply course knowledge, engage in collaboration and social learning with their peers, practice skills, and reflect on their individual progress.

Communicator

Anticipation of unsettling moments in course sessions and thoughtful planning for appropriate responses to students are useful trauma-informed teaching practices that can make a positive impact on every learner's experience (Venet 2021). Many people affected by trauma, such as a world-wide pandemic, experience a disruption in their beliefs about the self, the world, and the future. When

world and daily events no longer feel safe or stable, predictability in educational experiences becomes very important. This is true not only in the context of a pandemic, but also in more normal times when other forms of trauma may arise.

Participants mentioned how they made their teaching more predictable through communication, for instance, by building routines and providing rationales for specific course decisions. Interviewee 14, who used to lecture exclusively prior to emergency online teaching, shared how much their students appreciated that they now prepared thorough lecture slides and divided weekly classes into regular lecture and discussion days. In other instances, participants noted that students welcomed visual announcements reminding them of important course dates.

Effective communication of expectations and student success supports seemed to be crucial for many students. Students appreciated live meetings before assessment due dates, online FAQ forums, and checklist or rubric documents, which offered guidance in their learning. Interviewee 6 highlighted that making the implicit explicit was critical for student success:

> In terms of online courses, the assignment instructions and expectations had to be incredibly clear, so I reviewed all my grading rubrics for every single assignment. I would copy and paste it at the bottom of an assignment, so students could refer back to it, as well as read my comments. They could clearly see what an A looked like. If you did X, Y, and Z, you might get somewhere into the A category. It's not just up to me now, as the instructor and students are not just guessing here.

In a similar vein, instructors viewed predictability to be a key guiding principle, as many participants seemed to agree with interviewee 11 that "just making sure [students] knew what was going on at all times" was paramount. Interviewee 7 described why they strived whenever possible to avoid making changes during a course:

> I tried not to make any changes part way through the course [having] learned that lesson many years ago. It's not fair to students, you can't suddenly start changing goalposts partway through the term. I didn't want to suddenly be introducing new technology or radically changing how the weeks were going . . . because they were having enough trouble keeping up with everything. As bad as I think the past year was for me, it was worse for them.

Limiting the strategies for communication is also important. The vast number of available online communication tools can be overwhelming for web-based learners and teachers alike. Course management tools like Moodle or D2L, web conferencing tools like Zoom, online presentation tools, and mind-mapping collaboration tools like Coggle provide a myriad of ways to communicate and collaborate online. As noted in the Content Creator section above, our participants learned that most students preferred to minimize the number of new tools they needed to use for their courses.

Our respondents also reported communication challenges such as "angry emails from students because I did not send a third reminder for an exam or quiz that was announced twice, indicated on the Moodle calendar, and included on the syllabus" and "more questions than normal despite my students telling me I provided them with enough information for their assignments which increased the amount of time I spent communicating with students." Such challenges were perhaps linked to information overload and student uncertainty about where to find needed information and frustration when course requirements and tools varied across different courses.

Recommendations: Communicator

Our exploration of participants' communicator role during emergency online teaching yields two recommendations for instructors to address in their communications with students: establish clear course structures and protocols and provide predictability throughout the course.

Communicating clear course structures is foundational for online courses and can be aided by creating course tour videos. Maintaining a consistent and predictable experience for students not only within the course but, where possible, across courses, is important for learners (Lake 2016). Spending time at the beginning of the term to develop and reinforce communication protocols is also a key success factor for an effective online course. Instructors must articulate clear communication paths and protocols, including boundaries, for student-to-student, instructor-to-student, and student-to-instructor communications. Online educators need to regularly monitor students' access to technology and content, provide frequent and open communication to maintain predictability, and model appropriate online etiquette.

Community Builder

Community building is based on three pillars—engaging with students, stimulating interactions between students, and maintaining a positive classroom atmosphere (Trees and Jackson 2007)—all of which are fostered through connection and relationships. In university-level learning, a strong community positively impacts student success and satisfaction. Student involvement increases learning effectiveness, while students who feel alienated are more likely to withdraw from active participation (Myers et al. 2015). Students who develop feelings of community tend to show increased motivation and greater enjoyment of class (Kangas Dwyer et al. 2004).

Our participants' experiences reflected the inherent challenges of isolation in an online teaching environment. Participants mentioned dealing with feelings of disconnection with their students and often struggled to build a feeling of community and promote student engagement and participation. Approximately 70% of respondents reported a diminished sense of connection and lower student engagement. For many of them, fostering an engaging classroom climate became a priority. Interviewee 6 revealed that they "wanted to give [students] a chance, to relate to one another as humans, and I think that helped immensely."

