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SPECIAL ISSUE

The eLearning Literacy for Suddenly Online -
Voices from the Field

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In such an unparalleled time in education as what has been witnessed during the COVID-19 pandemic, the need for understanding and new knowledge into this suddenly online paradigm has been met in this timely special issue of the Journal of Literacy and Technology. It has been an honor and privilege to be a part of this project. This experience has been inspiring on so many levels and is the product of a shared vision. While the publication of this issue represents the completion of a step, it is but the first in the journey to realizing a dramatic new context and evolutionary change in the role and function of online learning in the 21st century.

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Because of their trust, we have been able to capture key data that will serve to foster understanding in the times to come.

Eyewitnesses to the Suddenly Online Paradigm Shift in Education:
Perspectives on the Experience, Sustaining Effective Teaching and
Learning, and Forecasts for the Future

Article Info	Abstract
<p>Robert C. Chandler, Ph.D. Lipscomb University</p> <p>Brian G. Burton, Ed.D. Abilene Christian University</p> <p>J.D. Wallace, Ph.D. Abilene Christian University</p> <p>Douglas G. Darby, Ph.D. Lubbock Christian University</p>	<p>Introducing this special issue of the Journal of Literacy and Technology, the second part of the two-part special issues focusing on the COVID-19 “suddenly online” transition to remote/virtual eLearning modalities during the Spring of 2020. This article introduces the emergency voices from the field arising from the COVID-19 “suddenly online” transition to remote/virtual eLearning modalities during the Spring of 2020. This rare, and perhaps “once in a lifetime” momentous COVID-19 pandemic induced a paradigmatic shift in teaching and learning modalities. The first-hand eyewitness accounts which emerged from the turbulent months of the “suddenly online” transition in education are important to capture direct reports from participant observers of the experience. That in this case, many of these participant-observers are also trained educators, academic researchers, and able to provide meta-perspectives on those experiences makes recollections, reports, and perspectives even more remarkable and essential.</p>
<p>Keywords: Suddenly Online, Pandemic, Wayfinders, Pedagogy, Social Inclusion, Engagement, Innovation, Problem-solving, Ethics</p>	

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This issue of the *Journal of Literacy and Technology* is the second part of the two-part special series focusing on the COVID-19 “suddenly online” transition to remote/virtual eLearning modalities during the Spring of 2020. Dramatic and far-ranging seismic social and educational modality shifts such as the current rapid educational transitions offer us an opportunity to pause and listen to the observations and voices from those who survived (and some who thrived) amid such tumult. To stop and listen to the voices of those who went through this environment and who are able to offer some systematic way of organizing and contemplating such experiences is the first step in listing the important lessons learned and making specific action lists for moving forward to whatever comes next. But who should be listened to? This is an interesting question and one to which several propositions will appear. However you answer it, teaching-scholar wayfinders that were in the moment and providing guidance to students in unfamiliar territory certainly have a strong claim. “For these reasons, a timely special edition of JLT was proposed to contextualize eLearning literacy against the backdrop of authentic, at the moment research, observations, and recommendations.” (Wallace, Burton, Chandler, & Douglas, 2020, p.11). However, the size and speed of the process did not allow for the results of that undertaking to be fully capitalized upon and so with a small extension of time and effort the catalogue of first findings was able to be expanded in a second special edition of The Journal of Literacy and Technology.

Purpose of this Issue - Voices

In this volume, the various authors present a framed “snapshot” of perspectives and observations of this transition moment.

These were gleaned as the authors navigated various challenges of the great mass transition to eLearning and subsequently reflected upon it. The authors’ collective voices provide important insights into the opportunities and challenges of designing and implementing eLearning and online programs for educators, students, and administrators. This volume collects several different views of the historical paradigmatic shifting moment, possibly illustrating important lessons and promising strategies that may also usher in changes for the broader education arena.

Significance of the Suddenly Online Shift

There was a well-developed canon of theory, research, and best practices for online teaching which was in place prior to the pandemic of 2020. That canon guided choices made during the suddenly online experience. Aspects of achieving student engagement, motivating high performance, and assessing the quality of instruction were valuable foundations for the transformative period. For example, previous research suggests that multiple communication channels appear to be related to higher engagement and that positive student-student and instructor-student personal communication tend to be correlated with higher student engagement (Dixon, 2010). However, the wholesale social, family life, and academic context shifted in Spring 2020 - creating new variable dynamics of students and faculty - as well as closing some communication channels and modalities. What do positive teacher-student and student-student communication look like with large periods of asynchronous learning and synchronous sessions mediated by “lean media” or restricted videoconferencing technology? The significant transformation of teaching and learning context provide a warrant to consider what emergent new

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factors and variables have become more salient or relevant in the pandemic and post-pandemic new normal.

The first volume of this two-issue series addressed the considerations of theory, research, and practices in light of the newly changed circumstances. This issue focuses on the eyewitness accounts, participant-observer case studies, and voices from the field experiencing that transformation.

In the Midst of Disruption

The fast-paced contingency switch to online and remote instruction in the spring of 2020 was a situation or state of confused movement and turmoil for teachers, students, parents, and administrators. In almost every instance, this transition was undertaken without an advance plan of how it would be accomplished, how the methods and curriculum would be designed, or how best to take possible future events, constraints, or circumstances into account. Furthermore, this was all undertaken amid anxiety and fear about health and safety, economic uncertainty, and confusion about both risks and mitigation methods.

It is useful to note the scale and speed of this transition. Faculty members had to change how they taught (and change quickly) and, for many of them, to change the modes and methods which they had not been previously prepared to operate with. Institutions rushed forward with rapid professional development and acquired and deployed (sometimes at great cost) new technology and connectivity tools to replace brick and mortar classrooms. Some students, including many who had been thriving in face-to-face learning settings, struggled with the eLearning context shift. Other students found themselves confronting heretofore unseen barriers of access, social

relationships, and skillsets needed to succeed in the new domain for which they were not fully prepared. As education institutions look to the coming academic years, they are actively working to prepare for success in a high uncertainty context and seeking to best thrive in this “new normal” education landscape. This volume seeks to capture how the experience of changed teaching/learning environment context from face to face modality to suddenly online or virtual eLearning modes were experienced by students, teachers, administrators, institutions, and other key constituents of the academy.

Where Are We?

Prepandemic research certainly provides a number of foundational characteristics that can be used in terms of relevance and possible consideration. The technology acceptance model (e.g. Davis, 1989) and others have provided several elements that can be considered. Setting content aside, Ghazinoory, & Afshari-Mofrad (2012), evaluate a few elements. Inherent applications seem relevant, but it is the implementation of these elements that provide difficulty. These elements include: support; ease of use; computer self-efficacy (cse); culture; reliability; and the use of experts (especially in course design). However, other elements such as perceived satisfaction, efficiency and playfulness have also been associated with buy-in (Estriegana, Medina-Merodio, & Barchino, 2019). Few systems have all the above elements, and indeed, they challenge even the most well-designed systems implemented in the most highly funded learning systems. However, they provide a context in which to look at the deficiencies inherent in the pandemic context. They also provide a lens in which to view the workarounds that the current set of

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wayfinders present, as well as the effectiveness and efficiencies of such applications.

Voices From An Educational Maelstrom

So, what is presented are the authors various “front-line” experiential reports – capturing a real-time sense of the transition moment that may be useful to help chart pathways forward. This includes reports of key variables such as satisfaction, social inclusion, engagement, innovation, problem-solving, and ethical dimensions experienced during the “suddenly online” context. Descriptions of the transition from physicality to virtual “spaces and places” and the implications of that shift on how teaching/learning was experienced is considered from the vantage point of preparation (training), assessment methods, user friendly/unfriendly tools, as well as essential skills and competencies required. Also, the challenges of technical skill acquisition and gaps in training effectiveness for both teachers and students in the suddenly online transition period are reported. Furthermore, these firsthand reports include self-observations, reflective contemplation, and summaries of emerging issues such as inequities and disparities in access to technology, digital (technological) literacy, and requisite technical and social interaction skills in both instructors and students.

Finally, these voices tell us of hurriedly updated metrics for what constitutes “high quality” in terms of teaching during the suddenly online context which offer some implications for longer term metrics of subsequent eLearning applications for all of us. These include reported emerging norms characterized as “best practices” specific goals and priorities for effective and interactive online teaching/learning environments. These

voices from the field provide us guidance and suggestions for navigating the coming challenges and repercussions emerging from the suddenly online experience that could benefit educators and students alike in the “new normal” eLearning environment of the coming academic years. For now, the most important next step is for all of us to listen to the voices of those who share their experiences of this sea change moment in education with all of us.

However, Mollenkopf & Gaskill (2020) provided a prescient warning in regard to findings found in the heat of the initial pandemic modality shift.

“This is not necessarily a reflection that students actually learned more, but it may have been related to the combination of supports, flexibility, and a student reaction to simply wanting to “outwit the virus”, which may not hold true under future semesters impacted by “COVID-fatigue.” p. 145

To this end, each of the authors was given a chance to provide a postscript in early October of possible lessons learned or updates that they provided in the article that was functionally written before the fall 2020 semester really started.

Observations from the Suddenly Online Chorus

In classical Athenian drama, the actors and singers who commented directly to the audience on the action occurring on stage of the play were called the chorus. These were typically both characters within the narrative as well as “third-party” observers who reported directly to the audience as a means of contextualizing, providing insights into the other characters and occasionally even as critics. In some instances, the chorus could even be

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considered the featured players in a tragedy or comedy performance. Considering the voices from the field in this issue as collectively representing a type of “chorus” from the context of the dramatic pandemic necessitated “suddenly online” experience, we turn our attention to their observations, insights, and critique to better understand what transpired.

Charron and Fuss-Reineck (2020) report a qualitative study seeking to articulate a student & faculty driven ethical credo that can be used to promote a successful learning community within the digital classroom. The first phase of the research focused on students’ reported experience as online learners. A thematic analysis is used to identify core ethical principles and associated behaviors found to promote virtual community and learning. The results are experience-based insights encapsulated in the *Credo for Ethical Distance Learning*. The second phase of this research extended the Credo for Ethical Distance Learning to the instructors’ reported experiences in teaching online. Faculty perspectives were used to create a supplemental *Credo for Ethical Distance Learning: Faculty Implications*. These emergent results can provide strategies to help develop better interactive online learning environments. Charron, and Fuss-Reineck argue that the credo can promote awareness about communication ethics and its impact on virtual learning.

Cunningham (2020) reports that technological literacy is integrated in various degrees in K-12 schools in the U.S. Technological literacy assesses how students understand technological concepts, adapt to technological change, and encourages them to participate in civic discussions about these changes. The sudden shift to online learning in the spring of 2020 highlighted

the importance of continuing these efforts. These findings suggest that many students not only lacked access to computers and the Internet, but they also lacked technological literacy skills to effectively navigate online courses. As schools move to more sustained levels of online learning, Cunningham argues for a capabilities approach to technological literacy that emphasizes individual development.

Ibrahim (2020) reports a case study of the implementation and adaptation of a “Professional Development Framework” for online teaching training and support for faculty as they rapidly moved to online teaching in a “suddenly online” transition. Using this framework, a college wide faculty team worked to develop interactive online teaching training, including: activities to practice skills; assessments to demonstrate competency; community support groups organized by type of class; and organizational support including a standardized syllabus, Canvas template, and support from technology specialists. This study also demonstrates promise for a systematic approach to ongoing faculty development outside of moments of crisis. The experience also suggests that an important supplement to teacher training is the need for development and implementation of parallel online learning training for students, more opportunities for assessment, and recognition of high-quality online teaching with meaningful uses of technology.

Lohman (2020) also reports on professional development and eLearning literacy aspects which arose amid the “suddenly online” experience. Finding that much technology training involves staff teaching faculty, but also finding that faculty often use informal peer networks and choose technologies independently in ways that

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may hinder eLearning literacy. A case study of a “suddenly online” course design institute provided an opportunity to explore how a thoughtfully designed, responsive professional development method which incorporated peer support could foster faculty eLearning literacy. Synthesizing participants’ feedback and assessment insights along with the designer-facilitator’s observations (and reviewing secondary literature) confirms the importance of peer support, integration of technology with design principles, and reflective activities in this “suddenly online” professional development. Further, Lohman argues that sociomaterial practices, such as peer learning, serve as assets in a holistic view of eLearning literacy. Treating skills, habits of mind, and situated practices as all essential to eLearning literacy, this article demonstrates that faculty preferences such as peer learning need not be considered hindrances but rather can be viewed as resources to be leveraged through thoughtful, responsive design to build organizational capacity to support effective online or “suddenly online” learning.

Totten (2020) reports the experiences with the cancellation of the semester showcase for the “Game Prototyping and Animation and Game Design Senior Capstone” courses at Kent State University. Totten points out that this transition fundamentally changed these courses’ pedagogy. Since this traditionally face to face course is an important opportunity for students to practice vital professional skills, such as displaying and promoting work to audiences, with instructors grading students on how they manage these tasks it is a significant part of student learning and assessment feedback. The shift to “suddenly-online” meant potentially losing both practice and assessment in courses that otherwise emphasize professional

development. Totten describes how the capstone courses were adapted to the new all-digital reality through platform case studies, using industry best-practices for marketing and event organization norms. Students and faculty organized BlatherCade, an online game event that used GameJolt, a digital marketplace for independent games, and the Nintendo Switch game Animal Crossing: New Horizons. Totten provides an assessment of the event, highlighting challenges and successes of working with these platforms, and suggests best-practices for future applications of this approach.

Emergent Themes from the Suddenly Online Chorus

There are several themes emerging from these eyewitness accounts of the suddenly online experience. Several themes are noteworthy. First, these case studies provide confirmation that aspects of teaching and learning during and after the transition were significantly different, for both teachers and students as well as academic institutions, during the suddenly online transition. Any presumption that the education process remained mostly unaffected by the switch to widespread eLearning modality appears to have been dispelled. The changed factors and variables of learning can appropriately be seen in the context of a paradigmatic shift of expectations and environment. There is a corresponding need to adjust and create our assumptions, methods, models, and best practices for teaching in the eLearning environment going forward. Furthermore, it should be noted that these case studies attest to the ubiquitous urgency all across the educational landscape of the search to better explore online educational tools, methods and best practices because of the pandemic suddenly online experience.

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Second, despite some opinions that viewed the suddenly online transition negatively and revealed serious failures in the teaching and learning processes (e.g. Rosenfeld, 2020), these case studies suggest that the transition may have been more successful and effective than is commonly thought. Taken together, these reports suggest that there were positive results achieved during a challenging and difficult period of rapid adjustment. This includes efforts to hurriedly prepare faculty, implement technological tools, and reinvent curriculum, content, and teaching/learning methods. This general sense of positive results achieved despite the challenges may be one of the most encouraging themes to emerge from these reports. These reported efforts reveal that there was evidence of strong resilience among teachers, students, and staff in the midst of very trying circumstances.

Third, the themes of emerging and now recognized areas on which we should focus for further improvement as we move forward. Cunningham's findings, for example, suggests that a capabilities approach to eLearning literacy which emphasizes individual development models can be beneficial. Ibrahim and Lohman each point us towards the importance of adaptive professional development of online teaching skills and methods for enhancing effectiveness of teachers (and students). Perhaps this is one of the "new normal" implications of the paradigmatic shift in eLearning overall. It is clear that our methods, assumptions, and preparation for teaching and learning must adapt and adjust to changed circumstances in the context of online and eLearning modalities.

There is a clear need for updating effective professional training for educators to develop the knowledge and skills they

need to address the newfound challenges in the online teaching and learning context. Such training efforts may not be effective unless it enables teachers to improve their instruction or adjust to the challenges of online education. Although it is important for providing training and support for all of those teaching online or virtually, it is especially critical for veteran teachers who have had to transition from their experiences in the old normal to the new normal to have specialized, ongoing and regular opportunities for such training and support, as well as guided opportunities to learn from each other.

Fourth, we need to continue the process of considering all of the key aspects of the online eLearning model - notably the holistic perspectives of the instructors, students, institutional training and support as well the technological and media ecology of the context. Looking at aspects such as the impact of social community, relationships, self-perceptions, engagement, motivation, along with more recognized issues such as technology gaps, distraction, and information/content modality is essential. The authors in this issue address a number of these areas. For example, Lohman's (2020) findings call our attention to the need for an increased focus on skills, habits, and variables of eLearning literacy for both instructors and students. Cunningham (2020) found that many students not only lacked access to computers and the Internet, and they also lacked technological literacy skills to effectively navigate online courses. Charron, and Fuss-Reineck (2020) call attention to an ethics grounded approach by which to promote virtual community and learning in an online environment (focused on by instructors and students).

Fifth, the opportunities for virtual engagement may be greater than heretofore

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imagined. Totten's (2020) case study findings, for example, may point us to exploring even more creative and "alternative" formats for achieving equifinality for online educational processes when compared to traditional face to face modalities. The social, emotional, and self-concept states influence how well students engage, participate, and learn in the virtual environment. A number of serious questions are raised. These include: how can teachers best incentivize student pre-class preparation; adapt flipped classroom models; motivate self-discipline and self-determination for asynchronous learning activities; and/or maximize the synchronous class sessions?

These observations can lead us to consider other innovative approaches (e.g. feedback loops, gamification, virtual experiential curriculum as well as advanced interdependent virtual instructional design, and much more). Since the technological genie has been let out of the bottle in terms of remote learning classes for face to face brick and mortar classroom constituencies, it seems highly unlikely it will not be called upon earlier and often as solutions to pedagogical "reach" issues.

Finally, even with these eyewitness case studies and insightful analysis, there is a vast gap in our knowledge about the new normal online learning environment, the cumulative and interactive impacts of social changes, and the impact of technology and virtual interaction. Much more research and analysis need to be undertaken. Various aspects should be investigated and explored including variables such as; technological determinism, media ecology, curriculum design and format, motivation, cognitive and affective dimensions, roles, perspectives, virtual spaces, climate, structures, flexibility and adaptability, collaboration, synchronous

and asynchronous factors, dependence, interdependence, inclusion, knowledge and technological equity, cultural and community differentials, the impact of interfaces and Interactions, as well as access issues inherent in many of those elements mentioned earlier.

Future Research and Scholarship

These accounts and case studies emerging from the turbulent months of the "suddenly online" transition in education are important voices from the chorus of those who both participated and assessed the suddenly online efforts to transition to eLearning. Again, this collection of the scholarship is all the more remarkable and essential, given the timeliness of its' creation. These articles serve as a time capsule of what happened, an assessment of what worked, what did not work, and provide the first in a sequence of roadmaps that point to a more compelling future of eLearning's coming years. Scholarship must determine what kind of footing the articles provide. Do the setbacks, failures, and barriers experiences provided better footing moving forward? Do they provide entry into inextricable complexity quicksand that neither frees the participant nor betters education? Which question is most applicable? It is here where the "chorus" of future scholarship must step in and comment on whether the wayfinders journey was one of comedy or tragedy. Regardless, the editors of this journal applaud their journey.

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Credo for Ethical Distance Learning

Article Info	Abstract
<p data-bbox="233 638 578 747">Lori J. N. Charron, Ph.D. Saint Mary's University of Minnesota</p> <p data-bbox="215 789 591 898">Marilyn Fuss-Reineck, Ph.D. Concordia University – Saint Paul</p> <p data-bbox="201 1268 597 1436">Keywords: ethical credo, distance learning, online education, best-practices, communication ethics, code of ethics, faculty implications, virtual education</p>	<p data-bbox="667 611 1432 1325">This qualitative study provides a student & faculty driven ethical credo that can be used to promote a successful learning community within the digital classroom. The first phase of the research focuses on students' experience as online learners. Through surveys and discussion boards, a thematic analysis is used to create core ethical principles and associated behaviors found to promote virtual community and learning. The results are experience-based insights encapsulated in the Credo for Ethical Distance Learning. The credo includes a preamble and five core principles with practical, supporting student behaviors for each principle. The second phase of this research extends the Credo for Ethical Distance Learning to the instructors' experiences in teaching online. Using focus groups and surveys, faculty perspectives were used to create the Credo for Ethical Distance Learning: Faculty Implications. The results of both research phases serve a dual purpose. The first purpose is to provide strategies that will help develop interactive online learning environments. The second is that the credo will promote awareness about communication ethics and its impact on virtual learning.</p>

Charron, L. J. N. and Fuss-Reineck, M. (2020). Credo for ethical distance learning. *Journal of Literacy and Technology*, 21 (3), 14-28.

