



The Phenomenon of Moving to Online/Distance Delivery as a Result of COVID-19: Exploring Initial Perceptions of Higher Education Faculty at a Rural Midwestern University

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OPEN ACCESS

Edited by:

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Reviewed by:

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Specialty section:

This article was submitted to Teacher Education, a section of the journal Frontiers in Education

Received: 15 July 2020 Accepted: 22 September 2020 Published: 05 November 2020

Citation:

Cameron-Standerford A, Menard K, Edge C, Bergh B, Shayter A, Smith K and VandenAvond L (2020) The Phenomenon of Moving to Online/Distance Delivery as a Result of COVID-19: Exploring Initial Perceptions of Higher Education Faculty at a Rural Midwestern University. Front. Educ. 5:583881. doi: 10.3389/feduc.2020.583881 The purpose of this study was to explore the initial perceptions and experiences of faculty whose classes were moved to an online/distance delivery as a result of the COVID-19 pandemic. Using mixed methods online survey methodology, the researchers sought to describe faculty perceptions relative to their response to moving all university courses online within the timeframe allotted by university leadership. Building upon this groups' previous research, which focused on the relationships among care and rigor in the online teaching/learning environment, the researchers designed survey addressed faculty perceptions and lived experiences related to supporting this transition, previous experiences with online teaching, the role of rigor and care in course design and implementation, and opportunities for demonstrating care toward colleagues. Information gleaned from the study will help to inform university leadership, instructional design support personnel, and faculty. As the long-term economic, social, and academic effects are realized across the world, the researchers anticipate significant changes in higher education.

Keywords: emergency remote teaching, online learning, care, rigor, emotional intelligence

INTRODUCTION

Transitioning to teaching in an online environment can be a challenge for faculty in higher education. On Wednesday, March 11, 2020 at 6:34 PM, faculty at a mid-sized, rural Midwestern university were notified by email that face-to-face classes scheduled for Thursday, March 12th and Friday, March 13th would be canceled; all classes would resume on Monday through distance delivery. The following was communicated with faculty:

All classes, labs, events and campus-wide meetings are canceled Thursday, March 12 and Friday, March 13. Campus will remain open. Face-to-face classes will resume in an online/distance delivery format beginning Monday, March 16 and continue through April 3. A decision concerning the rest of the semester and final exams will be made by March 30. Faculty will provide information before the first class meeting next week to let students know how course delivery will be handled (University President, personal communication, March 11, 2020).

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Less than 24 h after this directive, an existing crossdisciplinary group of online scholar-practitioners invited faculty to share their initial reactions through an institutional review board (IRB) approved survey. The purpose of this study was to explore the initial perceptions and experiences of faculty whose classes were moved to an online/distance delivery as a result of the COVID-19 pandemic.

Building upon this groups' previous research, which focused on the relationships among care and rigor in the online teaching/learning environment, the researchers designed survey questions to further explore these concepts during a time of chaos (VandenAvond et al., 2020). The survey addressed faculty (n = 83) perceptions and lived experiences related to supporting this transition, previous experiences with online teaching, the role of rigor and care in course design and implementation, and opportunities for demonstrating care toward colleagues. Information gleaned from the study documents faculty perceptions of lived experiences during a global pandemic (World Health Organization [WHO], 2020). Findings will inform university leadership, instructional design support personnel, and faculty by providing a snapshot of participants' immediate responses within the first moments of the phenomenon. This study, therefore, serves as a potential foundational data point for responding to the long-term academic, social, and economic effects of this phenomenon and contributes to the larger conversation relative to the heretofore unknown impacts to higher education as they are realized across the world.

BACKGROUND

Institutional Context

Online courses and programs have increased with widespread internet availability. In our Midwestern, United States, primarily rural region, the university has pioneered an educational access network (EAN) and established LTE towers to provide educational internet access. The university simultaneously initiated their Global Campus programs to recruit students beyond commuting distance or who otherwise may not be able to or prefer not to attend on campus (Board of Trustees, Northern Michigan University, 2018).