Interestingly, some instructors emphasized that digital technologies occasionally empowered communication in novel and unexpected ways, more effectively targeting more introverted students who would otherwise "never say a word in a large-enrollment class." Interviewee 7 said, "Zoom chat gives me insight into my students and it gives them literally a voice in a space for conversation that we don't get in an in-person class." Other participants noted that the lack of physical presence on campus had a negative effect on their ability to communicate frequently with their colleagues, which significantly reduced opportunities to interact, exchange information, receive feedback on online teaching, and support one another emotionally.

Recommendations: Community Builder

To build a thriving online classroom learning community, we offer two recommendations: use a variety of teaching approaches and technologies and maintain instructor approachability.

A blend of traditional approaches and novel digital technologies can help build a stronger sense of community. Maximizing opportunities for students to interact with one another and with the educator through group and individual discussions, virtual office hours, and online tools for peer collaboration is key. As interviewee 6 noted, "One of the big shifts as we moved online was to incorporate a lot more class discussion so that students would feel engaged." Being personable and approachable is also a strong asset and can take several forms depending on the instructor's inclination. For example, using conventions of face-to-face encounters, such as greeting students by name in a video conference, sets a positive tone. Some instructors may wish to incorporate a personalized touch by sharing personal photos or class jokes, as interviewee 3 described. With intentional pedagogical interventions and consistent approachability, educators can act as community builders to reinforce student engagement and learning effectiveness.

Professional Learner

With fundamental changes continuing to impact the higher education landscape, educators need sufficient time and resources to expand their instructional abilities in response to increasingly digital times. Despite being experts in their own disciplines, many participants found the sudden migration to emergency online teaching during the pandemic far from smooth. Among other things, the abrupt shift revealed gaps in instructors' own digital skills, instructional infrastructure, and teaching development support.

After one year of teaching online in various formats, many participants in our study came to appreciate how networking and learning new technologies enhanced their ability to overcome a wide variety of new instructional challenges, like creating content with technology that sometimes failed and countering diminished student engagement in the entirely online learning environment. Participants also frequently mentioned a desire to integrate more blended learning into their post-pandemic teaching, provided that appropriate supports are in place. To be successful, however, digitally mediated teaching requires not only nurturing learning communities and equitable opportunities for professional development, but also institutional recognition of the time, personal investment, and imagination needed to develop innovative learning experiences (Orr, Williams, and Pennington 2009).

We learned that online collegial socialization and support through departmental conversations, active engagement in local teacher training cohorts, and interinstitutional communities assisted our participants in navigating the unique challenges of teaching online in socially distant times. Regarding the benefits of collegial connection, Bali and Caines (2018, 5) observe that "reflecting in community and dialogue help learners develop a metacognitive awareness of connections between theory, values and practice." The value of such connections often motivated our participants to employ or adapt innovative teaching methods and technological tools to promote active student engagement and a more "participatory culture" (Cutajar 2019) rather than dry knowledge transmission.

Although the transition to remote learning occurred too quickly to allow instructors to properly prepare, pandemic-induced developments triggered a series of changes in academe and accelerated the adoption of innovative methods and digital technologies. Many participants said they made minor or significant modifications to their courses that sometimes involved experimenting with different implementations, such as introducing more flexibility in how students could engage with them and in late submission policies for coursework. Since the art of effective online teaching rarely flourishes without assistance from high-quality professional development, emerging theoretical frameworks and models can serve as valuable guidance in this journey (Gess-Newsome et al. 2003; Picciano 2017). While some participants relied exclusively on external sources for guidance in their journey of change, others also tapped into local institutional learning opportunities and collegial forums to inform their pedagogical choices.

Realizing that technologically mediated instruction calls for different or new skill sets, many respondents expressed a desire for guidance and sustainably supported institutional infrastructure. Some received "phenomenal" help from colleagues, while others relied on close working relationships with graduate teaching assistants or mentors to assist with timely decisions. The successes of participants who honed their online teaching abilities using resources within and beyond our institution align with the idea that productive professional development can indeed yield "a more transformative, sustained and equitable educational development experience, which respects individuals and better addresses their needs and goals, while doing so in supportive communal spaces" (Bali and Caines 2018, 4).