“In an increasingly technological world, the primary purpose of higher education has to be helping humans get better at being human...” (Bass, 2018)

When 1.2 billion students across the world were moved out of face-to-face classrooms due to the COVID-19 crisis (Li & Lalani, 2020), most faculty had to meet the new challenges of online teaching. Educators encountered the responsibility of engaging learners in an online format while continuing to build the learning community that began developing face-to-face. When doing so, instructors were met with behaviors that would not have been common in the traditional classroom. These class behaviors (i.e. Zoom meetings) may have included students’ passive stares that resembled television viewing, a student playing a video game while pretending to listen, minimal discussion board responses, and/or sliding slowly off a chair to get out of camera view. Of course, these are the mildly annoying or amusing behaviors, but they do hint at a mitigating factor to student online learning - student passivity. Let’s face it, these behaviors don’t happen as frequently in the traditional, face-to-face classroom. If they do occur, instructors can more rapidly intervene.

The student-switch from being a *contributing* member of a class in the face-to-face classroom to being an *observing* member of an online class is a concern for educators (Peled et al., 2020). In research that focuses on students’ and instructors’ perceptions, Gomez-Rey, Barberaa and Fernández-Navarro (2016) report that faculty and students focus on different course components when evaluating their satisfaction with the course. The instructors

focused on the importance of collaborative learning, whereas the students were more concerned “with their own learning benefits,” which included course aspects such as knowledge acquisition, transference of information, and learner content (p. 146). This subtle yet significant differentiation is important when trying to encourage students to develop an active and cooperative learning community.

This research seeks to address the need for purposeful engagement within the virtual classroom. It does so by articulating effective classroom behaviors and their ethical underpinnings. Faculty and students are thereby better able to understand how their behaviors impact the learning environment and why those behaviors matter. This paper will first review the literature regarding the importance of student interaction in online learning, followed by the importance of acknowledging ethics within distance education. Next, the study’s research methods will be discussed, followed by the resulting Credo for Ethical Distance Learning and the Credo for Ethical Distance Learning: Faculty Implications.

Importance of Student-to-Student Interaction in Distance learning

The seminal works of online pedagogy are saturated with research regarding the importance of creating cooperative learning¹ environments to student learning. Using the American Association for Higher Education’s “Seven Principles for Good Practice in Undergraduate Education” (Chickering & Gamson, 1999), online education was evaluated for its support of undergraduate education. Of the seven principles, the most perplexing to online

interchangeably in earlier research. For more insights, read McInerney & Roberts (2009).

¹ It should be noted that “collaborative” and “cooperative” learning was often used

instructors are principles two and three, which promote the importance of creating a cooperative learning environment. Principle 2 states, “Good practice develops reciprocity and cooperation among students.” Principle 3 states, “Good practice uses active learning techniques.” In addition, Hiltz (1994) suggests that the most important characteristic for online education is to create a collaborative learning environment. Hiltz writes, “Learning outcomes in the [virtual classroom] depend on whether or not teachers and students take advantage of its potential to support an active learning process that incorporates extensive interaction among students, and between instructor and students” (p. 194). Hiltz also states,

CMC [computer mediated communication] is particularly suited to the implementation of collaborative learning strategies or approaches. Collaborative learning means that knowledge is not something that is ‘delivered’ to students, but rather something that emerges from active dialogue among those who seek to understand and apply concepts and techniques (p. 23)...In the traditional classroom, it is unusual to find emphasized student-student interaction. Ironically it is student-student interaction that may be the more important determinant of education success’ (Harasim & Johnson, 1986) as opposed to ‘teacher-student’ interaction (Hiltz, 1992, p. 194).

More recent research expands the importance of cooperative learning in building a healthy learning climate and learning retention (Flock, 2020; Gray & DiLoreto, 2016; Abel, 2005). Research regarding “best practices” for online courses also indicates the importance of student

interaction. Grant and Thornton (2007) list “interactivity or interconnectivity” as one of their three themes within best practices for online instruction. Keengwe and Kidd (2010) suggest that online instruction should include a “social role” which is “creating a friendly social environment necessary for online learning” (p. 536). Research by Evans, Ward and Reeves (2017) found that the most commonly used indicators used to describe best practices’ online instructor behaviors were “encouraging, acknowledging or reinforcing student contributions” which was part of the “affect” component of the three instructional categories (p. 776). Kumar, Martin, Budhrani, and Ritzhaup (2019) indicate that exemplar instructors go beyond knowing the content and feeling stifled by the online format to feeling comfortable and freed by it. Borup, West, and Graham (2012) pointed out that excellent online teachers increase student engagement and a social presence.

Research on “social presence” also indicates the importance of student-to-student interaction. Cobb (2009) defines social presence as “the degree to which a person is perceived as ‘real’ in mediated communication (p. 241). Social presence increases student satisfaction (Joo, Lim & Kim, 2011; Richardson & Swan, 2003), the development of an online learning community (McInnerney & Roberts, 2009), and student achievement (Russo & Benson, 2005). Additionally, Sung and Mayer (2012) submit that social presence fosters the development of social respect, social sharing, intimacy (e.g., sharing personal experiences), open mindedness, and social identity (In Gomez et. al, 2016, p. 155).

To summarize, the research is clear; creating online courses that encourage students to engage with one another through

cooperative learning, or any type of “social presence,” is paramount to student learning.

Importance of Student Awareness of Ethics in Distance Learning

The communication ethics inherent to classroom behaviors are not always articulated in the online classroom platform (or the traditional classroom, for that matter.) In Kenneth Andersen’s (2000) article, “Developments in Communication Ethics: The Ethics Commission, Code of Professional Responsibilities, Credo for Ethical Communication,” he points out,

Typically, ethical concerns [in the communication classroom] dealt with violations of prevailing ethical norms related to plagiarism, appropriateness of content, and the impact of the perceived ethical violations on communication effectiveness. Students taking courses in these departments often did not become fully aware of the significant role that ethical issues play in the communication process. They were not exposed to or required to know a code of ethical communication behavior (p. 131).

Andersen’s comments of the “typical ethical concerns” are exemplified in Coleman’s (2011) article entitled, “Ethics, Online Learning and Stakeholder Responsibility for a Code of Conduct in Higher Education” in which the author discusses plagiarism, cheating, and other violations. These are important issues to be addressed but they do not get to the *heart* of student interaction. Students need the “why” behind the behaviors they are asked to engage in with one another. It is essential that they understand the ethical implications of their actions. Zembylas and Vrasidas (2005) discuss this ethical “why” by applying the philosophy of Levinas. They state,

Levinas’s concern with *relationality* as an event that cannot be subsumed under the nature of existence — that is, knowing who we are does not necessarily assume that we know how to relate to others in an ethical manner, nor vice versa — is a useful starting point for problematizing pedagogical relations over the Internet... An ethical orientation in online education requires that we take seriously the unknowable and irreducible Other (p. 62).

The Credo for Ethical Distance Learning reminds students of not only the ethical considerations of the *content* of their communication, but also the ethical considerations of the *process* of their educational experience.

Giorgini, Mecca, Gibson, and other authors (2015) summarize the reasons for creating professional codes of ethics: To create consistent normative standards, avoid legal issues, promote public image, maintain a high standard of conduct, address prevalent ethical issues, assure outside parties of ethical behavior, mediating disputes, and asking individuals to question their present values (p. 124). Using a code of ethics, or the less formulaic term “credo of ethics”, has advantages and disadvantages. According to Jensen (2013) the process of creating a code of ethics can be helpful in solidifying a group or organization’s beliefs and *in making their goals more explicit* [emphasis added]. A code of ethic can help to guide behavior and foster ethical decision-making. Jensen states that, “Codes may encourage members of a group not only to do or to avoid doing certain things, but also to be living examples of highly ethical people, contributing positively to the organization and to the general public” (p. 25).

The shortcomings of codes of ethics are often directed toward their lack of

effectiveness in changing behavior or toward the vague construction, rendering it meaningless. Codes may also be easily forgotten, can be difficult to enforce, and can sometimes be used to cover up or confuse ethical issues arising from “outsiders” (Jensen, 2013; Johannesen, 2008). To help reduce these problems, experts (Giorgini et.al, 2015; Johannesen, 2008; and Kultgen, 1983) suggest that the following guidelines be used when developing a code of ethics:

- Use clear, short language.
- Speak to specific concerns of a particular profession or business.
- Make it appropriate and applicable for “real” people to use during “normal” times.
- Indicate the moral principles on which the code is founded.
- Use guidelines and explanations when needed.

The Credo for Ethical Distance Learning was written with the above guidelines in mind. The credo intersects communication ethics (mass media and interpersonal) and effective educational practices in its application. To be effectively used, the credo should not be rigidly enforced by instructors. Research suggests that punitive, law governed codes of ethics, create dissension and resistance (Andersen, 2000). The suggested use is that professors clarify expectations and reasons for ethical online behavior by sharing the credo and opening it up to discussion and personalized revisions.

Method

Phase 1: Student Perspective

The data were gathered from students enrolled in an online degree completion program at a mid-western university. The program uses a cohort model and begins with a one-week face-to-face residency on campus. After the residency, the cohort meets online once per week in a virtual classroom. The rest of the week, the students interact with one another and their instructors through discussion boards.

For this research, students (Cohorts B002 – B006) were asked specific questions within their discussion board assignments regarding the ethical nature of communication within the distance learning community. First, the questions asked for an application of the National Communication Association’s Credo for Ethical Communication to online learning. Subsequent discussion board prompts focused on their own ethical values related to virtual learning.

The researchers then analyzed the students’ discussion board responses for themes, discussed their analysis, and constructed “working” categories for the ethical credo. Students (B002 – B006) were asked to respond to the categories. After analyzing those responses and re-analyzing discussion board data, five principles emerged from students’ statements that created the Credo for Ethical Distance Learning. The construction of the credo and its behaviors continued to be edited and discussed by researchers and students until consensus was reached. Students in subsequent cohorts (B007 & B009) were asked to respond to the Credo for Ethical Distance Learning using discussion boards; focus groups and interviews (M021, M023 & B015).

The sample consist of 86 students enrolled in 7 distance education cohorts: B002 (n=9) started the credo, B003 – B006 (total n = 38) added to B002's previous collected ideas, and B007 (n =10) & B009 (n = 8) responded to directly to the Ethical Credo for Online Classes. In addition, there were three focus group interviews: two M.A. online cohorts, M021 (n = 11) & M023 (n = 8); and a B.A. online cohort, B015 (n = 10).

Phase 2: Instructor Perspective

The “Implication for Instructors” was created using survey and focus group data gathered from instructors currently teaching online classes at a mid-western university. The survey and interview questions focused on two research inquiries: 1. Faculty feedback regarding The Credo for Ethical Distance Learning, and 2. Faculty behaviors that facilitate the credo's principles. Based on their feedback, researchers created additions to and deletions from the credo and its instructor implications. The result is the “faculty actions” of the Credo for Ethical Distance Learning: Implications for Instructors.

The sample consisted of ten instructor survey respondents and six faculty who participated in an online focus group interview (total n = 16).

Results

The research resulted in five ethical principles that undergird effective online learning behaviors:

Principle 1: Members of online classes strive for clear communication and understanding.

Principle 2: Members of online classes demonstrate integrity, showing respect for themselves.

Principle 3: Members of online classes practice respect for others.

Principle 4: Members of online classes foster honesty and trust in their communication.

Principle 5: Members of online classes participate responsibly as a community of learners.

These five principles provide an ethical context for behaviors that promote distance learning. Principle 1, “members of online classes strive for clear communication and understanding,” lays a foundation of clarity. Without this foundation, the other principles would be difficult to enact. Principles 2 & 3 build on that foundation by establishing a culture of respect. Principle 2, “members of online classes demonstrate integrity, showing respect for themselves,” focuses on speaking up for oneself and taking responsibility for one's own actions. Principle 3, “members of online classes practice respect for others,” shifts the focus to respectful behaviors toward classmates and the instructor. Principle 4 builds on that respect and addresses specific, relational communication. It states, “Members of online classes foster honesty and trust in their communication.” When members are striving for understanding and have fostered a respectful classroom (Principles 1 - 3), students are more likely to engage in honest dialogue and are more apt to trust one another - which will foster learning. Principle 5 is the culmination of the other principles in that it acknowledges the “whole” - the learning environment. It states, “members of online classes participate responsibly as a community of learners.” This principle promotes the “big picture” perspective of learning as a community.

The following are the five principles and their supporting behaviors of the Credo for Ethical Distance Learning.

Phase 1 Results:
Credo for Ethical Distance Learning

Principle 1: Members of online classes strive for clear communication and understanding.

Individual Actions:

- I ask if I don't understand.
- I attempt to clarify if I think someone doesn't understand.
- I listen to others so that I understand their viewpoints.
- I participate in and facilitate effective communication in the cohort, recognizing that all have a right to equal access to information and to give information.
- I adjust my communication to address online challenges for clarity and understanding.
- I frequently re-read the learning goals for each course.

Principle 2: Members of online classes demonstrate integrity, showing respect for themselves.

Individual Actions:

- I express myself so that my voice is heard.
- I accept responsibility for my own choices and ideas.
- I motivate myself to stay focused on my educational goals.
- I truthfully present my own “voice,” citing sources when the words I use are not my own.

- I refrain from negative self-talk.

Principle 3: Members of online classes practice respect for others.

Individual Actions:

- I demonstrate respect for other voices and support their self-expression.
- I communicate respect for individual differences.
- I treat others fairly, avoiding manipulation or degradation.
- I acknowledge the fact that each cohort member has different relational needs.
- I respect my cohort members' privacy.
- I choose words that facilitate learning and that will not distract my classmates
- I respect the boundaries of the learning group and keep my personal issues separate from the group's issues.

Principle 4: Members of online classes foster honesty and trust in their communication.

Individual Actions:

- I am straightforward with others and avoid hidden agendas.
- I state my ideas and feelings honestly and openly within the group when appropriate and encourage others to do the same.
- I communicate concerns directly to the person involved (peers and instructors) when I have a problem or conflict.
- I uphold confidentiality.

Principle 5: Members of online classes participate responsibly as a community of learners.

Individual Actions:

- I contribute to the effective functioning of my learning group, recognizing the group's contribution to learning.
- I support effective conflict resolution among group members.
- I uphold my commitments to the community of learners (responding promptly, completing assignments, and contributing to group work).
- I strive for excellence because others depend on me.
- I recognize my responsibility to give input and let others learn from me.
- I learn from others and acknowledge value in their experience.
- I expect dialogue and feedback in processing my ideas and respond openly to it.
- I respond appropriately to my colleagues, engaging in professional, empowering dialogue.
- I recognize that the instructor is a part of the “community of learners.”

Phase 2 Results:

Phase 1 of this research identified key ethical aspects of the online course as identified by distance education students and faculty. Phase 2 provides specific instructional suggestions for each of the principles presented in the Credo for Ethical Distance Learning.

Credo for Ethical Distance Learning: Faculty Implications

The Credo for Ethical Distance Learning provides a framework for faculty to explicitly enact the credo's principles, indeed the “Credo for Ethical Distance Learning: Faculty Implications was created for this purpose. The following “Faculty

Actions” are designed to operationalize the inherent ethical values that promote student learning and faculty intent within the distant learning classroom. To do so, specific faculty behaviors are provided to support each of the credo's five principles.

Principle 1: Members of online classes strive for clear communication and understanding.

Principle 1 prompts faculty to promote clarity of information and processes. In doing so, student uncertainty will be reduced, and retention facilitated.

Faculty Actions:

- Address the challenges of the online communication directly with students.
- Create instructor videos every week to keep a visual connection with students.
- Remind the class that humor, and sarcasm can be easily misunderstood online.
- Create a culture where stopping for clarification is ok – have a shared “short cut” or emoji to show you are confused.
- Write your syllabus, assignments, and directions with extreme clarity and specificity.
- Be sure everyone is ready for the next question or discussion with a “short cut” (i.e. thumbs-up emoji).
- Paraphrase students' comments, using their names in the conversation – encourage students to do the same.
- Be sure to have accurate and up-to-date email addresses, phone numbers, and fax numbers.
- Review recorded class sessions to discover quieter voices or discussions that got ignored and send class feedback

about your observations (without embarrassing use of names.)

- If students do not understand the material, follow up with one-on-one phone call or virtual meeting.
- Provide detailed reminders or checklists that specify the exact time and date of each assignment deadline.
- In the syllabus, explain the role of each of the instructional tools used in the class (i.e. bulletin board, group meetings, learning apps, etc.)

Principle 2: Members of online classes demonstrate integrity, showing respect for themselves.

Principle 2 prompts faculty to encourage students' academic honesty and personal empowerment. Sometimes, the online venue is just what some students need to discover their own voice.

Faculty Actions:

- Draw out introverts or students who have high communication apprehension – especially if they seem to be struggling to enter the conversation.
- Allow for contemplation with the use of silence during synchronous class time.
- Periodically ask students what they are each doing to help motivate themselves to stay connected with the course.
- At the beginning of a synchronous meeting, ask a question that will create the opportunity for each person to answer.
- Provide opportunities for students to set and meet their own goals.
- If a student gets ignored or interrupted, bring the conversation back to that person.

- Allow students to experience the consequences of their own choices.

Principle 3: Members of online classes practice respect for others.

Principle 3 prompts faculty to facilitate civil dialogue in a manner that seeks understanding and promotes diversity of thought. In doing so, the classroom becomes a playground of brilliant ideas, new discoveries, and courageous convictions.

Faculty Actions:

- Create various ways in which students can voice their ideas and reactions to other's ideas.
- (Bulletin boards or video apps are excellent for this activity.)
- Greet students by name as they come into class.
- When asking students to critique their classmates, be clear as to what criteria they are to use for that assessment.
- Deactivate private messages between students when appropriate during synchronous meetings.
- Model respect for individual opinions while encouraging that those opinions be supported by sound reasoning.
- Help students monitor their own participation so that they do not block or monopolize others.
- Privately message students in synchronous classes if their discussion of personal issues is disrupting the education of the others.
- Make grading criteria clear and fair, taking heed to incorporate a number of different learning styles in assessment.

- Shut down derogatory comments or any other communication that degrades you or class members.
- Be cognizant that each student has different relational needs and of those individuals who seem to be socially isolated from the class. Those students may be more of a retention risk.
- If students participate in a residency, recognize and plan that some members may not want to develop close relationships with their peers.
- Do not disclose any personal information without the permission of the student and encourage others to respect privacy as well.
- If your university does not password-protect meetings, periodically remind students that their discussion is widely accessible and to use discretion regarding personal information.

Principle 4: Members of online classes foster honesty and trust in their communication.

Principle 4 prompts faculty to develop student-to-student and student-to-faculty communication that is forthright and authentic. In doing so, deeper learning that touches both heart and mind may result for students and instructor.

Faculty Actions:

These actions by faculty can support and highlight enhance importance of honesty and trust.

- In your syllabus, be very clear as to what you define as plagiarism, unethical use of another's ideas, honesty, as well as the consequences for any non-compliance to those standards.
- Speak honestly to your students.

- Allow students to work within their personal boundaries, as long as it does not impede their learning progress.
- Help students monitor the effect of their own participation on the group climate (i.e. coming unprepared for a group discussion.)
- Ask permission before forwarding another's email.

Principle 5: Members of online classes participate responsibly as a community of learners.

Principle 5 prompts faculty to create a collaborative learning environment that fosters a positive communication climate. By doing so, students feel included and valued as an important member of their learning community. This is the antidote to the isolation many feel from distance learning.

Faculty Actions:

- Create a course in which cooperative learning is at the heart of the curriculum.
- Give students ample opportunity to learn from one another by using a variety of online platforms.
- Allow a social time before synchronous classes. Clearly articulate when the socializing period ends and the academic discussion begins.
- Grading should encourage participation and not competition, fostering a cooperative climate.
- Require students to respond to each other's posts.
- Encourage students to practice effective conflict management, guiding them to find the most appropriate medium (i.e. phone, Skype, e-mail etc.) for that management.

- Respond promptly to student correspondence and encourage students to do the same. Let students know when you have received a message or assignment even if it is to say,
- “Thanks for the assignment, I will grade it by ____.”
- Curriculum management should closely monitor and restrict the number of students allowed into an online class. Online classes require more individualized attention than face-to-face courses.
- If students experience technical difficulties during a synchronous class, follow-up with them after the class.

Limitations

This research is limited in its generalizability due to its small sample size and the fact that those involved in the research represent one university. To compensate for this limitation, the authors suggest that those who use this credo encourage their own students’ feedback and discussion of it. The credo, then, can be used not as a standard, but rather a stimulus for discussion. To broaden the credo’s utility, students can compare it to the National Communication Association’s Credo for Ethical Communication. By doing so, students can see the connection between ethical communication and their lived experience of distance education. Applying and comparing the Credo for Ethical Distance Learning could result in insights beyond the scope of this research – and beyond the online learning context.