In 2017, the Higher Learning Commission charged the university with establishing distance learning criteria and expectations for teaching, including evaluation of online courses, ensuring consistency of online course rigor, and maintaining consistency between online and on campus sections of the same course. Following this charge, the university adopted Quality Matters as the standard for quality assurance for online design and delivery. A team of university leaders, staff, and faculty worked to create a novel, voluntary training for faculty, beginning in 2017, and developed a long-term plan for defining and gradually increasing the criteria for demonstrating rigor as defined by Quality Matters course design principles (QM Higher Education Rubric, Sixth Edition). Despite these ongoing university-wide efforts to implement standards relative to quality online design and delivery, the global pandemic necessitated the need for immediate emergency remote teaching (Hodges et al., 2020; O'Keefe et al., 2020). Thus the vast majority of faculty were unprepared to move to a distance delivery model at the time of this crisis, as exemplified by only 15% of faculty (n = 80) having participated in at least the first Quality Matters Online Teaching Fellowship Program facilitated by this university.

Research Group

As an existing long-time research group, the cross-disciplinary self-study of online teaching practices team of researchers, sought to support and challenge those who were teaching or preparing to teach online courses. The self-study inquiry group aimed to create a community of cross-disciplinary online instructors who both systematically studied their own online teaching in a supportive community while also collaborating, sharing ideas, and producing scholarship of teaching (Boyer, 1990) that could be shared with others. Our research group brought together seven faculty from the disciplines of literacy education, educational leadership, special education, nursing, developmental psychology, and behavior analysis. This group included faculty with varying levels of experience as online educators and researchers. The cross-disciplinary perspectives informed and influenced the construction of the survey and the framework from which data analysis occurred.

The morning after being notified of the transition to online/distance delivery, the research team met for a previously scheduled meeting. While working to support each other through what felt like a chaotic transition, the idea emerged that this could be an opportunity to research the phenomenon of moving to distance instruction during a global pandemic. Despite the uncertainty of the moment, the group embraced the momentum of this idea. Working together, a survey and a research proposal were constructed. Due to the institution's efficient institutional review board process, this proposal was approved through administrative review within two h of submission.

LITERATURE REVIEW

Defining Emergency Remote Teaching and Online Learning

Throughout higher education, there is concern about the inconsistent quality of online course design and course implementation. This concern aligns with Meyer (2002) argument that a widespread perception exists that the quality of online courses does not live up to the quality of on campus courses. The perception of lack of quality in online learning persists even after countless studies substantiated findings that there is no significant difference in the learning outcomes between online and face to face courses (e.g., Russell, 1999; Arbaugh, 2002; Finkelstein et al., 2005; Cavanaugh and Jacquemin, 2015; Driscoll et al., 2012). However, the hurried move to online learning in response to COVID-19 created a situation characterized by industry leaders as "emergency

remote teaching" rather than online learning (O'Keefe et al., 2020). It is important to note that there is a difference between online teaching and emergency remote teaching. Emergency remote teaching is a change in instructional delivery due to crisis circumstances, instructors may triage what is important to keep and what can be altered or eliminated (Brooks et al., 2020). Under this model, the purpose is to create temporary access to instructional opportunities rather than develop a robust online learning class (O'Keefe et al., 2020). Course development in the traditional online classroom is an intense and lengthy process and generally involves teachers and learners who have intentionally chosen this method of learning. With emergency remote teaching, time is not provided for thorough planning and teachers and learners may not be accepting of the abrupt changes to their learning environment. Bozkurt and Sharma (2020) explain that in the circumstances surrounding a pandemic, "emergency remote teaching is not an option, but an obligation (p. iii)." Thus, the classroom experience may differ significantly from the typical online learning experience.

Faculty Readiness and Responses to Emergency Remote Learning

Preparing a course to teach online takes a significant amount of time (Welker and Berardino, 2005; Davidson-Strivers, 2009; Hodges et al., 2020) and backward design planning (Wiggins and McTighe, 2012; O'Keefe et al., 2020; Wentworth Institute of Technology, n.d.). Taking the time to prepare an organized course with alignment among course objectives, content and activities involves aspects of both care and rigor (VandenAvond et al., 2020). The communication of care and rigor is possible and important in both emergency and prepared online course delivery. This study addresses care and rigor in the context of emergency remote learning due to a sudden university closure during a global pandemic.