Recommendations: Professional Learner

As interviewee 4 observed, effective teaching "is not some sort of virus that will just pass from person to person and against which we can't be inoculated," but instead requires continuous professional development to help educators keep pace with ever-changing disciplinary and instructional landscapes. Moreover, since

educators have differing teaching practices and needs, learner-guided professional development (PD) empowers them to be actively involved in the selection, development, and implementation of their own PD. We offer two recommendations that may help to address our participants' desire for more sustainable faculty development: establish a reasonable balance between teaching loads and compensated time for professional development of teaching, and address systemic inequities and insufficiencies in institutional supports and incentives dedicated to the development of instructors' teaching practices and pedagogies.

As the development and implementation of new teaching practices and pedagogies require considerable time and effort, teaching loads must be equitably balanced with adequate time and resources to foster strong professional networks and rich opportunities for collegial sharing of ideas and experiences. Rebalanced workloads, commensurate compensation, and funding are especially important for educators holding precarious employment positions (Cutri and Mena 2020). Learning about new methods and technologies cannot be add-ons to existing workloads and requires adequate concrete support. Equally important are appropriate remedies to address systemic inequities and incentivize ongoing faculty development of teaching abilities. As interviewee 5 suggested, we should "revisit . . . our faculty support structures in a meaningful way . . . to support [all] folks [equally] as they try to become the teachers that they want to be and can be." Systematic attention to and adequate resourcing of teaching development programming and university-supported teaching technologies that enable accessible, equitable, and inclusive learning should be a priority for all educational institutions today and tomorrow.

Conclusion

What did we learn about our participants' experiences in navigating the unanticipated, swift transition to emergency online teaching during the first year of the COVID-19 pandemic? Despite the many undeniably taxing challenges they faced, most of our study

participants identified significant shifts in how they thought about or carried out their instructional activities that were, in the end, beneficial to their teaching. As interviewee 8 observed, "It's been an incredible learning experience being online. . . . Switching it around from being something horrible to being something we can use in a positive way has been very difficult . . . but it's also been tremendously useful." Our participants discussed numerous adjustments and changes they introduced into their teaching practices and pedagogy, the latter constituting the first two of three key areas of desirable pedagogical transformation identified by Venet (2021).

The five roles that summarized our participants' experiences teaching online during the pandemic were highlighted by the participants in different levels during their teaching. For example, the roles of instructional designer and content creator were more prevalent during the design and set-up of a course, while communicator and community builder became more of a focus as the course carried on. The role of professional learner was engaged in when instructors came across a circumstance that they did not have a ready solution for from their previous teaching experiences. During each course, one might engage in each of these roles with different intensity and focus. Though all roles are present in the instructor experience, not all of them are present equally at the same time nor are they present equally between instructors.

We learned that respondents who had used online elements in their pre-pandemic teaching seemed more open to online teaching and learning. In contrast, those with little prior experience in online teaching or online tool use or had primarily taught in settings with students physically present often preferred to return to in-person instruction. From this difference in instructors' comfort level with online teaching, we infer the critical importance of Venet's (2021) third key area needed for pedagogical transformation—policy, in the form of leadership-induced improvements in our educational system. Such institutional improvements must prioritize appropriate supports to assist instructors to enrich their practices and pedagogies,

with the ultimate goal of enabling all instructors to excel as educators in settings beyond in-person classrooms.

Institutional efforts to improve the quality of education are unlikely to succeed if introduced simply as add-ons to instructors' existing workloads, however. To bloom and thrive, pedagogical transformation requires strong policy-level supports in areas such as equitable compensation, collaboratively rebalanced workloads to accommodate instructors' professional development needs, adequate funding and infrastructure supports, and proper recognition and rewards within tenure and promotion processes for professional development and scholarship in teaching and learning. Effective teaching is not a skill set that is learned once and then applied thereafter with inevitably positive results. Our participants' experiences demonstrate that good teaching requires ongoing efforts to renew and expand teaching practices and to keep abreast of shifts in student needs and disciplinary and instructional landscapes.

Based on their personal experiences and assessments of student learning during the pandemic, many participants said they were considering retaining newly adopted strategies such as a partially or completely flipped classroom approach when on-campus teaching resumes. Others voiced a deeper appreciation of the need to foreground students' needs, concerns, and preferences in instructional design, content creation, communication, and community-building processes that may be more inclusive, flexible, and consistent than was perhaps the pre-pandemic norm. These are key practice- and pedagogy-based learnings that we believe will remain strongly relevant and applicable to post-pandemic teaching, no matter the setting or mode in which it occurs.