Conclusion

At the onset of the world pivoting to online classes, a senior writer at *The Chronicle of Higher Education* wrote, “Coronavirus could be the ‘black swan’ moment for higher education as we know it. ...the reverberations from coronavirus will be to all of American higher education: a reset moment that prompts colleges to rethink how they operate at every level” (Blumenstyk, March 2020). With the use of the Ethical Credo of Distance Learning, this research can contribute to this “reset moment.” First, this credo can provide tools for instructors to increase meaningful student-to-student interaction in a distance learning environment. Second, it can be used to promote student awareness of the ethical implications of online course pedagogy and student choices. By acknowledging and enacting the ethical principles inherent to online courses, distance education will emerge from quarantine more equipped and intentional in “helping humans become better humans.”

New Insights

Time has elapsed since we all disappeared into our gopher holes and tried to survive (and for some, thrive) online education and quarantine. We are grateful to the communication discipline’s outreach and support in helping us grow during a difficult time. With hindsight and experiences since that time, we have come to two conclusions. First, as we returned back to blended or face-to-face classes, it is clear that the Credo for Ethical Distance Learning is just as relevant to the face-to-face classroom. Perhaps the two formats are not as different as once thought. Second, we see now more than ever, the importance of teaching ethical communication. We have an opportunity

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and responsibility to help our students understand the importance and the process of respectful dialogue - as well as their contribution to it. This is particularly relevant in the context of the divisive speech exhibited in our society and the witnessing of a heartbreaking need to be understood. Our hope is that, in some small way, this research contributes to helping this next generation become better...well, just better.

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Suddenly...Technologically Literate: The Need for A Capabilities Approach

Article Info	Abstract
Carolyn Cunningham, Ph.D. Gonzaga University	Technological literacy is integrated in various degrees in K-12 schools in the U.S. Technological literacy assesses how students understand technological concepts, adapt to technological change, and encourages them to participate in civic discussions about these changes. The sudden shift to online learning in the spring of 2020 highlights the importance of continuing these efforts. Early findings suggest that many students not only lacked access to computers and the Internet, they also lacked technological literacy skills to effectively navigate online courses. As schools move to more sustained levels of online learning, this paper argues for a capabilities approach to technological literacy that emphasizes individual development.
Keywords: technological literacy, digital divide, digital inclusion, online learning, digital literacy, capabilities	

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The sudden shift to online learning that many U.S. K-12 schools faced in the spring of 2020 presented itself with challenges and opportunities. Some educators characterized this new reality as “crisis teaching” in which, as Gross (2020) writes, “our classes, our curriculum are not the most important part of anyone’s life right now” (para. 2). This pivot to online learning had practical advantages, including a stopgap measure to keep students engaged in the learning process and to fulfill school requirements. However, this shift amplified many educational inequities that already existed, such as lack of reliable access to the Internet, lack of access to computers to complete school work, lack of technological literacy skills to effectively navigate online classes, and lack of parental involvement as parents struggled to balance working from home and home schooling their kids. Teachers reported widespread absenteeism particularly among high schoolers with less access to computers and the Internet. At the same time, several benefits (intended and unintended) emerged. Online learning improved outcomes for some students who struggled to pay attention in face-to-face (FTF) classrooms because it minimized distractions like disruptive classmates, since teachers have the power to mute students’ microphones. Additionally, introverts who were not comfortable participating in the FTF classroom had multiple opportunities to participate in the online classroom, such as through discussion boards, chats, and emojis. And, the integration of videos and multimedia content appealed to different kinds of learners (Harris, 2020).

COVID-19 necessitates that some forms of online learning will continue to be part of educational offerings into fall 2020 and beyond. Moving forward, there is rich

opportunity to articulate and refine the kinds of literacies that students will need to manage this new context. Technological literacy will be a crucial component of students’ success. This article first provides an overview of technological literacy and its relevance to online learning. Next, it offers an expansion of current conceptualizations of technological literacy that integrates the notion of capabilities, preparing to adapt to technological change and participate in larger conversations and debates about technological innovation and development.

What is Technological Literacy?

Technological literacy first emerged as a concept in the 1980s when there was growing awareness that the U.S. was falling behind other nations in terms of preparing a science, technology, engineering, and mathematics (STEM) workforce. The 1983 report *A Nation at Risk: The Imperative for Educational Reform* outlined a number of suggestions for how to reform U.S. education, especially in terms of increasing math and computer science skills (National Commission on Excellence in Education, 1983). This report led to several organizations creating more robust curriculum for technology and engineering education. The concept of technological literacy emerged as part of this initiative. In addition to acquiring specific skills, educators argued that students should also develop technological literacy, where they could understand how technology works, as well as how technologies shape society and how society shapes technological development. As Loveland, Hoepfl, and Barbato (2020) write,

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the goal is to develop individuals who have a broad, conceptual understanding of technology and its place in society, enabling them to be active participants in the technological world and careful creators and users of technology. All technological systems are embedded within social and environmental contexts and all have, or will have, both intended and unintended consequences. Many of our current global problems were created by our technological choices. This increases the need for technologically literate citizens who participate in decision-making. (p. vii)

This framing of technological literacy led to several organizations developing standards for technological literacy. While these standards have shifted over time, the lasting element is that students should be able to adapt to technological change as well as be prepared to engage in broader conversations about the mutual shaping of society and technology. Technological innovation involves costs and benefits related to choices made in their adoption. Additionally, advocates of technological literacy urge that while citizens are dependent on technology, they remain largely ignorant of technological concepts leading to a citizenry that is not engaged with decisions that shape technological development.

Technological literacy is measured by the capacity students have to understand the broader technological world, rather than having a narrow expertise of a small part of it. For example, a technologically literate student would understand the limitations of viewing a website on a smartphone versus a laptop. The information is presented

differently and thus context is important. Another component of technological literacy is to understand the different affordances that are allowed by different platforms and different technologies (Shaw, 2017). Technological literacy is continuously developed through practice-based learning in the face of constant mutual reconfigurations of technology and practice.

As technology is increasingly integrated across the curriculum, there is concern that teachers over-emphasize technological competency and skill acquisition, rather than literacy. While skill acquisition is important, technologies continues to evolve and, as Pearson and Young (2002) argue, technological competence does not guarantee literacy. As they point out, civil engineers may be very skilled in understanding how structures and materials respond to heavy loads, yet may have little understanding of how the buildings they design affect society. In this way, as Winner (1999) states, artifacts have politics. Technologies can change the exercise of power and experience of citizenship. Technologies are not isolated tools freely adopted and discarded at will, but systems of understanding embedded within people's lives that can reconfigure social order. Winner uses the example of the overpasses on Long Island, New York, which are unusually low. As he points out, Robert Moses, who designed many of the roads, parks, and bridges in New York, deliberately specified that these overpasses be low hanging so that buses could not travel on the parkways, reflecting his class and racial prejudice. Poor people and people of color, who rely on public transportation, would be dissuaded from traveling to Long Island.

Technological Literacy and Learning

While many educators advocate technological literacy in technology-focused classes, such as engineering, the integration of technology in many aspects of life and the recognition of the skills necessary for 21st century learning have necessitated that technological literacy be embedded across the curriculum. Working and learning in the 21st century requires technological literacy, especially practices such as collaboration, communication, problem solving, and lifelong learning, which many of these learning technologies enable. This shift is reflected in the International Society for Technology Education (ISTE) standards for technological literacy. ISTE standards evolved from “learning to use technology” (1998) to “using technology to learn” (2007) to “transformative learning with technology” (2016). Some examples of transformative learning with technology include assistive technologies for students with different learning needs (such as deaf and hard-of-hearing students and visually impaired students), the Google Suite for Education, which allows students the ability to interact and communicate through a number of different applications, mobile tablets that increase accessibility for coding, and social media technologies that allow students and teachers to connect with information on a global level (Fingal, 2019).

Williams (2009) illustrates how technological literacy can lead to transformative learning when he writes,

the goal of all effective pedagogies is to be transformative; to transform pre-existing attitudes and practice to accommodate new experiences and knowledge in working toward, in this case, a form of technological

multiliteracy which essentially results in the felt need to participate in the democratization of technology and the design of personal and social futures. (p. 250)

In this sense, democratization of technology empowers students to see themselves as tech savvy, able to understand and adapt to technological change, and to use technologies to solve social problems. One way that technological literacy can be integrated in the curriculum is for teachers to help students understand and evaluate different technologies to develop solutions to problems and achieve goals. One example of an organization that is doing this well is Technovation (www.technovation.org), a global nonprofit that helps girls develop mobile apps to address real-world problems, such as poverty, illiteracy, and the climate crisis.

Despite the potential of technological literacy to transform pedagogy, there is little information on how teachers are integrating technological literacy in the classroom. What is available shows that teachers (and teacher training) tend to over-emphasize competence at the expense of literacy (Uerz, Volman, & Kral, 2017). This problem has been persistent since, as Young et al. (2002) write,

there is a lack of reliable information about what people know and believe about technology, as well as about the cognitive steps that people use in constructing new knowledge about technology. These gaps have made it difficult for curriculum developers to design teaching strategies and for policymakers to enact programs to foster technological literacy. (p. 78)

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Indeed, one of the challenges of increasing technological literacy in the classroom is that students are often passive consumers of technology, rather than active producers of content. This gap becomes especially illuminated in looking at underserved students, who too often are encouraged to use educational technologies for drill-and-practice activities and remediation (Zielezinski, 2016).

Instead, Davies (2011) proposes a framework for evaluating technological literacy that includes three levels: awareness (what can technology do?), praxis (how do you complete a specific task with it?), and phronesis (why are you using this technology to accomplish a specific task?). Since the early 2000s, there has been a mandate to integrate educational technology into classrooms while also increasing students' technological literacy. Davies points out that too often, "technology" is viewed as just computers and software. Instead, educational technology refers to any tool that can help students accomplish learning goals. As he writes, "technology literate people know what the technology is capable of, they are able to use the technology proficiently, and they make intelligent decisions about which technology to use and when to use it" (p. 47). Technological literacy, then, is not about mastering the Microsoft office suite, but instead about selecting different tools to accomplish different tasks. To achieve this, teachers would expose students to a variety of tools to allow them to pick and choose which ones would be appropriate given the specific task.

Technological literacy starts with the kinds of technological concepts children develop through experience. Mawson (2013)

found that through creative activities, like play and simulation, children had a good grasp of technological concepts. She recommends that teachers allow children greater input into and control of technological tasks set for them. This could lead to more in-depth technological knowledge and practice, such as collaborative problem-solving and peer tutoring. Teachers would play the role of helping students clarify ideas and reflect on the process and outcome. Additionally, teachers could help them understand the broader social and environmental issues involved in their design process.

Technological literacy is especially important for promoting diversity in the sources of innovation. There is a persistent racial and gender gap in STEM and research has shown that girls and students of color are uninterested in the ways in which technology is taught, opting out of these courses. For example, based on his findings of gender biases in technology classrooms in Rhode Island high schools, Walach (2015) recommended that these programs needed to appeal more to girls' interests, through offering training in areas such as medical technology and biotechnology, as well as using design problems that help solve pressing social problems, like the need for sustainable technologies. Hasse (2017) found that educational technologies created new inequalities in the classroom. In her classroom observations, she found that teachers relied on tech-savvy boys to help them overcome technological barriers in the classroom at the expense of including other engaged students. In this way, technology was emphasized over content, reinforcing gendered stereotypes of who gets to be tech-savvy.

In order to address some of the limitations of how technological literacy is framed, some scholars argue for a “critical technological literacy” that, as Petrina (2000) advocates, would focus on addressing power and dominance that perpetuate inequalities in the built world. A critical technological literacy is a “renegotiation of power from the state and economic control of technology education toward a power for ecology, justice, labour, and the public” (p. 182). A critical approach emphasizes the mutual shaping of society and technology, which interrogates how people design, deploy, and appropriate technologies. To illustrate these concerns, Bijker (2010) uses the example of introducing robots into an industrial workplace. Robots can increase an organization’s productivity, but this process also redefines what “work” is in that setting. The same can be said about education. What counts as “learning” now is quite different with the diffusion of educational technologies.

McGuire (2019) shows how a critical technological literacy would include a consideration of e-waste, or the impact of disposing outdated electronic technologies that are toxic and often shipped to the global south. In another example, Freeman, Park, and Middleton (2019) examined how a rural community dealt with interrupted internet access due to a lack of a stable infrastructure. The community applied their own critical technological literacy by figuring out how to create a wireless network that was more reliable and affordable for residents.

Emejulu and McGregor (2019) argue that technological literacy can lead to what they call “radical digital citizenship” which

“problematizes dominant ideas about technologies and rethink citizens’ relations with technology to advance the common good” (p. 132). Radical digital citizenship first includes a critical analysis of the social, political, economic, and environmental consequences of technologies in everyday life which then leads citizens to “collectively deliberate and take action to build alternative and emancipatory technologies and technological practices” (p. 131).

Technological Literacy and Online Learning

How might technological literacy be integrated in online learning? As schools adopt new online learning platforms, such as Microsoft Teams, and require assignments with a range of evolving and changing digital applications, it becomes essential that teachers assess student readiness to participate fully. Technological literacy calls for teachers to assess students’ ability to adapt to new technologies and understand how to select technologies to achieve their goals. Students should develop a general understanding of the development of the tools they are using as well as some of the discussion about their use. For example, the frequency of Zoom-bombs, in which hackers broadcast racist, misogynistic, and homophobic content in online meetings, revealed the importance of using this platform securely. Technological literacy is also a strategy for helping students succeed in online learning. Teachers could, for example, teach students about the different components of their laptops, tablets, or mobile phones as well as the mechanisms by which these devices connect to the Internet. They could discuss the history and development of these systems so that

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students are not just passive consumers of technology completing homework tasks, but instead understand these developments and be prepared to adapt as new devices emerge.

Moving out of the suddenly online context, teachers can ask themselves why technology is important, what is its purpose, does it increase access to learning, and will it transform learning? They can engage students in these discussions and talk with them about some of the most important issues facing our world that are impacted by technological decision-making, such as the importance of protecting private information, the ways in which technologies reflect power structures, and the impact of technological innovation on the environment.

Much of what was seen in the suddenly online context was overly deterministic: technology would stand in for the FTF component. As Trust (2018a) writes, “when used effectively, technology can redefine and transform learning. However, far too often, technology acts as a substitute for another tool, serves as a classroom management tool, or is used because it is required by the school (e.g. learning management systems)” (p. 54).

One of the challenges of online learning is the widespread adoption of learning management systems that may not allow for these practices to emerge. As Godwin-Jones (2012) writes, learning management systems (LMS) “embed pedagogical and cultural values which raise questions about learning design, instructional choice, and computer literacy” (p. 4). He goes on to argue that the “closed, self-contained system uses cognitive-behavioral learning, with emphasis on information presentation and measurable

performance assessment” (p. 4). Many LMS platforms emphasize transmission of knowledge, emphasis on individualism, and linear forms of communication. This approach to online learning contributes little to the kinds of technological literacy students will need in their work lives.

Much has been written about effective and ineffective online teaching and learning practices. Best practices in online learning include the importance of creating community, having teachers that are engaged and have social presence, and designing an intuitive online space so that students are not confused about where to access the information (Means, Bakia, & Murphy, 2014). One of the strengths of online learning is the ability to engage students in multimodal forms of communication to deliver content so that students with different learning styles can interact in the ways that are most useful to them.

Teaching online changes what is meant by teaching and learning and changes the way people think about learning. As Hamilton (2016) writes, educational technologies come into being in relation to conflicting ideas about what education is. Much of the discourse about online learning is that it is an inadequate substitute for face-to-face learning, but a necessary one to keep children and teachers safe during the pandemic. However, this dichotomous framing of face-to-face versus online learning limits possibilities to harness the potential of learning technologies. Applying a social shaping approach to educational technology calls for looking beyond the function of certain technologies, to interrogate what values allowed for these technologies to come into being as well as

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what is at stake for different groups (institutions, teachers, students).

One of the critiques of the use of technology in education is that “users of technology are not disembodied as some researchers assume, rather they experience constraints that make some practices more likely and make other practices less likely” (Costa, Hammond, & Younie, 2019, p. 395). They warn that technology use is often seen as a binary (digital natives vs. digital immigrants; adopters vs. resisters, deep learners vs. surface learners). Instead, technology use is based on circumstances and can be inconsistent. One of the benefits of online learning is that it can appeal to different types of learners, engaging multiple modes of learning, such as visual and audio learning. Learners can go back and engage with material multiple times (unlike in a physical classroom) and they may not be distracted by other students in the classroom.

Moving into the Fall, many school districts are planning for synchronous instruction through videoconferencing software. However, benefits of online learning are that there are multiple ways in which students can engage with content. There are a number of instructional technologies that can encourage collaboration and communication, as mentioned in the previous section. Utilizing these technologies can increase interactivity and engagement. This is quite different than simulating what happens in a face-to-face classroom.

At the same time, there have been lots of lessons learned from those who have been teaching online longer during this time, especially from educators who have been doing this in China. Some of these

suggestions include governmental support for technological integration, reinforcing students’ existing knowledge base rather than teaching new content, reducing online class time and encouraging “off-screen” activities, frequently communicating with parents, and acknowledging the social and emotional needs of students, teachers, and families (Ning & Corcoran, 2020).

A Capabilities Approach to Technological Literacy

The examples presented above show some of the limitations of how technological literacy is applied in practice, but also the potential of technological literacy for leading to a more just society. Moving forward from a “suddenly online” context to a more sustained integration of online learning, there is a need to refocus efforts to increase technological literacy, especially as they contribute to capabilities, or the freedoms individuals have to pursue their own potential.

A capabilities approach offers a framework for assessing and evaluating inequality, moving away from a measure of one’s material resources to an evaluation of what one can actually do with these resources (Sen, 1999). A capabilities approach reflects what Robeyns (2006) identifies as a “sociological turn” in economics because it integrates social theories and can be useful for critiquing social norms and practices that contribute to inequality. Central to a capabilities approach are the concepts of functionings and capabilities. *Functionings* refer to one’s state of well-being, such as being well-nourished or literate. *Capabilities* are the freedoms one has to realize these functionings. Traditional economic measures of poverty, for example, assume that equality in income will lead to

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the same equality in well-being and freedom. Yet, different social and physical characteristics, such as age, sex, education, and culture, impact an individual's ability to achieve their own potential. Take for example the differences between an able-bodied worker and a disabled worker. They may receive the same income, yet they may have quite different abilities to translate this income into well-being.

Capabilities include “positive freedoms,” which Gould (1988) writes include “capacity for choice and its exercise, absence of constraining conditions, and the availability of means” (p. 40). Thus, in order to ensure that people have equality of capabilities, it is important to address the constraining conditions, such as discrimination, illiteracy, and poverty, that create barriers to equality. In other words, a capabilities approach leads to an examination of freedoms in terms of what people can *do* rather than what they can *buy* (Saito, 2003).

One of the critiques of the capabilities approach is that it can be difficult to apply in practice (Robeyns, 2006). There is disagreement on whether to assess functionings, capabilities, or both, as well as deciding which capabilities are most necessary to measure. That said, a capabilities approach has been used to assess human development in specific countries, who is considered poor in developing countries, poverty and well-being in advanced economies, and gender inequality (Robeyns, 2006).

Technological literacy can increase one's capabilities, offering a means to access information, adapt to technological change, and allow people to use communication channels to draw attention

to diverse stories and perspectives. Technological literacy increases individuals' capacities to make decisions in complex situations. As Fourez (1997) writes, “understanding the spread of disease during epidemics, deep-freezing, the structures of computer software, the way to transmit a fax, or the freezing of diesel fuel, makes it possible for us to negotiate reasonable and rational decisions when faced with a series of problems” (p. 905). Fourez's description is especially relevant as students, teachers, and policymakers continue to understand the spread of COVID-19.

Technological literacy is not only about understanding how technologies work, but also about being able to speak about technologies to others. The shift to online learning has led to discussions about how to help students overcome cognitive deficits, such as how to master software applications and be engaged in video conferencing sessions. Instead, pedagogical approaches that increase technological literacy allow students to achieve a “level of interaction with scientific practices” (Fourez, 1997, p. 911). Technological literacy encourages students to make informed choices about which technologies to use for different purposes and prepares them to participate in broader conversations about technology policy issues in the digital age, such as network neutrality, privacy and surveillance, and censorship on social media. In this way, technological literacy encourages civic engagement through a critical look at the ways in which technology influences society and the way society influences technological development. Technological literacy is especially relevant when addressing Americans' lack of knowledge on digital topics such as

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cybersecurity, browsing, and social media ownership (Vogels & Anderson, 2019).