Care

The ethics of care require an examination of stories and relationships in their context because doing so intensifies relationships thus resulting in potential new solutions to obstacles that might not have otherwise existed (Gilligan, 1982; Banks, 2004). In the context of nursing, the care dialogue approach requires that ethical issues be handled as a complex, inductive, and social process (Schuchter and Heller, 2018). Specific to the education setting, Deacon (2012) argued that "creating a context of care in a classroom creates a robust environment for student learning; it facilitates better dialogue between students and teachers and allows teachers to draw out individual students and help them achieve their potential" (p. 6).

Understanding the role of care in the classroom is helpful in both theoretical and practical ways. Specifically, care in the online classroom is demonstrated most clearly through personal attention to students: responding to emotional tones, accommodating individual differences, responding to student inquiries, checking and responding to emails, and promptly interacting with students (Dennen et al., 2007; VandenAvond et al., 2020). Because care has been found to facilitate student learning (Deacon, 2012; Rose and Adams, 2014; VandenAvond et al., 2020), educators can include these interactions to foster care, and ultimately facilitate student success, in their online classrooms.

Rigor

A single shared scholarly definition of "rigor" appears to be lacking in the literature (VandenAvond et al., 2020). Rigor may be based on academic demands (Wyatt, 2005), time and energy expended (Winston et al., 1994), cognitive expectations (Braxton, 1993), or the amount of critical thinking required (Taylor and Rendon, 1991). Graham and Essex (2001) found that the same methods faculty used to ensure academic rigor in on-campus courses applied to online courses, with the caveat that clearer expectations and directions were required for the online course. Wyse and Soneral (2018) noted differences in student perceptions of rigor based on their academic classification: introductory students defined rigor based on workload, whereas upper class students defined rigor based on cognitive demand.

The existing literature also suggests that faculty and students have different perceptions of rigor in university courses. Wyatt (2005) quantitatively found that students perceived online courses to be more academically demanding than traditional courses. In follow-up interviews, Wyatt (2005) noticed that students suggested their online courses were intentionally requiring more work in order to defray criticism that online courses are not as rigorous as traditional courses. While not specific to online courses, Draeger et al. (2013) identified the various ways that faculty and students identified elements of rigor. Faculty defined rigor as being characterized by higherorder thinking, appropriate expectations, active learning, and meaningful content (Draeger et al., 2013). Some faculty feel rigor is the "fine line between challenging and frustrating a student" (K-12 Teachers Alliance, 2014). In contrast, students define rigor as being characterized by level of difficulty, grading standards, workload, perceived relevance to future goals, and level of interest.

THEORETICAL FRAMEWORK

Narrative Research

Narrative research studies how humans experience the world both as individuals and as a collective group (Connelly and Clandinin, 1990; Gudmundsdottir, 2001). Narrative research is characterized by three basic underpinnings. First, humans use narrative to document and understand their experiences. Second, these stories are rooted in the experiences, values, and contexts of the individual. Finally, narratives are multivoiced as the individual is connected to their social context. Vygotsky (1978) explains this as "an interaction between intermental and intramental processes. The notion of intermental processes refers to the social plane, and the notion of intramental processes refers to the inner psychological plane" (Moen, 2006, p. 60) As narrative researchers, we sought to collect the lived experiences from faculty in one specific moment in time and within one social context. Narrative inquiry in educational research focuses on educational experience (Clandinin and Connelly, 2000; Clandinin, 2006). To study narrative is to study "the ways humans experience the world" (Elbaz, 1991, p. 2). People frequently recall experiences in terms of specific, narrative events, and people often recall past events as they adapt or apply strategies to new situations (Webster and Mertova, 2007). As researchers with a longitudinal interest in faculty teaching experiences in the online learning environment, we sought to understand this shared event of moving courses online from the perspectives of faculty.

Building from this narrative research perspective, we situated our study in transactional and adult learning theories as a way of representing our cross-disciplinary perspectives from education, nursing, and psychology. Epistemologically, transactional theory recognizes dynamic, ecological relationships between knower and their environments, both in what they know and how they communicate knowledge (Dewey and Bentley, 1949). This framework supported faculty researchers being active meaningmakers in a collaborative, scholarly community who could improve teaching practices, student learning, and contribute to the larger academic landscape, specifically, the university's shifting culture and expectations for online teaching.