Online learning advocates (e.g., Bates 2020a, 2020b) share a conclusion reached by several participants that we will likely see a post-pandemic rise in blended forms of university learning. Interviewee 7 said, "I would not have thought that I would be the kind of person now saying, 'Online done well can be amazing.' . . . I want to move forward with blended options . . . because I now see the potential of online learning. It is not for everybody, but neither

is in-person teaching." A silver lining of the pandemic was thus the chance to reflect on the purpose of university teaching and instructors' roles within it. Many came to see their roles anew as inclusively and actively fostering agency in student learning rather than disseminating content, which in turn surfaced insights on aspects of their teaching that could benefit from more effective strategies and learning barriers that must be addressed.

Participants identified disconnection and a lack of community to be among the most significant barriers to teaching and learning online. Even in synchronous online teaching formats, instructors felt severely challenged to achieve adequate student engagement with course content and connectedness with and among students. Given the proven benefits of engagement and connection to learning effectiveness, educators need to mobilize a variety of methods such as adopting appropriate digital technologies, maintaining live personalized social interactions when possible, and drawing from inner empathy reserves (Meyers et al. 2019) to reach out to learners in compassionate and personally genuine ways in order to create a sense of community and to promote student engagement and participation in their virtual and on-campus classrooms.

Of the various repercussions of being forced to move to emergency online teaching with no advance preparation and inadequate supports, participants most often identified heightened stress and significantly increased workloads as the greatest barriers to effective teaching. And yet participants who tapped into professional and informal support networks for practical guidance, problem solving, and emotional support gained new confidence, skills, and knowledge and further developed their teaching practices. In this context, our participants' experiences underline the importance of maintaining strong communities of professional practice in addition to the availability of well-provisioned, equitable institutional supports for professional development.

An overarching theme throughout our participants' experiences is the fundamental need to protect and preserve the well-being of all campus community members, including instructors and students,

in order for optimal teaching and learning to occur. Exploring our participants' experiences of rapidly transitioning to online teaching yielded new understandings about instructional barriers, challenges, and learnings that bear thoughtful reconsideration of not only the role of university instructors, but just as importantly, their well-being and professional development needs. We recognize that a systematic evaluation of teaching supports, resources, and gaps is a large undertaking, but prospective gains would most likely far outweigh costs.

We hope this chapter will initiate fruitful discussion among administrators, educators, students, and support staff to articulate what effective support of a fully realized pedagogical transformation for an increasingly diverse student body looks like, and then to convert those articulations into action and perhaps further research.

References

Al Miskry, Abdullah Seif Abdullah, Abdalla A.M. Hamid, and Abdel Hameed M. Darweesh. 2021. "The Impact of COVID-19 Pandemic on University Faculty, Staff, and Students and Coping Strategies Used During the Lockdown in the United Arab Emirates." *Frontiers in Psychology* 12 (3283). https://doi.org/10.3389/fpsyg.2021.682757.

American Psychological Association (APA). 2020. "Stress in America™ 2020: A National Mental Health Crisis." APA, October 2020. https://www.apa.org/news/press/releases/stress/2020/report-october.

Bali, Maha, and Autumm Caines. 2018. "A Call for Promoting Ownership, Equity, and Agency in Faculty Development Via Connected Learning." *International Journal of Educational Technology in Higher Education* 15 (46): 1–24. https://doi.org/10.1186/s41239-018-0128-8.

Bao, Wei. 2020. "COVID-19 and Online Teaching in Higher Education: A Case Study of Peking University." *Human Behavior and Emerging Technologies* 2 (2): 113–15. https://doi.org/10.1002/hbe2.191.

Bates, Tony. 2020a. "Research Reports on Covid-19 and Emergency Remote Learning/Online Learning." *Online Learning and Distance Education Resources* (blog), July 27, 2020. https://www.tonybates.ca/2020/07/27/research-reports-on-covid-19-and-emergency-remote-learning-online-learning/.

Bates, Tony. 2020b. "10 Lessons for a Post-Pandemic World from Covid-19 for Canadian Universities and Colleges." *Online Learning and Distance Education Resources* (blog), November 5, 2020. https://www.tonybates.ca/2020/11/05/10-lessons-for-a-post-pandemic-world-from-covid-19-for-canadian-universities-and-colleges/.

BCcampus Open Education. n.d. OpenEd (website). Accessed October 28, 2021. https://open.bccampus.ca/what-is-open-education/.