Technological literacy is crucial as citizens' lives become "datafied" through artificial intelligence and machine learning. Data is becoming a core element of cultural, social, political, and economic life and students need to understand these dynamics. Carmi and Yates (2020) argue that the increased use of artificial intelligence and machine learning in decision-making about processes related to citizens' lives, as can be seen in arenas such as healthcare and policing, or even Netflix, call for curriculum that increases data literacy.

The "suddenly online" context revealed the importance of bridging the digital divide, which continues to be determined by race and class. One in three African Americans and Hispanics still don't have access to computers at home. And, 35% of Black households and 29% of Hispanic households do not have broadband (Simama, 2020). Even in urban areas where broadband is available, the cost can be too expensive for families. These realities are what led to schools creating mobile hotspots for students, even before COVID-19.

However, access to the same technologies does not necessarily ensure equality of opportunity. This becomes evident in looking at the persistent underrepresentation of women and minorities in STEM fields. When women do enter STEM fields, they may receive income equal to their male counterparts, yet they may not have the same freedom to achieve as men because of discrimination and lack of maternity leave policies. These issues became especially salient in stories from female game designers who have reported a toxic work culture that includes sexual

harassment and not being taken seriously, causing them to leave their jobs (Caddy, 2020).

A capabilities approach to technological literacy enables freedoms for youth to pursue interests that they value. A capabilities approach to technological literacy might, for example, make it possible for students to develop mobile apps that fulfill social or economic needs in their community. This necessitates rethinking structural barriers in place in education, such as filtering information from certain websites in schools and re-evaluating acceptable use policies. While there are good reasons why schools develop these policies, it may have the unintended effect of limiting youth's capabilities. For example, Vickery and Shaw (2014) discovered that black and Latino students' participation in after-school digital media clubs helped them to develop digital literacy. Yet, school policies blocked their access to social media and video sharing sites, limiting their ability to share their work, expand their social networks, and increase their social capital. Policies that restrict material considered inappropriate or uneducational denies students access to what they consider useful and even educational spaces, including social network sites and video games. As a result, Watkins (2018) identified that these students lived on the "digital edge" of formal education limiting their ability to fully benefit from the affordances of these technologies.

What Next?

The situation brought on by suddenly online learning offers a unique opportunity to reimagine how to integrate technological literacy across the curriculum. Technological literacy is especially

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important because the current moment not only revealed the inequities that persist in technology use and access, but also the importance of citizens participating in engaged dialogue about technological development and policies.

According to ISTE, very few states (only 17 out of 50) have updated their standards to the 2016 standards, which better articulate how to use technology for transformative learning. ISTE provides much guidance, but there also needs to be a cultural shift in how the ways in which students are taught not only how to use technology, but also how to become active participants in technological design and decision-making. In this way, technological

literacy can empower students not only to be critical consumers of technology, but also producers and innovators.

This more refined focus on what technological literacy adds to individual development can help contribute to a more just and equal society. This is especially important for non-dominant groups who have been left out of these decisions, but who are most often impacted by these decisions. Educational inequities continue to affect students along race/ethnicity and class lines. Technological literacy is one way to not only bring attention to this inequality but empower students to see themselves as change agents.

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From Survive to Thrive: Using Professional Development to Advance Online Teaching

Article Info	Abstract
<p data-bbox="253 793 553 863">Jennifer Ibrahim, Ph.D. Temple University</p> <p data-bbox="203 1163 537 1262">Keywords: Faculty Development, Online Teaching, Professional Development</p>	<p data-bbox="667 758 1430 1402">In Spring 2020, Covid-19 forced educational institutions to quickly pivot courses to an online format, leaving many schools unprepared to support students or faculty. The Professional Development Framework for Online Teaching was a suitable guide for the development of training and support for faculty moving to online teaching; key elements include teaching, community and organization. Using this framework, a faculty team from a College of Public Health worked to develop an interactive online teaching training, including: activities to practice skills; assessments to demonstrate competency; community support groups organized by type of class; and organizational support including a standardized syllabus, Canvas template, and support from technology specialists. This case study shows promise for a systematic approach to ongoing faculty development outside of moments of crisis. Future work includes the development of parallel online training for students, more opportunities for assessment, and recognition of high-quality online teaching with meaningful use of technology.</p>

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In Spring 2020, with the rapid spread of Covid-19 across the US, institutions of higher education were forced to modify their delivery of academic programs. At many schools, classes were temporarily halted or students who were on Spring break transitioned back to a fully online offering. On March 7, 2020, the University of Washington was among the first institutions to start the transition to a fully online format (Baker et al., 2020). By the second week of March, more than 100 universities had followed suit (Voytko & Porterfield, 2020). By mid-March, 1,102 universities nationwide had moved fully online, a move that impacted upwards of 14 million college students across the country (Hess, 2020).

The sudden transition to online learning exposed a systemic gap in faculty preparation; namely, a lack of comprehensive training for online learning for all instructors. As of 2018, more than half of college instructors nationwide have never taught a fully online course (Jaschik & Lederman, 2018), despite a growing demand among students for online education (Koksal, 2020; National Center for Education Statistics, 2018). Within the College of Public Health at Temple University, the breadth of instruction and variety of course modalities introduce myriad challenges to successful online teaching. Courses include large, introductory lectures (150 to 600 students) to small didactic seminars (20 students); they can be lab-based, clinical, writing intensive, or practica that enable students to meet field and clinical licensure requirements, as well as adhere to accreditation standards, where applicable. Further, the current social environment has created an emphasis on topics such as social justice, complex ethical scenarios, structural discrimination and bias

and inequality (Hamedani et al., 2020) - topics that can create “hot moments” during on-campus courses. The nuances of these types of interactions can be even more difficult to navigate online where visual cues and emotional inferences are not readily available. Finally, our student body is diverse by race and ethnicity, age, sex, gender, religion, sexual orientation and country of origin; includes first-generation students and older adults returning to seek higher education; and constitutes undergraduate, graduate, and professional students; and nearly every metric in between.

Faculty Concerns with Online Teaching

Faculty have long expressed concerns about online teaching, including the amount of time and effort needed to teach online (above and beyond in person teaching) as well as a lack of support for teaching online (Allen & Seaman, 2009). They generally believe that “in-person” instruction is more effective than online teaching (Jaschik & Lederman, 2018), and express skepticism about the ability of online education to help students meet and achieve equivalent course objectives and learning outcomes because of technology and pedagogical challenges. Instructors may question whether online learning allows for sufficient student-teacher interaction and reaching at-risk students, including historically underserved students (Jaschik & Lederman, 2018). Further, they often have minimal experience as online learners, which can leave them unprepared to create a rich learning experience for students (Cicco, 2013; McQuiggan, 2012).

Faculty members that have experience teaching online typically espouse more positive attitudes about the potential

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for online courses to produce equivalent learning outcomes (Jaschik & Lederman, 2018), and experienced online teachers spend significantly less time preparing their courses due to comfort with technology and teaching strategies (Mandernach & Holbeck, 2016). These findings suggest that advanced preparation, experience and planning can lead to a change in faculty attitudes about online teaching. In April 2020, the college distributed a brief questionnaire through the college listserv to all instructors to understand their concerns and to support them with online teaching. Of the 148 respondents, 43% indicated that they wished there was more advanced notice to move online, 19% wished that they had additional training to move online and 26% wished that students had additional training to move online. We sought to address gaps in online teaching preparation through professional development for full-time faculty and adjunct faculty, as well as doctoral students who were Teaching Assistants. While we searched for existing trainings to prepare faculty, we found trainings that were either too basic and largely focused on the technology alone or too expensive to scale to the entire complement of over 200 faculty. We knew that we needed a training that would consider teaching in the health professions and across a very diverse audience of students; due to these conditions, we decided to develop our own in-house online teaching training.

The purpose of this article is to explore the role of professional development to prepare faculty for online teaching. Using a descriptive case study methodology (Yin, 2003), we began with the identification of an appropriate theoretical model to guide our work. We then translated that model into practice and implemented a series of

professional development opportunities for the faculty throughout the summer of 2020 to prepare for online teaching in Fall 2020 and beyond. The remainder of this article will create a chronological narrative of the experience within the College of Public Health at Temple University and the lessons learned from the approach.

Professional Development Framework

The purpose of professional development is to enhance an individual's skills and abilities or to address a deficit in performance (Brinkley-Etzkorn, 2018). In higher education, faculty may be offered a wide range of professional development opportunities ranging from conferences, research methods training, leadership development programs, to teaching webinars or workshops. Development opportunities may be offered but not utilized due to barriers such as lack of funding, competing demands and/or a lack of time (Caffarella & Zinn, 1999). In some disciplines, professional development is focused on the specific field (continuing education credits) and not on teaching more broadly (Haras, 2018). Professional development opportunities must meet a need, be convenient, accessible to the intended audience and be valued by the institutional administration.

In 2014, Baran and colleagues developed a "Professional Development Framework for Online Teaching." The framework posits that successful online teaching is built on three concentric layers of development: teaching, community and organization (see Figure 1) (Baran & Correia, 2014). At the level of the individual, there needs to be training related

to sound teaching pedagogy, knowledge of the content specific to the course, and support with utilization of technology for engagement with the students. The idea of integrating knowledge of subject matter, learning theory and pedagogy, and digital technologies is widely accepted among online teaching researchers (Mbatia &

Minnaar, 2015). The “teaching” level of the model helps to build individual confidence and provides an opportunity to reflect on previous teaching. The faculty member can also look for ways to be innovative and seek new ways to integrate technology to engage all students.

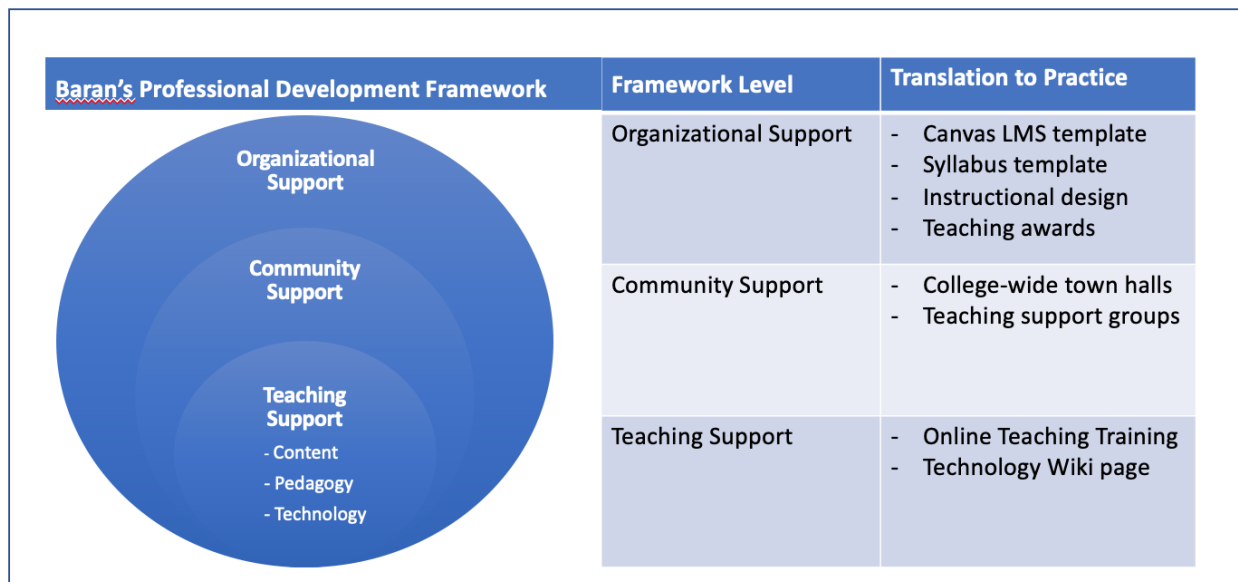


Figure 1: Translation of Professional Development Framework into Online Teaching Training

The second layer of the framework – “community” – calls for opportunities for instructors to engage with other individuals who are teaching online. Baran and colleagues noted that successful online teachers were engaged in mastery of the content to be delivered but also designing the form and content of the online course (Baran & Correia, 2014). While some institutions separate the online course development process between instructional designers and faculty, a more collaborative approach is to integrate the process so that faculty are aware of the mechanics and the decisions made in the design of the course. The development of a community of support

encourages collaboration across disciplines and between faculty and technology staff (Hill et al., 2007), thereby providing a space for open discussion and innovation.

The outer layer of the framework – “organization” - points to the need for administration to support faculty online teaching. Within academia, some have advocated for professional development as a “fourth leg” to the tripartite focus of teaching, research and service to demonstrate the value and importance of ongoing training (Altany, 2012). It is important that the organization is committed to enhancing and advancing their faculty and

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publicly recognize faculty for their online teaching efforts. While the Covid-19 pandemic forced institutions to move swiftly to avoid long breaks in the delivery of their curricula, the rush to “survive” the circumstances should be replaced with a “thrive” mindset that promotes online learning. If faculty members see that the institution values and respects online teaching, they will be more confident and motivated to engage in online learning (Baran & Correia, 2014) and perhaps co-curricular initiatives, as well. Outward signs of organizational support for online teaching may include rewards and recognition of individual faculty, financial stipends, acknowledgement during consideration for merit/promotion/tenure, and workload release (Maguire, 2005). The next section demonstrates the translation of the theoretical model into practice within the College of Public Health at Temple University.

Approach

Using Baran’s Professional Development Framework (Baran & Correia, 2014), we developed an integrated approach to provide free support and assistance to faculty moving to fully online course offerings. The process, which began in March 2020 and continued through summer 2020, consisted of three steps: 1) Comprehensive Online Teaching Training, 2) Community Support and 3) Organizational Support.

Comprehensive Online Teaching Training

In Spring 2020, less than 40% of the faculty in the College had recent experience with teaching online and many faculty

members expressed the need for assistance transitioning to the online environment. College leadership decided that all faculty needed to be trained in online teaching to maintain compliance with existing structures such as the State Authorization and Reciprocity Agreement (SARA) (National Council for State Authorization Reciprocity Agreements, 2020a). SARA is designed to ensure quality online education for students; one requirement of the Agreement is that all faculty delivering online education must be “appropriately qualified and effectively supported” (National Council for State Authorization Reciprocity Agreements, 2020b).

Beyond the requirements, we sought to make the training of value to the faculty. Feist found that when faculty are seeking professional development opportunities related to online teaching, they want training that can immediately be put into use, is convenient and fits with their schedules, includes a process for follow-up, is centered on curriculum and not just a generic approach, and includes a support person that is accessible for questions and feedback (Feist, 2003). Therefore, we decided to create an interactive learning experience that would be self-paced, could be revisited when needed, included feedback on progress and allowed for the creation of teaching products that could be used in the upcoming semester.

We began with the materials that were developed for a pilot online training which included content on how to develop an online syllabus; create alignment of learning objectives, activities and assessments; set up a Canvas course site; record lectures as videos; host video conference sessions using Zoom; create

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synchronous and asynchronous experiences; and provide constructive timely feedback to students (Frankel et al., 2020). Based on feedback from our small pilot group, we updated the content and included more specific information in areas where faculty identified the need for greater training (e.g.,

online test proctoring, assessment of hands-on clinical skills and inclusion, diversity and accessibility). The comprehensive training is composed of eleven online self-paced modules (see Table 1).

Table 1
Overview of Comprehensive Online Teaching Training

Module	Topic	Assessments
1	Student Learning in the Online Space	Content quiz Posting welcome message for new course
2	Creating Alignment	Create an alignment table (learning goals, activities and assessments)
3	Preparing Your Syllabus	Create an online syllabus
4	Setting Up Your Canvas Site	Develop course Canvas site
5	Using Web-conference	Record a videoconference practice session
6	Creating Videos	Record an asynchronous video lecture
7	Asynchronous Activities	Content quiz Practice with discussion board and voice thread
8	Designing and Delivering Synchronous Sessions	Content quiz Develop a synchronous session lesson plan
9	Providing Feedback to Students	Content quiz on feedback to students
10	Online Assessment	Content quiz Demonstrate feedback to online assignment
11	Inclusion, Accommodations and Accessibility	Content quiz

Using Baran’s Framework, the modules provided faculty with evidence-

based practices in online pedagogy following Quality Matters standards

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(Quality Matters, 2020), information and demonstrations on the use of technology and examples across the fields of health and health professions. Within each module, participants engage with readings, videos, demonstrations, and sample work. At the conclusion of each module, they have the opportunity to demonstrate their skills by completing content quizzes or brief assessments. Finally, as the participants are completing the modules, they are actually building out their next online Canvas course, developing the syllabus for that course, creating assignments and assessments; this fits with Feist's findings that faculty want something that can immediately be put into use and is related to the curriculum, not a generic approach (Feist, 2003).

Lastly, in order to provide guidance to faculty along this professional development journey, we (the four faculty course developers) divided the participants from the eight departments, each assuming responsibility for two departments. We met weekly throughout the summer to discuss questions, monitor trends, and discuss any needed improvements as faculty moved through the material. Announcements were posted to the training Canvas site to encourage faculty to keep working through the modules, provide feedback where we were receiving questions and remind faculty of the deadline to complete.

Community Supports

Moving from the teaching level to community supports, we developed two sets of activities that would serve as voluntary supplements to the comprehensive training. First, there was a college-wide "Town Hall" meeting to provide a forum in which faculty

could voice concerns, share ideas, and generally build a sense of "we are all in this together." In addition to the large "Town Hall" meeting, there were five different round-table discussions, where faculty from across the college came together to discuss how online teaching was progressing, share ideas for improvement, and provide a sense of community amongst faculty who were facing similar challenges.

Evolving from the success of the original round-table discussions, five voluntary working groups were created for faculty to continue conversations, share ideas and concerns while thinking ahead for the fall semester. The five different working groups focused on 1) writing intensive courses, 2) large lecture courses, 3) clinical courses, 4) small group labs/recitations, and 5) fieldwork courses. Each session was largely informal but brought together people facing similar challenges from across departments and professions for interdisciplinary collaboration. The development of opportunities to create a sense of online learning communities is important; such efforts do not need to be time or labor intensive but can signal administrative support for faculty to develop as teachers and professionals (Hill et al., 2007).

Organizational Supports

Within this framework, the faculty leaders often serve as a bridge between community and organization supports (Hill et al., 2007), identifying needs from the faculty and working with administrators to identify solutions. The college is fortunate to have an in-house Information Technology (IT) team which supports faculty

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development and instructional design. In collaboration with our IT team, we created a standardized Canvas template and corresponding syllabus template which provides the framework and all Quality Matters required elements for effective organization and communication (Quality Matters, 2020). Our IT team also tracks faculty hardware and reaches out to update machines to ensure that faculty are operating with appropriate speeds and memory capacity; the same is true for needed software.

Beyond the technical support, the college also offered stipends for faculty to develop online courses that will remain in an online offering (not just during the pandemic). The idea of course release was considered but financial constraints and the need for specific faculty expertise made this not feasible. To receive the stipend to create the course, faculty were asked to complete the online teaching training, develop a plan and timeline for creating the course in compliance with Quality Matters standards (Quality Matters, 2020), and share the course upon completion for feedback.

Results of Online Teaching Professional Development

Comprehensive Training

In May 2020, all full-time and adjunct faculty (as well as any interested doctoral students) were enrolled in the “Online Teacher Training” in Canvas Learning Management System (LMS). Participants were asked to complete the training by the end of August 2020 to ensure that everyone started the Fall semester fully prepared. As of June 1, 2020, there were 264 faculty, adjunct faculty, or PhD students

who were Teaching Assistants enrolled in the course. Depending on the participant’s comfort with teaching online, experience with the use of technology, and the amount of new content that needed to be built, the training required anywhere from 25 to 35 hours to complete.

The participants were divided by department and we tracked the progress of our assigned group of faculty and provided real-time feedback to each individual. We worked to review assessments through the use of rubrics, monitoring course progress, and providing encouraging feedback for improvement. There were also quizzes for some modules that included multiple choice questions where faculty would receive immediate feedback through automated answers and open-ended questions that required us to provide more detailed feedback. The intent of grading the modules and offering feedback was to model the behavior that we wanted instructors to use with their students. All participants had to complete the modules with a score of 80% or better; if a participant received a score less than 80%, they were required to return to that module and retry until a score of 80% or better was achieved. All participants who completed and received a score of 80% or better received a digital certificate at the conclusion of the training. By the end of August, 236 (90%) of the faculty had completed the modules. (Note: There were some faculty who were enrolled but on sabbatical or not teaching until Spring and therefore did not complete by the end of August.)