Andragogy

Andragogy, generally defined as the scholarly approach to the learning of adults, was originally coined by Alexander Kapp in 1833 and later developed into a theory of adult education by Malcolm Knowles (Knowles et al., 1998). Andragogy includes five guiding principles: (1) self-concept - an adult learner views him/herself as a self-directed human; (2) adult learner experience - an adult learner accumulates experiences which becomes a resource for future learning; (3) readiness to learn an adult learner's readiness to learn is oriented toward the development of skills related to social roles; (4) orientation to learning - an adult learner seeks knowledge for immediate application to a problem-centered issue; and (5) motivation to learn - an adult learner is intrinsically motivated (Knowles et al., 2005). Andragogy informed researchers' perceptions and interpretation of data; faculty participants were considered adult learners who also could communicate perceptions of their learning experiences as they responded to the mandate to move classes online.

Transactional Perspectives

Transactional theory suggests that learning occurs when people consider, discuss, and inquire into problems and issues of significance to them (Dewey and Bentley, 1949; Rosenblatt, 1978/1994, 2005). Individuals not only interact but also exist in a state of transaction with their environments (including their own knowledge and experiences), sources of knowledge beyond the self, and others. According to Rosenblatt (1978/1994), as individuals read texts, they both simultaneously form the meaning of texts through their interpretations and are changed by the texts. Learning occurs both from within the learner and from shared interpretations that expand the reader's questions and insights. Building from prior research (e.g., Edge, 2011; Cameron-Standerford et al., 2013; Bergh et al., 2018; Edge and Olan, 2020), the research team viewed teaching and learning experiences, teaching practices, and teaching contexts as textlike objects. Inquiring into participants' perceptions of their experiences, can provide insights into faculty meaning-making in the context of a university event and in the broader context of a global pandemic.

MATERIALS AND METHODS

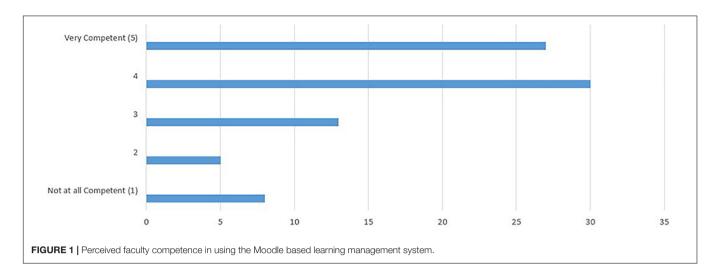
The purpose of this explanatory mixed methods study was to explore the initial perceptions and lived experiences of faculty whose classes were moved to an online/distance delivery as a result of the COVID-19 pandemic (World Health Organization [WHO], 2020). An explanatory mixed methods design is often used to explore a phenomenon (Creswell et al., 2003). IRB approval was obtained within a few h of the creation of the research proposal through an administrative review process from the mid-western United States public university where the study took place. Faculty perceptions were gathered through online survey methodology using Google Forms.

Constructing a survey instrument is an art (Synodinos, 2003). We sought to engage as many participants as possible by purposefully constructing a non-traditional survey. For example, one of the first questions on the survey asked faculty to identify their emotional response to moving classes remotely by choosing clipart representing an emotion based on the characters from the popular Disney Pixar children's movie, *Inside Out* (Docter, 2015). The survey also requested demographic information, previous experience teaching online, and competence with the learning management system. Additional open ended items addressed the concepts of care and rigor, which were of particular interest to ongoing campus developments and to the researchers' previous studies. Questions asked how faculty would communicate care and rigor to students, and how faculty might use this time of chaos to communicate care.

A convenience sample of faculty was obtained through the email listserv of the American Association of University Professors at a Midwestern United States public university. Through the email, potential participants were provided with a brief introduction to the study and asked to follow the survey link if they consented to participation. Data collection was conducted in March of 2020.

A descriptive approach was used to analyze quantitative data. Demographic data included items related to position, rank, and online teaching experience. Participants were also asked to share their emotional response to the transition to online emergency remote learning through a categorical item listing an array of potential emotional responses.