Cutajar, Maria. 2019. "Teaching Using Digital Technologies: Transmission or Participation?" *Education Sciences* 9 (3): 226. https://doi.org/10.3390/educsci9030226.

Cutri, Ramona Maile, and Juanjo Mena. 2020. "A Critical Reconceptualization of Faculty Readiness for Online Teaching." *Distance Education* 41 (3): 361–80. https://doi.org/10.1080/01587919.2020.1763167.

Dodge, Rachel, Annette P. Daly, Jan Huyton, and Lalage D. Sanders. 2012. "The Challenge of Defining Wellbeing." *International Journal of Wellbeing* 2 (3): 222–35. https://doi.org/10.5502/ijw.v2i3.4.

Gao, Perry P., Arvid Nagel, and Horst Biedermann. 2019. "Categorization of Educational Technologies as Related to Pedagogical Practices." In *Pedagogy in Basic and Higher Education: Current Developments and Challenges*, edited by Kirsi Tirri and Auli Toom, 167–84. London: IntechOpen. https://www.intechopen.com/chapters/68730.

Gess-Newsome, Julie, J. Michael Blocher, Joëlle Clark, Jackie Menasco, and Elizabeth M. Willis. 2003. "Technology Infused Professional Development: A Framework for Development and Analysis." *Contemporary Issues in Technology and Teacher Education* 3 (3): 324–40. https://www.learntechlib.org/primary/p/19910/.

Government of Canada. 2020. "About Mental Health." Last modified June 22, 2020. https://www.canada.ca/en/public-health/services/about-mental-health.html.

Griffin, Gene. 2020. "Defining Trauma and a Trauma-Informed COVID-19 Response." *Psychological Trauma: Theory, Research, Practice, and Policy* 12 (S1): S279–80. https://doi.org/10.1037/tra0000828.

Henry, Jim, and Jeff Meadows. 2008. "An Absolutely Riveting Online Course: Nine Principles for Excellence in Web-Based Teaching." *Canadian Journal of Learning and Technology* 34 (1). https://cjlt.ca/index.php/cjlt/article/view/26431.

Hodges, Charles B., Stephanie Moore, Barbara B. Lockee, Torrey Trust, and M. Aaron Bond. 2020. "The Difference Between Emergency Remote Teaching and Online Learning." *Educause Review*, March 27, 2020. http://hdl.handle.net/10919/104648.

Horesh, Danny, and Adam D. Brown. 2020. "Traumatic Stress in the Age of COVID-19: A Call to Close Critical Gaps and Adapt to New Realities." *Psychological Trauma: Theory, Research, Practice and Policy* 12 (4): 331–35. https://doi.org/10.1037/tra0000592.

Howe, Deanna L., Keri L. Heitner, Andrea Dozier, and Seketha Silas. 2021. "Health Professions Faculty Experiences Teaching Online During the COVID-19 Pandemic." *ABNF Journal* 32 (1): 6–11.

Kangas Dwyer, Karen, Shereen G. Bingham , Robert E. Carlson , Marshall Prisbell , Ana M. Cruz, and Dennis A. Fus. 2004. "Communication and Connectedness in the Classroom: Development of the Connected Classroom Climate Inventory." *Communication Research Reports* 21 (3): 264–72. https://doi.org/10.1080/08824090409359988.

Keaton, Whitney, and Andrew Gilbert. 2020. "Successful Online Learning: What Does Learner Interaction with Peers, Instructors and Parents Look Like?" *Journal of Online Learning Research* 6 (2): 129–54. https://files.eric.ed.gov/fulltext/EJ1273659.pdf.

Lake, Brendan. 2016. "9 Ways to Make Your Course Easier to Navigate" *Teach Online, Arizona State University*, April 22, 2016. https://teachonline.asu.edu/2016/04/online-course-navigation/.

Marinoni, Giorgio, Hilligje van't Land, and Trine Jensen. 2020. *The Impact of Covid-19 on Higher Education Around the World: IAU Global Survey Report.* Paris: International Association of Universities. https://www.iau-aiu.net/IMG/pdf/iau_covid19_and_he_survey_report_final_may_2020.pdf.

McGreal, Rory. 2017. "Special Report on the Role of Open Educational Resources in Supporting the Sustainable Development Goal 4: Quality Education Challenges and Opportunities." *International Review of Research in Open and Distributed Learning,* 18 (7): 292–305. https://files.eric.ed.gov/fulltext/EJ1163203.pdf.