Town Hall and Support Groups

During the Town Hall webinar event, there were 122 faculty (61% of full faculty complement) that participated. There was

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representation from across all departments in the college, as well as several adjunct faculty members. (Note: There was also an online teaching workshop being held by the University Teaching Center on campus at the same time, which may have reduced participation slightly.) The faculty were engaged, asking questions and offering suggestions on their own approaches to online learning. There was a positive mood to the gathering and faculty requested some form of follow-up after the meeting, noting that another full Town Hall over the summer may not be practical as most faculty do not regularly work during the summer months.

The working groups met every other week on a specified day at noontime beginning at the start of June and continuing through the summer months. While the sessions were voluntary and confirmation was needed to participate, there was a googledoc shared with the faculty and adjunct faculty listservs with the log-in information. At the end of July, there were between five and seventeen faculty that attended each session. The conversations focused on expressing concerns, seeking support, sharing information and asking for additional references/resources. A shared folder was also created for each working group to disseminate best practices or innovative ideas for that specific type of online class.

In addition to the working groups, faculty had regular access to their assigned course developers - the four authors of this paper. Each of us was responsible for grading between 60 and 75 faculty members. In addition to evaluating all the faculty assessments, we were also available to answer general questions and offer recommendations for faculty. For example,

as faculty had challenges using technology to submit assessments for a given model, we would reach out to provide assistance and teach them how to complete that module. We also provided weekly “open office hours” for any instructor that wanted to drop in for assistance.

The outcomes of the support groups were varied. For example, in conjunction with the college IT team, we uncovered additional technology needs for faculty who had not fully considered what they needed to be able to reach remotely. Faculty who had previous experience teaching online shared tips and techniques for teaching, time management and engagement with students in the online space; the groups were not just about advice from the organizers, but a more organic sharing among participants. The groups also provided a forum for faculty to express frustration and make suggestions; this is important to help faculty feel empowered to have a voice, particularly in times of great uncertainty (Hrabowski et al., 2020).

Organizational Support

The organizational support for online teaching grew over the course of the semester. As college leadership saw the time and effort put forth by the faculty (particularly over the summer when many faculty are not typically working), there were new ideas created to demonstrate organizational support for online teaching. While the college had several teaching awards at the department and college levels to provide external recognition, there are now conversations about creating a dedicated online teaching award. In addition, the dean will use on-time completion of the training when making decisions about merit awards. The public

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acknowledgement is important, but the inclusion of stipends and merit awards provide financial incentives, as well.

Discussion

The literature regarding teaching online demonstrates that there are a number of key considerations when developing opportunities to support faculty online teaching. While the pandemic certainly moved institutions of higher education to “suddenly online learning,” there may be a silver lining in the process. The rush to move online may have released innovation and creativity that was not previously needed. In traditional teaching structures, many instructors teach what was handed down and if it works, then there is no need to change course. Framing the training for online teaching as professional development provides the faculty member with something to show for their work while enabling them to take their teaching to a new level.

The opportunity for faculty to develop their online teaching abilities also allows them to create more meaningful interactions with students through student-centered teaching (Sorcinelli, 2007). Rather than focusing on the logistics of teaching, if the faculty member has developed a level of comfort and confidence in teaching online, the process of learning can be the focus rather than just teaching. With appropriate training, the instructor can think more about assessment and understanding how the students are digesting the material. The creation of this type of environment makes the learning experience more positive for the faculty and the students. Moreover, the home-grown professional development creates a social norm specific to our college

that we are never truly done learning. In turn, we hope that the shift in social norms creates a sustainable environment to support a culture of quality and innovative online teaching. While we (the course developers) began the process, we hope that other faculty will continue the journey.

Challenges

Some of the challenges of offering professional development opportunities to faculty is that the faculty composition can be changing, which may have an influence on motivation to participate; the student body is changing; and the approach to teaching is changing (Sorcinelli, 2007). By offering the training to all faculty members (full time and adjunct faculty) as well as PhD students who were serving as Teaching Assistants, we tried to make this a culture shift at the organizational level. By framing the training as professional development and providing a certificate upon completion, all participants were able to build on their skills but also have something to document on their CVs. While the focus was training for *online* teaching, this was also a way to improve faculty teaching in-person as well. Finally, it was a challenge to address faculty concerns of duplication if they had already completed an online training elsewhere; there was no way to know the quality of other trainings and there was not the same depth of assessment to understand faculty members’ skills and abilities.

Beyond the content in the modules, there were some challenges from faculty about the time needed to complete the training as well as the fact that this was being required over the summer months, when most faculty are not working. In an ideal situation, the training would have been released at the start of the academic year and

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faculty could complete on their own time prior to the end of the same academic year; however, the pandemic did not afford us that time frame. What we have learned from the 24 faculty who completed the pilot version of the online teaching training prior to the pandemic is that while they offer some resistance during the training, there has been unanimously positive feedback on the depth and breadth of the training once the faculty member was actually teaching. Not only did the faculty find the techniques useful, but they also mentioned referencing back to content in the materials as a refresher in real-time.

Opportunities

Online teaching requires the participation of the instructor and the students. While the online teaching modules are useful for the faculty, there is an opportunity for a parallel training for students to better understand online learning. We believe that parallel training for students and faculty will ensure that both parties are receiving the same information and can appreciate the value of different aspects of online learning such as the importance of effective and timely communication. (Please reference the postscript for updated details.)

The online teaching modules also present an opportunity for ongoing professional development. As faculty receive feedback in the form of student course evaluations or peer evaluations, department leadership can refer faculty back to particular modules as a refresher or to consider supplemental materials to improve teaching in a given area. In addition, the use of support groups provides a mechanism for faculty to learn from one another and seek mentorship and advice to make improvements (Hill et al., 2007). The intent

of the training is not just education at a single point in time, but rather to create a culture change related to online teaching. As we move forward and have a chance to evaluate faculty teaching in the fall, we will be able to test the idea that the online teaching training leads to improved learning experiences.

Even without a pandemic, online instruction can be more demanding than on-campus teaching. Online teachers often report that there is no clear start or stop time, which can contribute to burnout (Covington et al., 2020). Novice online instructors can spend significantly more time preparing for class than experienced instructors (Mandernach & Holbeck, 2016); those “novice” online instructors may be experienced faculty that have been teaching on-campus for decades. The experience of teaching online can be isolating but with ongoing support opportunities such as those outlined in this article, it is possible to minimize that isolation; which leads to the final point.

The true value of the teaching training was to build community and collaboration. In addition to ensuring that the faculty were learning how to teach online (both pedagogy and technology), the training and associated supports created a sense of community. As faculty developed content, they were sharing with one another; the same was true as we provided feedback on the different assessment items. The support groups brought faculty together from across the college around teaching approaches and techniques and broke down departmental boundaries; discussions resulted in ideas for how to move the institution forward and not just individuals. Future efforts to encourage these behaviors

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may include an Online Teaching Award and online teaching expert panels. In addition, and in response to the Spring faculty questionnaire, a parallel training for students to be better prepared for online learning could also be developed in the future.

Limitations

There were several limitations to the study. While participation in the support groups and town hall events were voluntary, the online training modules were required by college leadership. There were faculty who were not happy about having to complete work over the summer months when they are not formally working and so we saw many participants rushing to complete in August just prior to the start of the semester. There were no requirements for participants to view all of the readings prior to starting the assessment activities, so it is possible that some of the grades below 80% were a result of jumping into assessments without completing preparatory work. Finally, we do not yet know how the training translates to long-term application of the skills developed during the training. Future work will include an assessment of the faculty teaching experience post-training.

Conclusion

Looking ahead to Fall 2020 and beyond, there are many schools and colleges that are planning to offer at least a portion of their curricula in an online format (Aspergren & Zwickel, 2020). The Centers for Disease Control and Prevention has made recommendations for institutions of higher education to enforce physical distancing (Centers for Disease Control and Prevention, 2020), necessitating online

teaching for many courses and reinforcing the need for online teaching training. By framing teaching training as professional development, it provides faculty with a tangible means of documenting and being recognized for their efforts, within their home institution and beyond. Moving forward, there are opportunities for the administration to identify additional ways to acknowledge outstanding online teaching and recognize leaders to foster a culture of excellence in online education. In terms of next steps for faculty professional development related to online learning, assessment is a priority (Mueller, 2005). Once faculty are well-trained in the basics of online teaching, there is an opportunity to build on that foundation to help them evaluate how students are learning in the online space, as well (Sorcinelli, 2007).

Postscript

Since the submission of this article in late August, the faculty have continued to progress through the revisions in the online training; almost all have completed their revisions to achieve the score of 80% or greater on each module. We have begun to add additional adjunct faculty and doctoral students who plan to teach online in the Spring. As faculty who completed the training in the summer are now teaching online, we continue to hear comments such as “wow, that actually helped prepare me” and “it was a lot of work, but I see where it is informing my teaching.”

In addition, we built on our experience of developing faculty modules to create a parallel version of self-paced “Student Online Learning” modules for all of our students (graduate and undergraduate)

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to feel more prepared with the technology being used and the pedagogical approaches to online education. We released the training for all incoming and continuing students during the second week of August; this provided a sufficient amount of time for students to complete the interactive training

prior to the start of the fall semester. While the training was voluntary, 425 students enrolled in the modules. We plan to build on this work moving forward and as we consider which courses we will continue to offer in an online format moving forward.

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Leveraging Sociomaterial Practices to Build eLearning Literacy in “Suddenly Online” Professional Development

Article Info

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Abstract

Despite many studies of faculty development for online teaching and instructional technology use, significant challenges confront those seeking to develop faculty with the digital literacy needed to function effectively and efficiently as online instructors, let alone “suddenly online” instructors. Much technology training involves staff teaching faculty, but faculty often use informal peer networks and choose technologies independently in ways that may hinder eLearning literacy. A “suddenly online” course design institute during the COVID-19 pandemic provided a valuable opportunity to explore how thoughtfully designed, responsive professional development incorporating peer support can foster faculty eLearning literacy. Quantitative and qualitative data from faculty participants in the “suddenly online” institute clarifies factors that impacted faculty online learning, their awareness of and ability to use technologies for eLearning, and the value of their “suddenly online” learning experience for supporting learners in a similar situation. Synthesizing participants’ insights with the designer-facilitator’s observations and secondary literature highlights the importance of peer support, integration of technology with design principles, and reflective activities in this “suddenly online” professional development. While affirming selected findings of previous studies, this article reconfigures sociomaterial practices such as peer learning as assets in a holistic view of eLearning literacy. Treating skills, habits of mind, and situated practices as all essential to eLearning literacy, this article demonstrates that faculty preferences such as peer learning need not be considered hindrances but rather can be viewed as resources to be leveraged through thoughtful, responsive design to build organizational capacity to support effective online or “suddenly online” learning.

Lohman, L. (2020). Leveraging sociomaterial practices to build elearning literacy in “suddenly online” professional development. *Journal of Literacy and Technology*, 21 (3), 59-81.

Despite many studies of faculty development for online teaching and instructional technology use, significant challenges confront those seeking to develop faculty with the digital literacy needed to function effectively and efficiently as online instructors, let alone “suddenly online” instructors. These include time, expectations that instructors change their paradigm of teaching, a shift in faculty role to being a facilitator of learning, and effective technology skills (Henning, 2012). In the case of technology skills, faculty reliance on independent problem solving and informal peer networks may hinder their digital literacy (Herckis, 2018). At the heart of this technological challenge are persistent contradictions. Much technology training involves staff teaching faculty (Belt & Lowenthal, 2020), but faculty often want peer-to-peer learning to share ideas and experiences on topics like using mobile technology in instruction (Hauptman, 2015). Yet in rejecting available formal training and seeking insight from informal peer networks of trusted colleagues rather than technology experts, faculty may pursue technology choices more independently and, as Herckis cautions, not develop digital literacy. Commenting on faculty as adopters of eLearning tools, Herckis explains, “prioritization of independent problem solving, paired with the tendency to leverage informal support networks, means that would-be adopters and their support networks lack crucial digital literacy” (Herckis, 2018, p. 33).

“Suddenly online” professional development illustrates how these contradictions can be effectively addressed

to develop faculty eLearning literacy. Amid the additional challenges presented by the COVID-19 pandemic, an innovative course design institute at a small master’s level university (Lohman, 2019) became triply “suddenly online”—the author, as the institute’s designer-facilitator, rapidly shifted this professional development from in-person to online delivery, faculty participants became “suddenly online” learners, and, just as the institute began, both were notified of the need to prepare fall on-campus classes to use online learning. As all but one of the faculty participants had applied for the in-person course design institute to focus on designing or redesigning a specific face-to-face course, these “suddenly online” shifts had significant impacts on the design, development, and delivery of the institute and participants’ experiences in it.

To explore the factors contributing to faculty eLearning literacy in this “suddenly online” context, this article synthesizes insights from the designer-facilitator, participants, and literature spanning digital literacy and faculty development. Following a review of relevant themes in literature on faculty development for instructional technology and online learning, this article outlines the designer-facilitator’s decisions in designing the original institute and redesigning and developing it for online delivery during the COVID-19 pandemic. Quantitative and qualitative data gathered from participants regarding their learning experience clarifies factors impacting faculty learning in an online environment, their awareness of and ability to use relevant technologies for eLearning, and the impact

of their experience as “suddenly online” learners on their ability to support learners in a similar situation. Synthesizing participants’ insights with the designer-facilitator’s observations and secondary literature highlights the importance of peer support, integrating technology with design principles, and reflective activities in this “suddenly online” professional development. This article demonstrates that faculty preferences such as peer learning need not be considered hindrances but rather can be viewed as resources to be leveraged through thoughtful, responsive design to build organizational capacity to support effective online or “suddenly online” learning.

Literature Review

Literature on faculty development in instructional technology and online learning provides important context for understanding how the “suddenly online” institute sought to support faculty members’ development of eLearning literacy. Particularly relevant are large-scale reviews of faculty development for instructional technology and online teaching during the past decade, research on barriers to faculty adoption of instructional technology, and multiple perspectives on digital literacy.

There are three noteworthy contrasts between common practices in faculty development for online teaching and instructional technology during the past decade and recommendations made in other, related research. First, while reviews of faculty development note a longstanding

reliance on in-person support for both online learning and instructional technology (Belt & Lowenthal, 2020; Meyer & Murrell, 2014), researchers have stressed the value of providing faculty development in the same modality in which faculty will be teaching. Online professional development can model sound practices and provide faculty valuable experiences as online learners. As Borup and Evmenova (2019) explained of their online multi-week professional development course on online teaching, “the course content and assignments proved effective at increasing faculty members’ knowledge and skills, but it was the course delivery and the opportunity to learn as an online student that appeared to most impact faculty members’ attitudes and perceptions of what was possible in online learning environments” (p. 16).

Second, while Belt and Lowenthal (2020) noted a common use of staff to teach faculty about instructional technology, many researchers have advocated for greater use of peer learning in faculty development on instructional technology and online learning. As faculty interviewed by researchers value learning from other faculty, researchers have recommended peer-support formats such as learning communities (Belt & Lowenthal, 2020; Hauptman, 2015; Reilly et al., 2012; Richardson et al., 2020; Terosky & Heasley, 2014). Learning from faculty peers is often described positively by both faculty and researchers as a source of community, collegiality, and collaboration that can support faculty development for online teaching and faculty experimentation with instructional technology (Belt & Lowenthal, 2020; Terosky & Heasley, 2014). More

specifically, peer modeling of technology use and online teaching is often praised for its ability to promote self-efficacy through social learning, change how participants perceive online learning, and illustrate the learner-learner interaction sought in online learning more generally (Barton & Dexter, 2020; Borup & Evmenova, 2019; Gumness, 2019; Saleh, 2008). Online learning communities or cohort programs can provide these opportunities in the same modality as the instruction targeted for improvement (Reilly et al., 2012; Sullivan et al., 2018).

Third, while Meyer (2013) noted that faculty development for online teaching shifted from focusing on technology tools to pedagogy and instructional design, research on the competencies and roles in online teaching suggests that faculty members' ability to fulfill a technologist role and use technological skills in carrying out other roles remains important (Goodyear et al., 2001; Martin et al., 2019). Meanwhile, common emphases during professional development for online teaching have included assessment, creating community, and the learning management system (LMS) (Meyer & Murrell, 2014). De-emphasizing a range of technology tools in professional development may encourage faculty to seek such knowledge through the informal peer networks that Herckis suggests work against developing their eLearning literacy.

Even with such recommendations, significant challenges remain for those developing faculty members' eLearning literacy. These include many barriers to faculty adoption of instructional technology.

First-order barriers—barriers external to faculty—include insufficient time, limited access to technology, unreliable technology, limited access to professional development or advice, insufficient incentives, and institutional control. Second-order barriers—barriers internal to faculty—include attitudes towards technology, technology anxiety, low digital literacy, difficulty maintaining technological currency, beliefs about teaching and learning, attitudes toward change, and self-efficacy (Belt & Lowenthal, 2020; Borup & Evmenova, 2019; Faulkner, 2015; Fleagle, 2012; Gachago et al., 2017; Hauptman, 2015; Johnson et al., 2012).

Valuable in overcoming these challenges is a holistic view of digital literacy that encompasses technology skills, habits of mind, and socioculturally situated practices (see Figure 1) (Meyers et al., 2013). This holistic view draws out how specific contexts shape learners' digital literacy development and contrasts with studies focused on abstract learners' skills and competencies (Digby & Bey, 2014; Koonce, 2017; McGrail et al., 2018). In the latter, an influential model has been Sharpe and Beetham's (2010) model of digital literacy development in which learners progress from digital awareness and access, to digital skills, then to digital practices, and finally, identities. Gourley and Oliver (2016) stress that we cannot understand digital literacy fully through an account of learners divorced from a sociocultural context. Instead, we must also attend to "the material and social networks in which practices are enacted" (p. 77). A holistic view of digital literacy facilitates attention to elements of

eLearning literacy such as metacognition, self-directed learning, communication, collaboration, use of the eLearning environment, and engagement in cultural practices as established in that environment. All are relevant to “suddenly online”

professional development, an extended “digital literacy event” that Gourlay and Oliver suggest can help us understand sociomaterial practices integral to developing digital literacy.

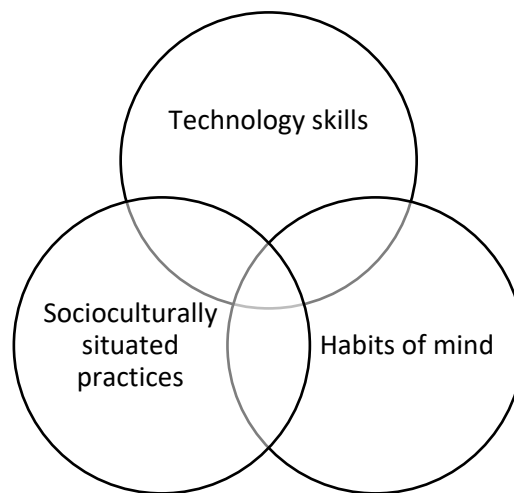


Figure 1. *A holistic view of digital literacy.*

Design Decisions

The designer-facilitator’s decisions were critical to the “suddenly online” institute as a digital literacy event. These include decisions made when designing the original institute, redeveloping it for online delivery, and designing two weeks of new content under university-level guidance during the COVID-19 pandemic.

The institute was originally designed as a month-long learning experience that fused approaches to course design often

segregated in professional development led by faculty developers and other learning specialists (Lohman, 2019). One basic premise was that faculty can use sophisticated instructional design techniques, such as component skill analysis, drawn from an instructional systems design text (Dick et al., 2015). Another basic premise was responsiveness to the organizational context, including the influence of Fink’s (2013) taxonomy of significant learning on the curriculum and emphasis on reflection and metacognition. Content was sequenced and presented to

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help faculty develop design skills applicable to any modality. Between the four, weekly, six-hour in-person sessions, participants completed application exercises and shared deliverables in a collaborative digital notebook. Each participant focused on designing or redesigning one target course discussed in the application for the institute.

This institute became “suddenly online” professional development as the university campus was closed to employees during the spring 2020 phase of the COVID-19 pandemic and state and county stay-at-home orders were issued. Faculty registered for an in-person institute—thirteen full-time and adjunct faculty in disciplines spanning humanities, natural sciences, social sciences, arts, and health—became “suddenly online” learners. The designer-facilitator rapidly redeveloped the institute for online delivery using the web-based eLearning authoring app Rise, the asynchronous video discussion platform Flipgrid, the Zoom-based videoconferencing tool RingCentral Meetings, and collaborative, cloud-based Microsoft Word and PowerPoint files. The institute was redeveloped as a largely asynchronous learning experience complemented by videoconferencing in response to local faculty preferences for face-to-face, synchronous peer learning. Participants joined one to two hours of group video conferencing sessions per week; these were scheduled to coincide with participants’ progress on Rise lessons addressing complex concepts and their application of these concepts to their target courses. Redeveloping the institute outside the LMS in this way gave faculty a safe space to share their application of and ideas

about design techniques and technological tools; reinforcing this safe space, participants were asked not to share cohort members’ materials with those outside the cohort. The creation of a trust-building “safe space” was consistent with other faculty development (Gumness, 2019; Sullivan et al., 2018).