Researchers utilized phenomenological methods (Moustakas, 1994; Giorgi, 2009; Creswell, 2013) for analyzing qualitative data. Together, we read through the data to get a sense of the whole (Giorgi, 2009). In our Zoom meetings, we took turns verbally noting significant statements and key words participants used to communicate their lived experiences and making notes in a Google document. Our aim during this early phase was to gather



an initial understanding of the essence of faculty experiences, as expressed by participants, finding themes among participants to determine meaning units (Giorgi, 2009).

For each open-ended question, we developed textural descriptions of what participants explained happened. Next, we analyzed how participants described their experiences. Finally, we incorporated participant descriptions into essence statements. Below, we provide an essence statement for each open-ended question followed by an overall essence statement to describe the phenomenon of faculty perceptions and experiences having their courses moved online for emergency remote teaching during the initial impacts of COVID-19.

RESULTS

Quantitative Findings

Eighty-three faculty responded, 65% of whom were tenured fulltime faculty members. The participants were distributed among the differing ranks with 34% (n = 28) Full Professors, 18% (n = 15) Associate Professors, 22% (n = 18) Assistant Professors, and 26% (n = 22) Instructors. Sixty-eight percent of respondents had not previously taught online.

Participants were asked "At this moment, which of the following images (Joy, Fear, Anger, Disgust, Surprise, and Sadness from the characters in the movie, *Inside Out* or the option to indicate Other) best communicates how you are feeling about moving your face-to-face coursework online?" The top three responses included surprise (29.3%, n = 24), joy (12.2%, n = 10), and sadness (9.8%, n = 8).

Faculty competence in using the online Moodle based learning management system was of particular interest. A Likert scale question asked participants to rank their competence on a scale of one through five where 1 = not at all competent and 5 = very competent was utilized. The mean level of competence was 3.76 with the majority of participants (68.6%, n = 57) ranking their competence highly (4 or 5 on Likert scale). Of note, a small portion of faculty (15.7%, n = 13) reported a very low level of

competence (1 or 2 on Likert scale) in regards to the learning management system. Faculty competence is outlined in **Figure 1**.

Qualitative Findings List 10 Words

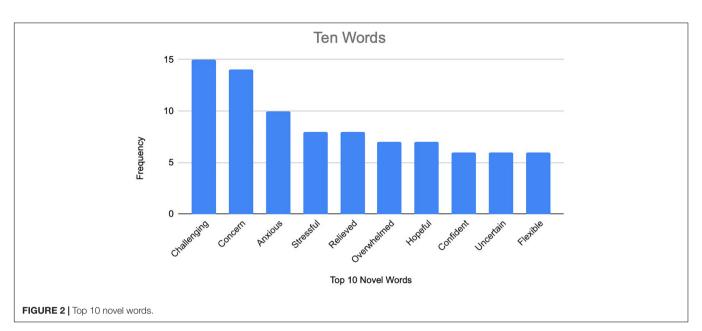
The survey posed a question to faculty in which they were asked to list ten words to describe the experience of moving their class to an online platform as a result of COVID-19. A content analysis resulted in 237 novel words/short phrases from participants (n = 78; see **Figures 2**, **3** for the most frequent words identified). Of these, 173 had an occurrence of one. Of the words most commonly indicated, *challenging* was reported 15 times while an iteration of *concern* was documented across 14 instances. *Anxious* was listed 10 times, and interestingly the opposing terms *stressful* and *relieved* were provided eight times. Initial *overwhelmed* as well as *hopeful* were described seven times. Frequency counts for repeated words were placed into a Word Cloud generator.

Faculty responses were constructed into a Word Cloud to illustrate key words across participants' responses. In a narrative framework, repetition emphasizes and can signal patterns and relationships between, as well as divergences between, individual participant's perceptions of their experiences (Bletzer, 2015). Word clouds have been used in survey research to communicate the relationship between mathematical proportions and a holistic perception (Ahearn, 2014; Bletzer, 2015). Participants' lived experiences were communicated in words, quantified by the researchers, and then qualitatively displayed as a means of representing the essence of the phenomenon (Giorgi, 2009).

Addressing Rigor

Participants were asked how they would maintain rigor during the transition from a face-to-face format to an online method of delivery. Participants, perceptions (n = 78) varied between certainty, uncertainty, frustration, and outright anger related to demonstrating course rigor when moving courses online. This question demonstrated the spread of emotions that participants were experiencing.