McLachlan, Elizabeth. 2020. "Coping with COVID-19: Loneliness." Faculty of Education Wellness Initiative: Supporting a Focus on Health and Well-being. University of Lethbridge, May 2, 2020. https://stories.ulethbridge.ca/coping-with-covid-loneliness.

Meyers, Sal, Katherine Rowell, Mary Wells, and Brian C. Smith. 2019. "Teacher Empathy: A Model of Empathy for Teaching for Student Success." *College Teaching* 67 (3): 160–68. https://doi.org/10.1080/87567555.2019.1579699.

Myers, Scott A., Zachary W. Goldman, Jordan Atkinson, Hannah Ball, Shannon T. Carton, Melissa F. Tindage, and Amena O. Anderson. 2015. "Student Civility in the College Classroom: Exploring Student Use and Effects of Classroom Citizenship Behavior." *Communication Education* 65 (1): 64–82. https://doi.org/10.1080/03634523.2015.1061197.

Navigator Inc. 2020. *OCUFA 2020 Study: COVID-19 and the Impact on University Life and Education.* Toronto, ON: Ontario Confederation of University Faculty Associations. https://ocufa.on.ca/assets/OCUFA-2020-Faculty-Student-Survey-opt.pdf.

Ní Shé, Caitriona, Orna Farrell, James Brunton, Eamon Costello, Enda Donlon, Samantha Trevaskis, and Sinead Eccles. 2019. *Teaching Online Is Different: Critical Perspectives from the Literature.*

Dublin, Ireland: Dublin City University. http://doras.dcu.ie/23890/1/13758_Text_V3.pdf.

OECD. 2021. *The State of Higher Education: One Year into the COVID-19 Pandemic.* Paris: OECD Publishing. https://doi.org/10.1787/83c41957-en.

Orr, Robert, Mitchell R. Williams, and Kevin Pennington. 2009. "Institutional Efforts to Support Faculty in Online Teaching." *Innovative Higher Education* 34 (4): 257–68. https://doi.org/10.1007/s10755-009-9111-6.

Picciano, Anthony G. 2017. "Theories and Frameworks for Online Education: Seeking an Integrated Model." *Online Learning* 21 (3): 166–90. https://doi.org/10.24059/olj.v21i3.1225.

Prideaux, Ed. 2021. "How to Heal the 'Mass Trauma' of Covid-19." *BBC Future*, February 3, 2021. https://www.bbc.com/future/article/20210203-after-the-covid-19-pandemic-how-will-we-heal.

Rutherford, Teomara, Sarah Karamarkovich, Di Xu, Tamara Tate, Brian Sato, Rachel Baker, and Mark Warschauer. 2021. "Profiles of Instructor Responses to Emergency Distance Learning." *Online Learning* 25 (1): 86–114. https://doi.org/10.24059/olj.v25i1.2472.

Trees, April R., and Michele H. Jackson. 2007. "The Learning Environment in Clicker Classrooms: Student Processes of Learning and Involvement in University-Level Courses Using Student Response Systems." *Learning, Media and Technology* 32 (1): 21–40. https://doi.org/10.1080/17439880601141179.

University of Lethbridge. 2022. "Annual and Fall Term Indicators." Institutional Analysis. Accessed July 23, 2023. https://www.ulethbridge.ca/analysis/view-facts.

Venet, Alex Shevrin. 2021. *Equity-Centered Trauma-Informed Education.* New York: W.W. Norton & Company.

Watermeyer, Richard, Tom Crick, Cathryn Knight, and Janet Goodall. 2021. "COVID-19 and Digital Disruption in UK Universities: Afflictions and Affordances of Emergency Online

Migration." *Higher Education* 81 (3): 623–41. https://doi.org/10.1007/s10734-020-00561-y.

Weilandt, Joerdis, Helen Connolly, and Adriana Monteiro Lima. 2019. "5 Critical Questions Around Online Teaching at the UofL." *A Light on Teaching,* 2019-20: 2–6. http://www.uleth.ca/sites/default/files/2019/09/lightonteaching_2019-20_-_web.pdf.

World Health Organization. 2020. "WHO Director-General's Opening Remarks at the Media Briefing on COVID-19, 11 March 2020." https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020.

Zhao, Yong, and Jim Watterston. 2021. "The Changes We Need: Education Post COVID-19. *Journal of Educational Change* 22 (1): 3–12. https://doi.org/10.1007/s10833-021-09417-3.