As the pandemic unfolded, the “suddenly online” institute became an opportunity to model online instruction. Just as the institute began, academic administration directed faculty to prepare fall classes to include online learning and those providing summer professional development to support faculty in this effort. Funding for a new mobile-friendly Learning Management System (LMS) was announced, but implementation timing remained unclear until after the institute ended. Accordingly, the designer-facilitator redesigned the content in the second half of the institute to emphasize other mobile-friendly technologies that could support diverse learners in fluid and challenging pandemic conditions regardless of the LMS used (see Table 1). In the third week, technologies and workflows were curated for participants using criteria in the (LEAPS) framework for selecting instructional technology (a mnemonic for learner analysis, engagement, accessibility, purpose of instruction, and sustainability) (Lohman, 2019; Lohman, in press). From these, faculty selected technologies suited to their courses based on design principles from the previous two weeks, including alignment with learning outcomes and objectives and a five-part instructional strategy (Dick et al., 2015). The final week

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included new content on making accessible materials, job aids, building community online, and fostering social presence online. Overall, the “suddenly online” institute’s emphasis shifted in the second half to the broad applicability of decision-making tools and techniques rather than their sustained

application to the design of one course. This shift was consistent with administrative guidance given to faculty and the designer-facilitator’s conception of participants as likely mentors of colleagues preparing their fall courses for pandemic conditions later in the summer.

Table 1. *Learner-facing learning objectives by week in the “suddenly online” institute*

Week 1	Week 2	Week 3	Week 4
<ul style="list-style-type: none"> • Understand how a backwards design process differs from a typical faculty process for creating a course • Analyze the context in which learning will occur in your course • Analyze your learners' characteristics • Clarify how your course will foster significant learning (learning outcomes) • Articulate a major "end of course" performance to assess that learning • Conduct a goal analysis based on that performance 	<ul style="list-style-type: none"> • Conduct a component skills analysis • Identify differences in how novices and experts perform the same task • Write component skill objectives • Revise course-level learning outcomes to be observable • Select appropriate “tests” from four common types. • Outline a five-part motivational, instructional strategy for a component skill objective • Evaluate alignment between skills, objectives, and instructional strategy 	<ul style="list-style-type: none"> • Sequence instruction effectively. based on your major summative assessment • *Identify traditional course content that can be removed or modified • *Chunk instruction into logical multi-week units or modules • *Select appropriate digital technologies for use in face-to-face and online learning environments • *Adapt course design to the learning context (e.g., COVID,19 physical distancing) • Incorporate support for student metacognition as appropriate to your course learning outcomes 	<ul style="list-style-type: none"> • Select varied instructional materials suitable to the learners and context • *Understand the value of job aids in current university instruction • *Understand key principles and resources for creating accessible instructional materials • *Create an accessible syllabus that supports instructional continuity. • *Understand how to build community and social presence in an online environment

** indicate new learning objectives added to address administrative guidance to faculty for fall 2020 courses and COVID-19 conditions.*

Methods

Participants in the “suddenly online” institute were invited to share their perspectives in a program evaluation survey that also produced research data with Institutional Review Board (IRB) approval. Of the 13 participants, eight consented to participate in the research study and three of those also volunteered to participate in a follow-up interview. Quantitative and qualitative data was gathered through an online anonymous survey completed within three days after the conclusion of the institute (see Appendix). The author qualitatively coded responses to open-ended questions in NVivo. Coding included preset codes (e.g., awareness, access, skills, practices, identity, social network, materials), emergent descriptive codes, and some in vivo coding. Reflecting the focuses of questions 2 through 7, the next section shares participants’ insights regarding sociomaterial factors impacting their learning in an online environment, their awareness of and ability to use relevant technologies to provide eLearning, and the impact of their experience as “suddenly online” learners on their ability to support learners in a similar situation.

Results

Sociomaterial Factors

Faculty responses illustrate the importance of a holistic perspective of

eLearning literacy that includes ample attention to sociomaterial practices. Among 14 factors highlighted through closed-ended survey questions, 50% to 100% of respondents reported that individual social and material aspects of the professional development had significant positive impacts on their learning. These include feedback from facilitator and peers, feeling like part of a community, dedicated digital space for cohort members to share ideas, cohort-based schedule (as opposed to independent learning), feeling accountable for making progress in front of peers and facilitator, organization of the institute materials, and opportunity to revisit materials as needed (see Figure 2).

When responding to open-ended survey questions, participants reinforced the importance of materials and a social network to their learning online. Several respondents stressed the organization of the materials. One noted that the effective organization both mitigated the potential of the extensive materials to be overwhelming and facilitated learners’ revisiting materials to deepen their understanding. Another elaborated, “I found it so useful to be able to return to the same material multiple times over the course of the week, and during the subsequent ones, to review the material. Each time I got something new or different from it that I had not gotten during the previous viewing.” Commenting on the importance of peer and facilitator feedback, one participant explained, “I learned so much from every participant and was grateful for the time commitment and level of engagement from

the facilitator and my peers.” Post-survey interviewing clarified that participants valued peer learning, peer feedback, peer modeling, and community as integral contributors to their learning in the institute. As their explanations made clear, social

networks and characteristics of materials can support learner motivation and comprehension of complex new material when integrated in purposefully designed digital literacy events.

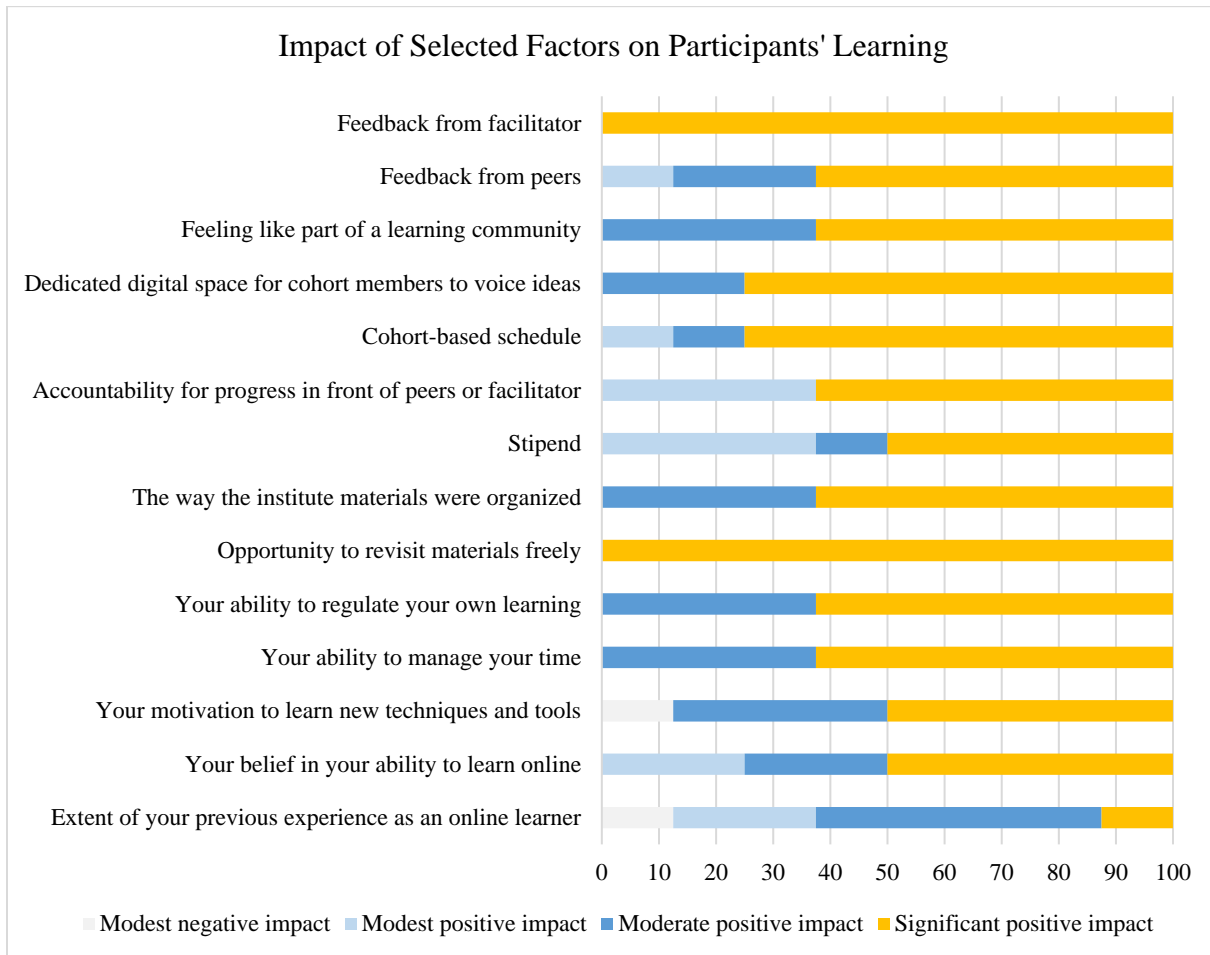


Figure 2. Percentage of respondents indicating degree and direction of the impact of selected social, material, and personal factors on their learning during the “suddenly online” institute. No respondents indicated that any factor had moderate negative or significant negative impact on their learning.

As these explanations suggest, participants’ own characteristics were

integral to learning in the institute. Over half of respondents also identified their own

abilities, namely time management and self-regulated learning, as factors that had significant positive impacts on their learning. Such responses to self-regulated learning were likely shaped in part by the prominence of metacognition and reflection in university discourse on teaching and learning. Factors less often noted as having significant positive impacts on their learning included financial incentives, motivation to learn new techniques and tools, the extent of prior experience as an online learner, and belief in their ability to learn online.

Using Technologies for eLearning as Instructors

“Suddenly online” participants reported greater awareness of and ability to use relevant technologies for eLearning as instructors. Such development is seen in respondents’ comments on a change in their “feeling” in relation to technology. One reported gaining “lots of new ideas, both on technologies and on how to use them effectively. I feel much better prepared to face my classes next fall having taken this course design institute.” Another elaborated, “Exponential growth! Definitely feel more comfortable in using.” A third responded, “Yes! I learned so many new tools and strategies that I am excited to implement in my classes.” Participants’ enthusiasm for their learning about technology is remarkable given the challenging circumstances of a summer felt to provide no normal break from teaching responsibilities due to the complex preparation required for fall courses. In this trying context, the safe space provided in the institute was an asset; one participant

explained that “Learning new tools in a risk-free environment allowed me to learn in a stress-free way.”

Respondents’ comments aligned with three of the four levels in Sharpe and Beetham’s (2010) developmental model of digital literacy. Influenced by Maslow’s hierarchy of needs, this pyramid model has a foundational layer composed of access to and awareness of digital technologies, above which three successive layers represent digital skills, practices, and identities or attributes rooted in the creative appropriation of digital technologies. Three participants commented on increased access or awareness, two commented on skills they had gained, and two commented on how their practices had changed. As one participant explained, “I learned about so many technology tools about which I knew nothing, or very little. We have access to so many more options than I anticipated.” Among the skills cited, one participant highlighted having “more tools for assessing appropriate tools,” an implicit reference to learning a criteria-based process for selecting technology with the LEAPS framework. Moreover, participants reported expanding and deepening their knowledge of familiar technologies. As one attested, “I felt pretty comfortable with online tools prior to this course, but I have learned a vast amount about the functionality and accessibility of tools I already use.”

Impact of Being a “Suddenly Online” Learner

Faculty participants reported several ways that their experience as “suddenly online” learners gave them valuable insights

they could use to support students in such a situation. One respondent volunteered this connection when explaining the tension between their interest in technology and their capacity to learn it, writing, “I would love to try all sorts of new technologies, but I only have the capacity to learn and be patient with myself as I learn so many new technologies right now. *I imagine my students feel similarly*” (emphasis added). When directly asked, respondents elaborated on general insights they gained to support “suddenly online” learners. One explained, “Being a student in this unanticipated environment helped me to see how students might experience my course. This made me become much more thoughtful in my approach to my Fall courses.”

Several participants shared new realizations about the temporal dimension of online learning and how their design choices impact students’ interactions with course materials in time. One noted new awareness of how much time is spent looking at a screen, while another explained that the institute “helped me understand the time commitment and distractions that contribute to online learning.” Another, after connecting their own overloaded feeling to their students’ sense of overload, stressed the importance of helping students address time management. One faculty member noted greater awareness of online students’ challenges in “balancing several classes in the modality.” The faculty member highlighted a newfound ability to “consider which tools are best to use that ease the burden around learning,” including consideration of asynchronous and synchronous schedules when designing

courses for “suddenly online” conditions. Another participant’s new appreciation of students’ having “flexibility in when to watch” instructional materials echoed other colleagues’ thoughtfulness about how students interact with materials in time. Such realizations were critical for faculty members’ eLearning literacy following an institutional and national shift to synchronous online instruction in immediate response to the COVID-19 pandemic in March 2020.

Several participants stressed their insights about how they can give “suddenly online” learners support. Three emphasized clarity and communication. As one explained, “It definitely reminded me that clear, simple, explanations for the work they need to do is key to preventing online fatigue and frustration.” One noted gaining new insights into their “suddenly online” learners’ “emotional bandwidth.” Another elaborated, “It really just reiterated to me that we need to be supportive, empathetic, and willing to go above and beyond for our students. They need a lot of support right now, and it was very helpful to be reminded of what that is like as a learner as well as a professor.” A takeaway of needing to “go above and beyond” is noteworthy given the challenging unknowns that participants faced regarding course modality, LMS, classroom usage, and campus access for fall instruction. In addition to representing institute participants’ learning experiences, this takeaway reflects the university’s motto of serving others and how faculty put that motto into practice.

Discussion

While participants' insights clarify what elements contributed to their learning and how they grew through the institute, synthesizing their insights with designer-facilitator observations and secondary literature can further explain why they reported these impacts. This synthesis clarifies how faculty preferences such as peer learning need not be considered hindrances but rather can be viewed as valuable resources in a thoughtful, responsively designed learning event to build organizational capacity to support effective online or "suddenly online" learning. In redeveloping the institute for online delivery and redesigning portions in response to instructional needs in the ongoing pandemic, the designer-facilitator leveraged three major factors noted during analysis of the institute's learner population and the context in which learning would occur: faculty valuing of peer learning, faculty expectations of autonomy in decision-making, and local valuing of reflection as part of the learning process. All three elements were leveraged in the "suddenly online" institute as socioculturally situated assets to develop participants' eLearning literacy in preparation for fall instruction.

Well-Designed Peer Support

The "suddenly online" institute was designed to satisfy and take advantage of local faculty members' strong valuing of opportunities to learn from other faculty. The impactful peer support can be traced to two critical elements. The first was a series of specific prompts for participants to share their application of design techniques and

technology selections with other participants. These prompts were carefully aligned with learning objectives and suited to participants' experience level as instructors for both sharing ideas and providing one another feedback. The second was choosing supportive technologies that responded to local faculty preference for real-time, in-person interaction: an asynchronous video platform, rather than a text-based discussion tool, and videoconferencing. These enabled discussion, peer feedback, peer exchanges of ideas, and peer modeling of the use of these technologies. One participant reflected, "FlipGrid and the opportunities for peer-peer evaluation really helped to build community, and helped me to think through ideas well." Some participants were particularly responsive and attentive in posting substantive video replies as their colleagues shared how they applied design techniques and would use technology tools in fall courses. As another participant stressed, such cohort-based peer support "allows you to gain insight into the perspectives and best practices of other instructors. This fosters growth." The combination of asynchronous video discussions, collaborative files for selected learning activities, and videoconferencing spurred social connections and community building reported as lacking in other online professional development (Wynants & Dennis, 2018).

How did peer learning help faculty in this triply "suddenly online" learning? Among the challenges it assisted with were second-order barriers such as attitudes towards change. Borup and Evmenova

(2019) suggested that these barriers may be harder to overcome than first-order barriers and may not be recognized by instructors. A noteworthy example occurred in the third week when participants helped one another recognize how an unacknowledged sense of loss was holding some of them back in fully embracing technologies to teach effectively online. By then, well-established habits of peer support within the cohort enabled their expression of loss and grief over the possibility of having little or no face-to-face instructional time with students in fall, a significant cause of concern at an institution known for its employees' strong personal relationships with individual students. Fundamental to this expression was a sense of belonging already established in a trust-building safe space, shared efforts of meaning-making communicated through peer feedback, and commitment to deepening understanding as members of a cohort (Peacock & Cowan, 2019; Terosky & Heasley, 2014). Collegial opportunities to discuss how to uphold shared values of supporting students amid uncertain and unfamiliar instructional conditions helped participants make sense of strong emotions that struck at the heart of their self-concept as learning professionals.

Integration of Curated Technologies with Design Principles

Faculty expectation of autonomy in decision-making was also leveraged as an asset in developing participants' understanding of how to integrate technology selection with instructional design principles. The careful curation of selected technologies in reinforcement of fundamental instructional design principles

proved valuable in challenging, stressful, and frustrating "suddenly online" circumstances. After learning key instructional design techniques and principles, the faculty were given details about curated technologies and workflows and a criteria-based process for selecting technology. Then they were asked to make technology selections for fall instruction amid the continuing pandemic, including both low and high bandwidth tools (Stanford, 2020). While Herckis (2018) noted that technology tools for which workshops are required to understand their implementation can present a perceived threat to faculty members' autonomy in the classroom, post-institute interviewing clarified that preparing faculty to make informed choices from curated tools preserved faculty autonomy. Simultaneously, this approach gave them a process for selection applicable to other situations in the future. This approach reinforced the importance of faculty choice found in other research (Gumness, 2019) and leveraged the powerful culturally situated practice of autonomy as an asset to engage faculty in learning about technology rather than an impediment.

Integrating technology selection with participants' application of instructional design principles had several benefits. Curation of technology tools and articulation of their relationship to the instructional design principles through the LEAPS framework helped faculty focus on selecting useful tools for responding to a complex fall teaching situation, rather than focusing on the tools as ends in themselves (Meyers, et al., p. 362). Integrating learning about technology with instructional design principles helped center discussion on how

and why it made sense to use a particular technology in a particular course in a particular way. Amid the challenging conditions, the curation of technologies in a way that preserved faculty choice and autonomy enhanced motivation. As one participant explained, “I was also really motivated to learn new technologies since the likelihood I will be relying on these in fall and future semesters is pretty high.” While other researchers have observed that faculty may lack confidence and experience technology anxiety when they are asked to experiment with new technologies (Johnson et al., 2012), participants reported their learning about technology enthusiastically, and one noted that the institute “improved my confidence to work in this uncertain environment.” In addition, the inclusion of tools such as Flipgrid both in the institute’s delivery and among those curated for faculty selection for their fall courses helped address second-order barriers to participants’ technology use, particularly concerns about limited face-to-face interaction with students (Reilly et al., 2012, p. 100). Finally, with respect to participants’ development of digital competencies as conceived across industries, this approach enabled them to demonstrate a wider range of competencies, including learning with and about technology, and informed decision making about technology (Janssen et al., 2013).

Reflective Activities

The design of the “suddenly online” institute also leveraged the socioculturally situated practice of reflection as an asset in

developing faculty participants’ eLearning literacy. Reflection was already a prominent element of daily discourse among faculty and part of the university curriculum through programmatic learning outcomes influenced by Fink’s (2013) taxonomy of significant learning. Including opportunities for participants to reflect both individually and as members of a cohort helped faculty overcome common barriers to technology adoption as essential to providing online instruction. Reflection was incorporated by the designer-facilitator through synchronous discussion and asynchronous individual activities, consistent with general guidance on reflective learning in online environments (Chang, 2019; Lai & Land, 2009).

Individual reflection activities included short closed- and open-ended prompts about the participants’ approaches to the institute as online learners. These were framed as illustrations of metacognitive prompts that faculty could use to help their “suddenly online” learners recognize how they could change their approaches to note-taking or time management. But these prompts also explicitly guided faculty to reflect on choices they had made as learners that impacted their own learning in the institute. Other individual reflective activities were built into the program evaluation survey. A noteworthy example was participants’ reflections on their experience of time as a “suddenly online” learner, which enhanced their awareness of ways they could deliberately support their own “suddenly online” learners through their course design. Through such reflective questions, a

commonly noted second-order barrier to faculty technology adoption—time—became an asset in developing instructors' abilities to support students through eLearning.