Those who communicated confidence and or hope addressed what they would do in terms of specific actions they were





making or planned to make. These perceptions were expressed in relation to course design elements such as course objectives, assignments, clear communication, assessment, interaction, and communicating expectations. Additionally, some faculty members identified the need for possible modifications as they prepared for moving courses online. For example, altering exam/test delivery; increasing the amount of writing assignments; encouraging student-student interaction; and requiring or encouraging attendance during synchronous classes. Some faculty members indicated through their responses the need to maintain the *status quo* by maintaining already established course objectives. Several faculty shared that rigor was not a priority concern during the time of transition. Three faculty members commented that asking about rigor at such a time was insensitive. For example, one response stated: "I am shocked by the insensitivity of this question, given that we have 4 days to prepare. How will the university demonstrate its rigor in helping faculty during this transition?"

One faculty member indicated that this was a time where prioritizing care over rigor was important and stated, "I care more about helping people feel comfortable during this time of crisis over the "rigor" of my class. It's disproportionate thinking to even be worried about rigor now when we're on the cusp of a difficult world wide crisis".

Responses also communicated that expectations of quality teaching could be lowered with this transition to distance learning. One participant stated, "In times of crises we need to accept less-than-perfect teaching experiences. The sooner we accept that, the more we can help each other". Of note, many faculty stated they did not want to overwhelm the students and make things harder just because we were transitioning to the online environment.

Chaos as Opportunity to Demonstrate Care

Participants were asked to frame their experience of responding to chaos – the mandatory movement of all face-to-face courses to online – through the lens of opportunity to demonstrate care by responding to the question: What steps have or will you take to ensure your students feel cared for during this transition to online learning? Results from 67 open-ended responses from faculty fell into two broad categories: internal states of being and external actions taken.

Internal states of being

Faculty reported the following internal states of being: being available; choosing to help and/or to act; being appreciative; being confident; being empathetic; being willing; being thoughtful; being positive; showing solidarity; being unsure; being patient; being collaborative; being aware of what most matters; being connected with others; being content yet realistic; being open; being adaptive; being an example. The following direct quotes reflect examples of this finding: "We are all in this together. Given the short timeline, we can just reassure each other that our best efforts have to suffice."

External actions

Faculty reported the following external actions taken: helping others, specific mention of a desire to support younger or less experienced faculty members; reaching out to others; assisting others with setting up online courses, identifying how to access resources for support; sharing ideas about technology and online resources; assuring students and colleagues; saying and hearing messages of encouragement; communicating with students, faculty; leading. The following quote reflects an example of this finding.

I've also passed on my willingness to have a few minor "bloopers" in front of my students (in which I adapt and remind students that new software presents a steep learning curve to everyone) in the midst of what will be an imperfect semester for everyone.

Is There Anything Else to Communicate?

The final extended answer question provided participants the opportunity to share any additional thoughts by responding to the question, *Is there anything else you would like to communicate about your lived experience of classes moving to an online/distance delivery as a result of the COVID-19 pandemic?* Although the responses were diverse and delved into multiple areas of concern, three prominent themes emerged. These themes included: Words of Encouragement, Concern about Time Allotted to Transition,

and Concern about the Learning Management System and Technology Support.

Words of encouragement

The most common response to this question related to the theme of words of encouragement. Considering the unique nature of the phenomenon, respondents used the final survey question to recognize the ability and strength of the faculty to get through the move to online/distance delivery by drawing on characteristics of the faculty collectively, the cohesive community, and the support/strength evident with both groups. Feelings of being part of a collective where they could lean on each other and unite together was evident. One example comment was:

This is a time for Wildcats to step-up and show what it means to live in the U.P. We are resilient compassionate people who have always focused on community. Now it is our time to work together to get our students through the next 6 weeks! They are our concern!

Faculty recognized that although there was a challenge set before them, they possessed the wherewithal to persevere. This would be done while striving to maintain the academic rigor of their courses while showing care for their students who were also incurring a major shift in their college experience.