The “suddenly online” institute’s social practices also included group reflection, particularly during videoconferencing. One example was when several participants noted their sense of loss of in-person instructional time with students in fall. The designer-facilitator prompted group reflection on a key moment when a member had expressed not feeling part of the community and other participants had responded in various ways to address their colleague’s concern. By highlighting a weakness in the “suddenly online” institute itself, the designer-facilitator involved participants in this reflective activity and gave them an opportunity to learn from a design error they had responded to as learners. Reflecting on this error equipped them to proactively foster community from the outset of their fall courses. Such reflective activities were part of the “habits of mind” that were both situated in local practices and essential to the holistic view of eLearning literacy adopted to prepare faculty participants for challenging teaching and learning conditions.

Conclusion

In several respects, participants’ reported experiences in the “suddenly online” course design institute affirm key findings of previous studies. Their insights underscored faculty preference for peer learning, the value of same-modality

support, and the importance of safe spaces for promoting learning about new technologies, skills, and strategies. In other respects, the institute demonstrated that faculty preferences previously conceived as hindrances to digital literacy and even common barriers to technology adoption can be turned into sociomaterial assets for fostering eLearning literacy through thoughtful design of digital learning events. In particular, Herckis (2018) noted that faculty reliance on independent problem solving and peer networks may hinder their digital literacy, and other researchers have noted recurring barriers to faculty adoption of instructional technology. Through responsive design based on careful analysis of learners and the context in which they would be learning, faculty preferences for peer learning and sociomaterial practices such as autonomy could be used as resources to build organizational capacity for delivering “suddenly online” learning. The institute demonstrated that faculty preferences for peer support, expectation of autonomy, and local practices of reflection can be leveraged through well-designed professional development to foster meaningful learning consistent with a holistic view of digital literacy.

Read within the immediate implications of the COVID-19 pandemic, the “suddenly online” institute and the responses of its participants underscore the abilities of faculty as course designers (Bennett et al., 2017). Built on the fundamental premise that faculty are capable of using sophisticated instructional design techniques, the institute gave faculty participants valuable decision-making tools

for selecting suitable technologies in conjunction with instructional design principles. Participants' enthusiasm for developing eLearning literacy in such challenging conditions is noteworthy amid industry-wide discourse regarding the future of instruction and inevitable organizational decisions about workforce planning. While institutions may be tempted to assume that team-based course design by instructional designers, multimedia specialists, faculty subject matter experts, learning experience designers, and instructional technologists is the only feasible way to create learning opportunities in the post-COVID era, faculty capacities for rising to meet complex design challenges and building necessary eLearning literacy should not be underestimated. Instead, they should be cultivated through responsive, well-designed professional development.

Postscript

The four months since the writing of this article in June have generated widespread and varied institutional responses to help faculty develop the digital literacy needed to teach in new, often complex, course modalities. The need for faculty eLearning literacy only increased

with institutions' delivery of individual courses with flexible options for students to engage in synchronous online, asynchronous online, and in-person learning to accommodate physical distancing, reduced classroom density, international travel limitations, and community health protocols. Notable examples of faculty support have drawn on organizational strengths consonant with calls for an ecological approach to professional development and have affirmed the social and material foundations of eLearning literacy (Johnson et al., 2020). Some institutions have used faculty peer feedback to complement required asynchronous online training designed by digital learning staff. Others have foregrounded faculty peer learning, using faculty learning communities supported by institutional staff to reach 90% of faculty (Kita, 2020; Walker, 2020). Attention to faculty preferences for peer learning exemplifies fundamental principles of instructional design, including learner analysis and analysis of the learning context. Such professional development also affirms how faculty preferences previously conceived as hindrances to digital literacy can be harnessed as sociomaterial assets in thoughtfully designed digital learning events.

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Appendix
 Program Evaluation and Research Survey

1. Please rate the institute on each dimension below:

	Unacceptable	Poor	Average	Good	Excellent
Overall quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Technology used	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of instruction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of information and resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. How did these factors impact your learning in a fully online learning environment during the institute?

	Significant negative impact on your learning	Moderate negative impact	Modest negative impact	Modest positive impact	Moderate positive impact	Significant positive impact on your learning
The way the institute materials were organized	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Opportunity to revisit materials freely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stipend	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feeling accountable for progress in front of peers or facilitator	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Having a dedicated digital space for cohort members to voice ideas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feedback from peers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feedback from facilitator	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cohort-based schedule	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. Please elaborate on how one of the factors above impacted your learning:

4. How did these factors impact your learning in a fully online learning environment during the institute?

	Significant negative impact on your learning	Moderate negative impact	Modest negative impact	Modest positive impact	Moderate positive impact	Significant positive impact on your learning
Your motivation to learn new techniques and tools	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your belief in your ability to learn online	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your ability to regulate your own learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your ability to manage your time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The extent of your previous experience as an online learner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The extent to which you felt like part of a learning community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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5. Please elaborate on how one of the factors above impacted your learning:
6. We were unexpectedly thrust into an online learning environment much like our students this year. How has your experience as a learner in this situation given you insights you can use to support students in such a situation?
7. How has your awareness of or ability to use technology tools for instruction changed as a result of participating in this institute?
8. Today, what are your 3 most prominent takeaways from this institute?
9. What suggestions do you have for retaining or altering features of this institute when it is offered in the future?
10. Please use this space to share any other feedback not specifically addressed above.
11. I consent to participate in the research study and have my responses included in the research study.
 - Yes
 - No
12. If you are willing to participate in the brief follow-up interview, please let the facilitator of the institute know separately after submitting this form so your answers remain anonymous.

Suddenly Online Professional Development Pedagogy: End-of-Semester Showcasing in GameJolt and Animal Crossing: New Horizons

Article Info	Abstract
<p data-bbox="256 695 553 835">Christopher W. Totten, M.Arch. Kent State University Tuscarawas</p> <p data-bbox="203 1129 602 1293">Keywords: Games in the Classroom, Digital Exhibitions, Social Media, Game Design, Community Engagement, Game Development, Showcase, Suddenly Online</p>	<p data-bbox="667 663 1425 961">The cancellation of the Spring showcase for the Game Prototyping and Animation and Game Design Senior Capstone courses at Kent State University fundamentally changed these courses' pedagogy. This showcase is an opportunity for students to practice vital professional practice skills, such as displaying and promoting work to audiences, with instructors grading students on how they manage these tasks. "Suddenly-online" meant potentially losing both practice and assessment in courses that otherwise emphasize professional development.</p> <p data-bbox="667 982 1425 1276">This article tells how these courses adapted to their new all-digital reality through platform case studies and industry best-practices for marketing and event organization. Students and faculty organized BlatherCade, an online game event that used GameJolt, a digital marketplace for independent games, and the Nintendo Switch game <i>Animal Crossing: New Horizons</i>. This article provides a post-mortem of the event, highlighting challenges and successes of working with these platforms, and suggests best-practices for future work in this area.</p>

Totten, C. W. (2020). Suddenly online professional development pedagogy: End-of-semester showcasing in gamejolt and animal crossing: New Horizons. *Journal of Literacy and Technology*, 21 (3), 82-101.

Kent State University's Animation Game Design (AGD) program serves two hundred eighty-three students in two concentrations, Animation and Game Design, with all classes being offered at Kent State's Kent, Stark, and Tuscarawas campuses. Students in the Animation concentration study the history, concepts, and methods of 2-dimensional (2D) and 3-dimensional (3D) animation; as well as motion graphics, which is the making of animated logos, and visual effects. Students in the Game Design concentration study the history, concepts, and methods of non-digital and digital game production, as well as the role that games and interactivity have in society. Students in these concentrations each take a core set of classes, which cover topics shared between the two such as 3D modeling and animation, storytelling, and media history. Vital to both concentrations is group critique and showcases, events where student work is displayed publicly and given feedback so that students might use the lessons learned from a project in their future works. These critiques and showcases occur both during in-class presentations and via public events, which include yearly Fall art show and the end-of-semester showcases in the Fall and Spring.

PEDAGOGY

Two particular courses for upper-level students (third and fourth year), the Special Topics: Game Prototyping course and the Senior Capstone course, make these events a vital part of their pedagogy. These courses are patterned after courses in the arts and in architecture, themselves descendants of the introductory *Vorkurs* course at the famous Bauhaus school of design (Lerner, 2005). These courses incorporate free exploration of materials and tools rather than directed tutorials into their pedagogy (Prager, 2015). The end of semester showcase is an important part of many studio-art-styled curricula, from the commercial and fine arts to new media disciplines such as game design. In

this format, students put work on view in publicly accessible spaces for audience members and faculty to appreciate; in the case of games and animation, they also mimic film festivals, museum events, and conventions where professionals promote their work, an important part of professional practice (figure 1) (Dreskin, 2015). These events lastly provide an emotional release: a celebration of the end of the semester and the work accomplished by students. These environments allow students to practice showcasing without the intense pressures that come with professional events. As such, instructors grade students not only for the completeness of their animations and games against a project rubric, but also on how they compose their booth space. This includes criteria such as how the students interact with visitors, and how they use the event as part of a larger marketing strategy (figure 2).



Figure 1 *The Smithsonian American Art Museum (SAAM) Arcade. This is an example of the types of exhibitions that Kent's end-of-semester showcases try to mimic. Photo credit: Bruce Guthrie, Smithsonian American Art Museum.*

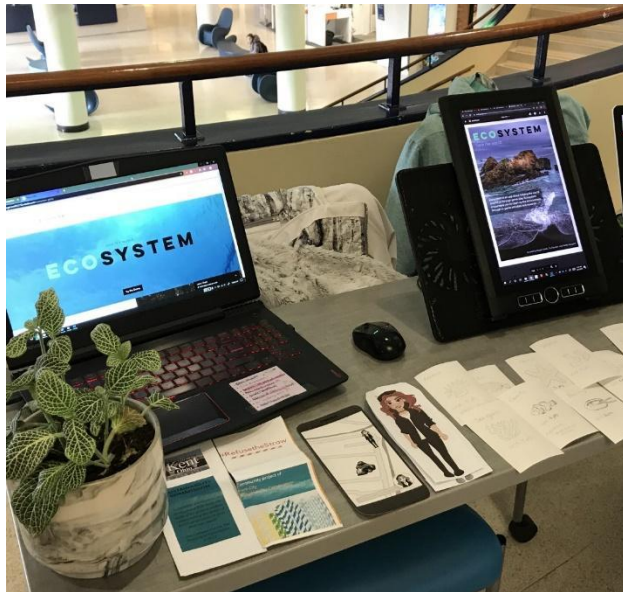


Figure 2 A student booth from the Fall 2019 Games for Education class. The students who created this game, which guides players towards environmentally friendly habits, decorated their booth thematically and included concept art and artifacts from their research.

The Switch to Virtual Events

The importance of this event and those like it is why the “suddenly online” environment of the Spring 2020 semester, during which many schools went to completely online instruction in response to the COVID-19 pandemic, posed a challenge for students’ professional development. Gone was not only a cathartic celebration of the semester’s end, but also major parts of students’ skill-building and how the course was evaluated. One option would have been to excuse students from this element of the course, but that was an unpopular choice. It was felt that students from the socially distant semester should not lose out on professional development opportunities for something that was out of their control. Faculty, aware through social media of ongoing efforts at other institutions

(metasynthe, 2020) to move their own showcases online, saw an alternate solution in holding an online event at which the students could show their work.

The digital media industry has no shortage of tools for showing works through virtual and online interfaces, and many were being adopted by academic programs as a means to hold their own programs’ showcases. Many programs utilized streaming platforms such as Twitch – a social media site that allows users to broadcast live footage of video games – to show student artworks (NYUGameCenter, 2020). Others, such as Rensselaer Polytechnic Institute (RPI)’s Games and Simulation Arts and Sciences program held their showcase, called GameFest, through the virtual reality program Sansar (RPI, 2020), which allowed users to socialize in a 3D environment and watch videos of the students’ work.

Museums and other cultural institutions were taking their operations online as well. The British Library created a virtual tour through the Bitsy game engine, a program that lets users make simple retro game styled environments that multiple users can access at one time (“The British Library launches unique take on virtual tour,” 2020). The Pittsburgh-based LIKELIKE gallery and arcade created an online gallery, LIKELIKE Online, that allowed multiple users to view the games on display at one time and interact with one another (Robertson, 2020). Rather than show videos, LIKELIKE Online allows visitors to directly access the sites where its digital artworks might be downloaded and was released open source so that it might be used by other institutions and galleries (Pedercini, 2020). The Monterey Bay Aquarium alternatively used an existing video game to connect to patrons: *Animal Crossing: New Horizons*, a Nintendo Switch

game released during the early part of the COVID-19 lockdown in the United States. Monterey Bay Aquarium staff gave virtual tours of *Animal Crossing's* in-game aquarium (Treese, 2020), telling viewers about the real-life animals depicted within. Observing these ongoing efforts as case studies, the Kent State faculty set out to find a solution that would fit their own spring semester showcase and potential future exhibitions.

Virtual Event Platform Case Studies

Platforms were evaluated on a basis of accessibility, ease of use for the organizers, public appeal, accessibility for audiences, and whether the students' work could be accessed from within the platform. These platforms were also evaluated on whether they would provide opportunities to transition the marketing and showcasing pedagogy of these classes from real-world event-based promotion to a pedagogy that furthered students' literacy with online social media promotion.

Faculty also wished to maximize their use of digital platforms by using them to create positive creative communities. While finding a solution to their suddenly online context was first priority, faculty identified other opportunities for these digital platforms to facilitate collaboration (Marlatt, 2018). Digital platforms empower students to contribute meaningfully to digital spaces, transform meanings of works, or collaborate via social functions (Pigozzi, 2020). The concept of "hanging out, messing around, and geeking out" or HOMAGO (Ito, Baumer, Brittanti, and Cody, 2019) was of

particular interest, as digital social and play spaces are built to facilitate meaningful interactions between players, which game designers call "emergent behaviors" (Salen and Zimmerman, 2004). These emergent behaviors are a key feature of many digital games and positive social behaviors among players may be fostered by building social structures within online communities devoted to the games (McGonigal, 2010; Topo, 2015.)

With these factors in mind, the platforms chosen for evaluation were the Habboon social media platform, the 3D art gallery online game *Occupy Whitewalls*, LIKELIKE Online, and *Animal Crossing: New Horizons*. The faculty also considered strategies which used multiple platforms at one time, such as New York University's (NYU) use of Habboon for gatherings and Twitch to show student works.

Habboon

Habboon is a website where users manage and explore virtual "hotels" where they can chat with other users. The interface runs within a web browser on the browser's Adobe Flash Player plugin and shows users' pixel-art-styled avatars in an axonometric view (figure 3.) Players are able to create and customize their own rooms within the hotel from hundreds of customization options including wall and floor styles, furniture, plants, and even creatures. Users are given access to one another's rooms either by having their rooms posted publicly (which would allow any user to visit) or by exchanging codes for private rooms.



Figure 3 A hotel lobby in Habboon, showing multiple active and idle user avatars.

Habboon's main advantages are its customization options and existing infrastructure – event organizers can rely on the existing features of the website to hold their events. Likewise, the site has an appealing art style which would have a thematic fit with the game development courses involved with the Kent State showcase. During the faculty's experimentation creating their own room within Habboon, they felt that the customization options were simple enough that a gallery could be made within a few days by an experienced computer user. For this reason, faculty felt that Habboon could be a good tool for exploring the HOMAGO concept, where students could create and modify spaces as they saw fit in response to ideas from their areas of study.

Despite this ease of use for organizers, the site was felt to be inadequate for the showcase based on several factors. The first was the site's small user-base. During tests, faculty observed only six hundred to eight hundred users online at any given time. Compared to a site like Twitch, which reported an average of 1.44 million

concurrent viewers as of March 2020 (Iqbal, 2020), this is a much smaller potential audience. Likewise, access to the site required users to enter user information, build a profile, and have Adobe Flash Player installed, which is increasingly unsupported by web browsers. The site could be useful for engaging the students directly, but held little promise for introducing the public to the students' works. Lastly, there were no observed options for accessing student works from within Habboon. This meant that it would be of little use as part of a broader demonstration of how to market digital media works.

Occupy White Walls

Occupy White Walls is a 3D massively multiplayer online game in which players can build their own art galleries from a collection of over two-thousand architectural assets and fill them with art for other players to see and comment on (figure 4). The game is currently in an Alpha (pre-release) state and is available for free on the Steam digital game marketplace. The game includes a collection of over six-thousand artworks including eighteenth and nineteenth century

art, as well as contemporary works (StikiPixels, 2018b). The game also includes an artificial intelligence (AI) named DAISY that learns players' taste in art and makes recommendations for additions to their collections based on common elements. The

AI does not distinguish between well-known "canonical" works and lesser known ones. Art is acquired through an in-game currency, called Pixels, given to players as their galleries attract visitors. (StikiPixels, 2018a)



Figure 4 A screenshot of *Occupy White Walls*, showing a user-made gallery. Image source: *Occupy White Walls Player Galleries*: <https://www.oww.io/?pgid=jcrs1txj-14e93374-4586-412f-a2c3-a6448e246311>

Of the platforms evaluated, *Occupy White Walls* was the most graphically sophisticated, including realistic 3D rendering and an impressive selection of pre-made architectural and artwork assets. It featured a simple gallery-building interface, making it highly usable by organizers. However, all users – including potential organizers and visitors to the showcase – had to sign up for a user account and sit through a tutorial on how to use the software that could not be skipped. The game also required a twelve-gigabyte download, adding to concerns about audience and student accessibility for those with low-powered computers. Most disqualifying of

all was the fact that user-created artworks could not be uploaded in the current Alpha version: the developers have said that this is a priority when the platform reaches the Beta stage. While the platform has great potential as a tool democratizing the act of art curation, in its current state it was impractical for Kent State's Animation and Game showcase.

LIKELIKE Online

LIKELIKE Online is the creation of Paolo Pedercini, one of the founders of the LIKELIKE Arcade in Pittsburgh, PA, a "neo-arcade/playful arts gallery" specializing in showcasing independent and

experimental games and other digital artworks (figure 5) (LIKELIKE, 2020). It was built as a reaction to the COVID-19 crisis and is meant to be a means to keep the gallery active while the public cannot visit the gallery in-person. This platform is unique among those cited as it was built both as a specific reaction to the “suddenly

online” situation that many institutions found themselves in and for the purpose of showcasing “new media” works such as computer-generated animations, online multimedia artworks, and games.



Figure 5 Screenshots of LIKELIKE Online, showing multiple users visiting and chatting within the online space. Image source: <https://www.molleindustria.org/blog/LIKELIKE-online/>

LIKELIKE Online is a small application, written in Javascript for web browsers, that can be embedded within a website and visited on multiple types of devices from a smartphone to a desktop computer. To visit, someone needs only to reach the site itself, type in the name they wish to go by as they explore the gallery, and select an avatar from one of many simple pixel characters; no permanent accounts are created or personal information collected. Visitors can chat via a small text window at the bottom of the interface or walk up to artworks and access them via hyperlink. These links open new browser tabs or windows showing the work’s web

page, often at a site where the work can be viewed, downloaded, or played. The tool has been offered by the creators as an open source tool via the development repository websites GitHub and Glitch, able to be used by other galleries and users for creating their own online showcases (Pedercini, 2020).

LIKELIKE Online is a truly remarkable tool that has garnered attention from both writers (Robertson, 2020) and museum curators. In terms of visitor accessibility and access to games, it had many of the features that the Kent State Animation and Games faculty desired for an online platform for their showcase. Though

students could not easily modify the space as they occupied it, they would be easily able to visit it and share it with friends and relatives. However, the need to “hard code” any customizations, or specify aspects of the program directly within its code, made using it a significantly larger project than the

faculty were able to take on during the brief period between shutting down and the Spring 2020 showcase. The tool impressed nonetheless and will be used to make an online version of the yearly Fall Art Show (figure 6.)

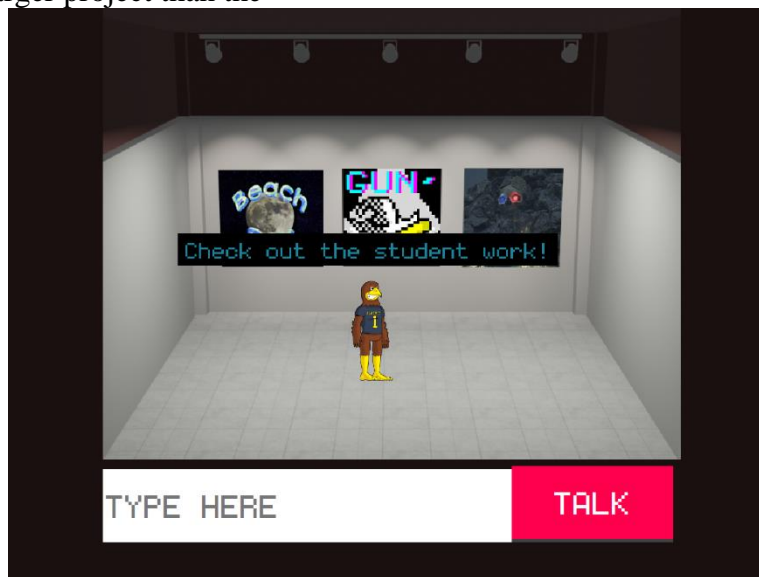


Figure 6 *A proof of concept prototype of Kent State’s implementation of LIKELIKE Online. Some stakeholders were concerned that the pixel art style would put off casual observers more interested in state-of-the-art graphics, so a version with higher resolution art was made. All art here is a stand-in and would be made more sophisticated in the final version.*

Animal Crossing: New Horizons

The final platform evaluated was *Animal Crossing: New Horizons*, a commercial game published by Nintendo for their Nintendo Switch game console. *New Horizons* is the latest game in the *Animal Crossing* series, in which the player is a human who lives in a village inhabited by anthropomorphic animals and which began with the 2001 game *Animal Crossing* for the Nintendo GameCube console. Gameplay in *Animal Crossing* is above all an open-ended

social simulation where players can perform various activities in their towns such as fishing, gardening, catching bugs, and befriending other villagers. Most important for this article are the ability for players to visit one another’s villages: a feature facilitated by the Nintendo Switch’s online capabilities in *New Horizons*, and the player’s ability to customize their village with both pre-made and player-made decorative objects (figure 7).

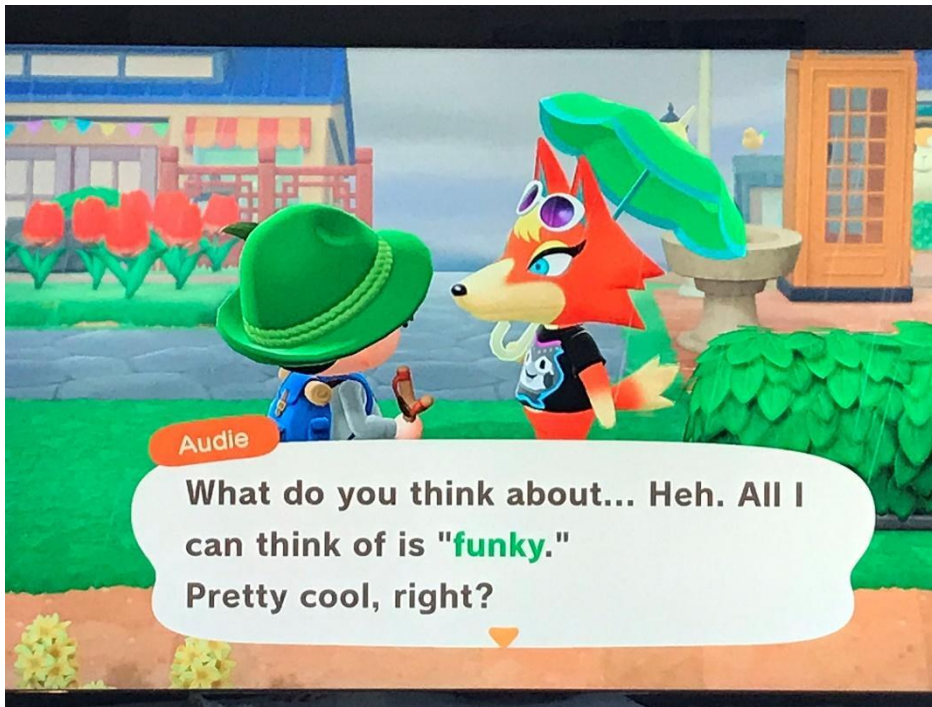


Figure 7 A screenshot of *Animal Crossing: New Horizons* on the Nintendo Switch. The player is talking to a villager among the town square they have built with in-game materials and objects.

Players have used this ability not only to create thematic landscapes and or gardens, but also art installations. Installation artist Shing Yin Khor has recreated several famous artworks within the game, including Marina Abramović's performance piece, *The Artist is Present* (Cascone, 2020). Likewise, Marie Foulston – curator of the *Design/Play/Disrupt* exhibition at the Victoria and Albert Museum in London – recreated Chris Burden's *Urban Light* installation in her *New Horizons* village (Tigershungry, 2020a.) The game also has an in-game museum curated by an owl named Blathers which showcases fish, insects (Blathers hates these but displays them anyway), fossils, and classic artworks that the player finds as they explore their villages. While Blathers' museum is not customizable – it merely records pre-made creatures and objects that the player has found – users have found creative ways to use the museum

or supplement it, such as the aforementioned guided tours from the Monterey Bay Aquarium or by turning their houses (fully customizable spaces) into independent galleries (Tigershungry, 2020b).

In terms of ease of use for organizers, *Animal Crossing: New Horizons* had perhaps the easiest-to-use interface, symptomatic of its role as a commercial game made for mass audience-consumption. Students' full animations or games could not be shown in it or even linked from it, but students would be able to create art representing their works via an in-game paint tool. This art could be displayed on canvases or on in-game clothing. Art could also be shared as QR codes through a smartphone app that would load the images into a user's copy of the game, and fans had created tools for translating photos into QR codes that could be read by the game (Lee, 2020).

This customization was not as bespoke to the needs of showing games as LIKELIKE Online, but *Animal Crossing's* key advantages were its ease of use and its massive user base. The game released on March 20, 2020 – several days into many US States' COVID-19 shutdowns. In this way, a game about living a peaceful, carefree life of fishing, bug-catching, and making animal friends was perfectly timed: it sold 11.7 million units in its first eleven days on the market (Nintendo, 2020) and was called the “game for the coronavirus moment.” (Khan, 2020) This massive user-base translated into millions of potential visitors to see a digital showcase of the students' works and a number of popular social media hashtags with which the event could be promoted to those potential visitors. Faculty felt that this platform best allowed students to enact HOMAGO, as it was an easy place to gather not only with their classmates, but also potentially with members of the media arts industry that they hoped to attract with the showcase. They could then engage in online networking around the artwork that they had made and potentially find creative opportunities with this community outside of the event.

Even if a student could not themselves attend the showcase because they either did not own a Switch or *Animal Crossing* itself, they could participate in the promotion of the event with hashtags and links. This helped transfer one of the professional development opportunities of the in-person event, the booth management and audience engagement, to an online environment where students would participate in the event's social media management. Given these factors, *Animal Crossing* was the platform of choice for the AGD Game Prototyping and Senior Capstone end of semester showcase.

BUILDING THE BLATHERCADE

After choosing *Animal Crossing* as the showcase's platform, the next step was to create a name for the event. Any name had to be short and simple to turn into a social media hashtag to accommodate the class's new social media-based professional development goals. The faculty had a history of working with museums and other cultural institutions to organize video game showcases such as the SAAM Arcade (Totten, 2019) and GameFest Akron (formerly the Open World Arcade) at the Akron Art Museum (“Akron Art Museum to continue Juried Game Design Showcase, GameFest Akron,” 2020), so it was decided to build the event around Blathers' museum and call the event “BlatherCade.”

The outcome of both the Game Prototyping and Senior Capstone courses were digital media projects such as games and animations that, as stated previously, were shown during the end-of-semester showcase. At the onset of the remote learning period and before *Animal Crossing* was chosen as a showcase platform, faculty had already changed requirements for the courses so that project check-ins, typically handled through weekly classroom meetings with each student group, could be handled online. Students now had to build pages for their projects on the digital market site, GameJolt, which allows creators to post blog posts about making their project. To align with student privacy laws, these pages could be set to a “private” mode, where only those with a specific link to the page could see it; many students regardless opted to have their pages publicly viewable. The faculty also created a “jam” on the site as a means of keeping track of the projects: jams are events where media works such as games or animations are made in a limited time period, similar to a hackathon.

GameJolt provides tools for organizing these events and linking game pages to the jam, which became a portal with which faculty could view all of the projects at once. Once their projects were posted, students were required to do register their projects for the jam and post weekly updates. The topics of these updates were open-ended, with faculty

advising students that consistently showing progress through new artwork, sound, screenshots, or text updates was a good way to maintain audience engagement. Once BlatherCade was established, branding for the jam page was updated so that it could direct visitors to the students' work (figure 8).

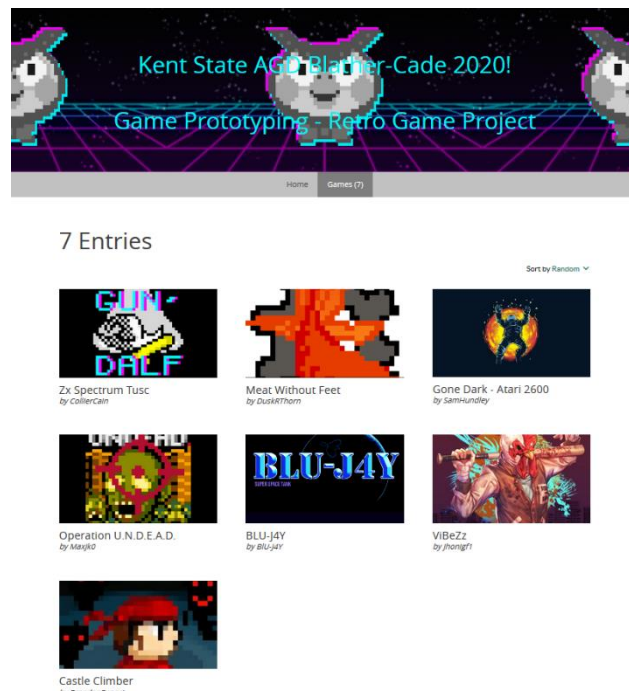


Figure 8 The BlatherCade jam page for the Kent State Game Prototyping course. Students were required to register their projects for the jam event, which allowed faculty to access the students' project pages from one place. Students were required to post weekly updates as a means of building the skill of engaging audiences regularly.

In addition to the organizational advantages mentioned above, GameJolt offered a way to circumvent *Animal Crossing*'s weaknesses: it could be a place where audiences could access the students' projects. Through GameJolt's own social media tools that let visitors follow creators, share links to one another's projects, and post comments, students without a copy of *Animal Crossing* could also engage.

Due to its popularity and place in the COVID lockdown zeitgeist, *Animal Crossing: New Horizons* offered a number of opportunities for promoting the event through in-game factors. Promotion would therefore follow two strategic paths: one would appeal to professional audiences interested in supporting student designers and the other would be to promote to a broader audience with gameplay-based

incentives. For example, the event was announced on social media by replicating the daily “announcements” that in-game character Tom Nook makes when players sign into the game (figure 9.) These posts performed well and attracted the support of

industry members who were also playing *Animal Crossing*: in-game items to help customize the showcase space, such as VR goggles and arcade game machines, were “donated” to the event through the game’s gift-giving system.

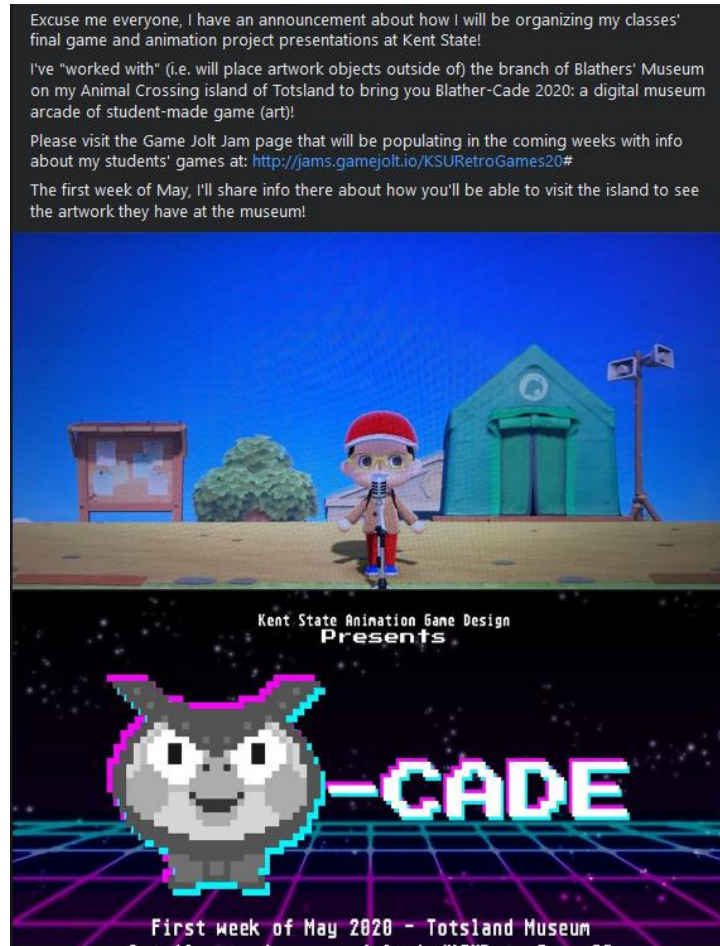


Figure 9 The social media post announcing *BlatherCade*, which used popular imagery from the game as a means of highlighting the event.

BlatherCade required only one new assignment for students: to submit a 32-pixel by 32-pixel piece of artwork that could be used to represent their project inside *Animal Crossing* via the custom art tool. This avatar would be displayed outside of the museum in the same way that games are placed in

museum atria and lobbies at events like SAAM Arcade. Faculty, who were playing the game for leisure anyway, made sure to hit specific in-game benchmarks so that their village would be a more enticing place to visit: rare creatures such as the Sturgeon, which disappeared from players’ ecosystems

at the end of March, were caught and added to the museum so they could become attractions for visitors, for example.

In some ways, the Blathercade final showcase – meant to emulate the way that creators engage audiences at in-person events – became a social media campaign. Here, students could learn how creators engage audiences online through GameJolt, Twitter, and other platforms. GameJolt and *Animal Crossing* could not complete all of the goals of the showcase alone. Together they formed a toolbox that created both community and a popular place to hang out and celebrate the students' work. As with Marlatt's use of the TodaysMeet platform to facilitate literary discussion (Marlatt, 2019) and Pigozzi's use of blogs to encourage social creative writing (Pigozzi, 2020), sites like GameJolt allow creators to engage one another's works in meaningful and constructive ways. Since GameJolt is otherwise a digital marketplace where professional creators can distribute their works, contributing on this site added an additional feeling of "real world" agency as students created content for their pages and commented on others' works. *Animal Crossing*, on the other hand, formed a space rich with opportunities for students to customize the semiotic world of the game and its museum (Katz and Wallace, 2019) with their own works. They collaborated in this effort with industry members who added their own semiotic touches to the event via donations. As we will see, bringing everything together in a limited-time social media-driven event will provide meaningful

emergent interactions between student makers and the industry community.

BLATHERCADE OPENS

BlatherCade took place from May 4th through the 8th, corresponding with Kent State's finals week and the deadline for students to post the final versions of their projects to GameJolt (figure 10.) Online connections to the faculty village where BlatherCade was held were open between 10 AM and 2 PM US Eastern time. Connection was accomplished by connecting the game to the internet and distributing an access code, called a "Dodo Code", that let players "fly" to another's islands. All of this is accomplished via the game's internet access menu, which is represented in-game as an airport operated by dodo birds. Each day's access code was posted to the GameJolt jam page for each class, requiring visitors to visit the pages where the student games were to engage with the *Animal Crossing* portion of the event. Both students and faculty could then share the link to the page with the codes using popular *Animal Crossing*-related hashtags such as #AnimalCrossing and #DodoCodes. GameJolt even assisted with promotion of the event, sharing links to the jam page and student games on their social media and promoting what in-game events were happening that day in the village where BlatherCade was being held (figure 11). In-game events unrelated to the BlatherCade, but which could be used to make the island enticing to visitors, included visits from special vendors who sold in-game items (such as Sahara, a camel who sells rare home décor items) or the presence of rare bugs and fish to catch.



Figure 10 An image of BlatherCade taken right before opening the game's internet connection on the first day of the event.



Figure 11 GameJolt assisted in the social media campaign for the event, highlighting the event, the student projects, and in-game events that would entice Animal Crossing fans to visit the village where BlatherCade was being held.

Animal Crossing limits the number of visitors to a village to eight players at one time. Regardless of this restriction, the event managed to attract seventy-three visitors during the time that it was open (Totten,

2020). These visitors ranged from random visitors attracted via the #DodoCode hashtag to game developers, academics, the students themselves, and their friends. (figure 12.) Students had the opportunity to network

with several of the developers during the event via the in-game chat function. Social media posts were made throughout the week to promote the event, with the most popular

of these earning 8,097 impressions (times that a post is seen) and 678 interactions (times that a post is clicked.)



Figure 12 A faculty member and two students – the event had a party-like atmosphere reminiscent of traditional end-of-semester celebrations.

Visitors attracted via *Animal Crossing* hashtags and not familiar with the purpose of the event would regularly stop at the arcade to ask what was going on and reacted to the answer with positivity and encouragement for the students (figure 13). Faculty also designed an in-game t-shirt for the event, which could be accessed by visiting the island's clothing shop (figure 14), as a souvenir for visitors. Associating their projects with the event increased traffic to students' project pages. Student groups that actively promoted their game during BlatherCade with associated #BlatherCade

and #AnimalCrossing hashtags received between eighty and one hundred views each as opposed to student groups who simply posted their projects, which garnered between fifteen to twenty-five views. One Senior Capstone project, a horror game called *Rose Willow*, was even featured and given a positive review by a game-focused YouTube channel (Rentner, 2020). This level of engagement was thanks to faculty and student efforts with promotion, as well as outreach done on sites like GameJolt and to members of the game industry.



Figure 13 *Random visitors offered encouragement for the students, and student visitors (like the graduating senior pictured here) could see their work's impact beyond the classroom.*



Figure 14 Organizers created in-game clothing to offer visitors as a souvenir that was available in the island's clothing store.

FINDINGS AND FUTURE WORK

Despite being a quickly organized event, BlatherCade was a success. It offered not only a cathartic end to the semester like those found in in-person showcases, but also added social media management to the professional development skills that students learned during the semester. Despite the initial unpleasantness of migrating content to an online setting, "suddenly online" also led to some innovations that will be carried into future in-person teaching and which might be useful to other instructors. Using GameJolt's jam function and requiring students to maintain project blogs was beneficial both from an information organization standpoint and as a piece of classroom instruction. Faculty could view and evaluate student projects from one location rather than trying to manage multiple links e-mailed by students, as was

the previous method. The students' blogs were a great ancillary for in-class check-ins, helped students understand the value of online community engagement and marketing, and encouraged community engagement. Jumping on the popularity of *Animal Crossing* showed students how engaging with trends could help them build interest for their own projects if done in a novel and engaging way. As a massively popular game released not long before the showcase, *Animal Crossing* also provided an accessible social space for both collaboration and networking between students and members of game industry. Future iterations of these courses and others like them will be utilizing tools like GameJolt Jams, progress blogs, and awareness of social media trends to develop students' social media literacy. It is believed that similar online and social media tools might be useful in other areas, and the

program is discussing its findings with other units at Kent State for potential collaboration.

On the other hand, *Animal Crossing* showed that it had some limitations as an event organization tool. As stated previously, villages could only have eight visitors at one time, which restricted the game's usefulness for events much bigger than a class showcase. Nintendo's notoriously glitchy online infrastructure added to the frustration. On some days, the event's internet connection had to be restarted several times. The game generates a new Dodo Code with each new connection, which required faculty to update the classes' GameJolt pages with the new codes frequently. The pairing of *Animal Crossing* with GameJolt was ideal for the event's core audience of technology-savvy students, gamers, and industry members, but would likely be confusing for more casual audiences. Having one place to both socialize and see the work, as is possible in LIKELIKE Online, would be ideal. For this reason, the Kent State AGD program has moved on to creating events in the LIKELIKE Online platform, including their Fall 2020 art show and building an online gallery space for the Akron Art Museum in Akron, Ohio.

Regardless of the limitations and short preparation time, events like BlatherCade show how community engagement may be built into curriculum. Skills like this are important for teaching new media artists what to do after they have actually created their projects; activities such as public releasing, marketing, and building an audience are just as vital as the creation of the work itself. Beyond the classroom, BlatherCade shows how factors of ease of use for the organizers, public appeal, accessibility for audiences, and whether

works may be accessed from within a platform might help curators and event organizers form their own exciting online digital media showcases.

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