DISCUSSION

Discussion of Findings

Participants in this study included faculty of all academic ranks from one mid-sized Midwestern institution of higher education. This well-distributed sample lends to the generalization of findings to other universities of similar size who experienced an abrupt move to emergency remote learning. Of this faculty group, 15.7% (n = 13) reported a very low level of competence with the Moodle-based online learning management system used at the university. In contrast, approximately 15% of faculty (n = 80) employed at this institution of higher education previously participated in at least one Quality Matters Online Teaching Fellowship Program facilitated by this university. The varying degree of expertise among faculty with necessary technology used in online/remote delivery likely impacted faculty's emotional responses to this chaotic situation and to their ability to understand how to deliver a caring yet rigorous course. When viewed from the perspective of faculty being adult learners, readiness to use technology and course management systems is an important factor for continued research and professional development.

As mentioned earlier in this paper, a single shared scholarly definition of "rigor" appears to be lacking in the literature (VandenAvond et al., 2020). Responses to items regarding rigor highlighted the lack of a consistent understanding of this concept among faculty participants. Many faculty responses communicated a clear plan to maintain strategies aimed at creating rigor in face-to-face courses or to alter assignments slightly to involve more writing. These responses closely align with the idea that rigor relates to a focus on cognitive demand rather than on increasing the workload for students (Wyse and Soneral, 2018). On the other hand, some responses indicated that maintaining rigor was no longer a priority concern and that asking a question about rigor may actually be insensitive at such a time. It is likely that differing responses from these faculty participants were related to a difference in their underlying thoughts on what rigor involves. Perhaps, this subset of faculty defines rigor more similarly to introductory students in that it relates most closely to the amount of workload within a course (Wyse and Soneral, 2018).

Overwhelmingly, elements of care were communicated throughout participant responses. Faculty shared how important they felt it was to care for students during this time and many faculty offered *caring* assistance to less experienced colleagues immediately after the announcement of the transition to emergency remote delivery. At times, faculty who communicated frustration or anger in their responses, mentioned they were seeking care during this time from both administration and colleagues.

The ability to navigate the unexpected and unknown is a challenge the world is collectively facing during COVID-19. Our research described the experiences related to the specific phenomenon of faculty being mandated to move face-to-face classes to the online environment. This change was unexpected and required faculty to quickly respond resulting in a multitude of emotions due to the pace of the change (Weberg, 2019).

Connections to Recently Published Literature

A number of authors have quickly published articles related to emergency remote teaching during a pandemic (Bozkurt and Sharma, 2020; Gares et al., 2020; Jeffery and Bauer, 2020; Osmond, 2020; Petillion and McNeil, 2020). Several key themes related to the challenges of emergency remote teaching are apparent in the literature and relate closely to the concepts in this paper.

Meaningful interaction among students, between faculty and students, and between students and course content impacts learning outcomes in all classrooms (Osmond, 2020). With emergency remote teaching, faculty were expected to revise courses very quickly and were allotted very little time to consider the development of teaching/learning activities that encourage all types of interaction. Individual faculty members' previous knowledge of such teaching/learning practices likely impacted their ability to create content that deliberately encouraged all forms of interaction under such urgent circumstances.

Relationships among students and faculty were vulnerable during this unexpected change. Gares et al. (2020) described an institution of higher education where faculty/student relationships were of high priority and noted the benefit of having already formed relationships with students before the campus was closed. As many institutions of higher education continue to utilize remote teaching months into the pandemic, students are faced with engaging in experiences where they have not had the opportunity to first develop relationships with faculty. The outcomes of these ongoing remote learning experiences may differ from those where face-to-face teaching allowed the development of faculty/student relationships prior to moving to a remote method of delivery.

Many schools implemented academic accommodations (Gares et al., 2020; Osmond, 2020) such as offering a credit/no credit grading option rather than using letter grades. This action is a positive step toward demonstrating empathy regarding the student experience and in turn communicating care. Other actions documented in published literature which communicate care during this time include; flexible deadlines, frequent faculty check ins with students, and opportunities for students to have open discussions with faculty (Gares et al., 2020). The impact of such academic accommodations on the sense of rigor in the classroom has been a concern for some faculty (Osmond, 2020).

Future Research

Future research should endeavor to determine methods for universities to establish methods of care for both faculty and students who are experiencing the stress of crises, such as a global pandemic. There are several therapeutic approaches that have shown success within the area of employee stress and burnout as well as student success that might offer guidance in this area. For example, Stress Management Interventions (SMIs) are typically found within Health Promotion Programs that strive to increase health and wellness of staff (HPPs; Ivancevich et al., 1990). Such interventions generally attempt to reduce effects of stressors as well as the negative psychological and physiological outcomes correlated to stress (see van der Klink et al., 2001).

Faculty responses to the move to emergency remote teaching varied greatly. The research team inferred that an individual's emotional intelligence may have impacted their response to the pandemic. Emotional intelligence describes the "capacity, skill, or self-perceived ability to identify, assess, and manage the emotions of one's self, of others, and of groups" (Serrat, 2017, p. 330). As a behavioral model, emotional intelligence includes five domains that work together to create personal and social competencies. These five domains include: self-awareness, self-regulation, selfmotivation, social awareness, and social skills. Relative to Adult Learning Theory (Knowles et al., 2005) and survey results, those with strong self-regulation, self-motivation, and social awareness skills appear to have been better equipped to manage times of chaos. Specifically, competence in the domain of self-regulation can be described as self-control during times of pressure and the ability to adapt to rapid change while seeking innovative solutions. In tandem, those who demonstrate competencies in self-motivation seek to achieve by reducing uncertainty through information gathering, committing to the mission of the larger group, demonstrating initiative, and displaying optimism despite obstacles, setbacks, and fear of the unknown. Findings from this study indicated those whose responses demonstrated strong social awareness skills were also able to respond to others with empathy, seek ways to be service oriented, develop capacity in others, and leverage diversity (Serrat, 2017).

Participants in this study communicated concerns related to faculty and student stress, uncertainty, anxiety, and general mental and emotional health. As an approach to supporting mental health, Mindfulness-Based Interventions have demonstrated success in areas related to stress, anxiety, and general mental health (Gu et al., 2015), in addition to reducing psychological distress and improvements in attention and working memory (Jha et al., 2010; Redick and Engle, 2006). Although mindfulness has origins in Buddhism, modern techniques do not necessarily have a religious affiliation (Keng et al., 2011), which allows for the opportunity of a large array of populations to benefit from the processes utilized by mindfulness-based approaches. Training that places emphasis on mindfulness tends to seek to increase the individual's ability to attend to stimuli in the present environment in a nonjudgmental manner (Brown and Ryan, 2003). Mindfulness-Based Interventions or professional development may be particularly beneficial when managing significant situations, such as COVID-19. By developing the ability to notice stress as it arises in a non-judgmental way, individual faculty and students may be better equipped to direct their attention to the present moment rather than perseverating on the stressor at hand. Mindfulness-Based Interventions in higher education contexts offers a clear potential direction for researchers to determine a course of action in an attempt to reduce the stress associated with significant changes in the status quo not only for faculty, but for the students served by the universities who are navigating the crisis. Viewed ecologically from a transactional paradigm, there is a need to better understand, support, and care for how individuals experience teaching and learning in university and broader higher educational contexts.

This study was not without limitations. In an effort to capture faculty perceptions in the midst of the transition, survey development was completed in just a few hours. In reviewing the results, the research team realized that additional survey items may have provided further understanding. For example, although the researchers were able to discover how many faculty at the university had completed the institution's *Online Teaching Fellows* program, the survey in this study did not ask participants about the completion of this program. It is unknown what portion of the participants took part in this program. The methodology of this study involved survey research which in itself comes with some limitations as it addresses perceptions of participants.

REFERENCES

- Ahearn, L. M. (2014). Detecting research patterns and paratextual features in AE word clouds, keywords, and titles. Am. Ethnol. 41, 17–30. doi: 10.1111/amet. 12056
- Arbaugh, J. B. (2002). Virtual classroom versus physical classroom: An exploratory comparison of class discussion patterns and student learning in an asynchronous internet-based MBA course. J. Manag. Educ. 24, 207–227.
- Banks, S. (2004). Ethics, Accountability and the Social Professions. London: Palgrave Macmillan. doi: 10.1007/978-1-137-11536-2
- Bergh, B., Edge, C., and Cameron-Standerford, A. (2018). "Reframing our use of visual literacy through academic diversity: A cross-disciplinary collaborative self-study," in Self-study of language and literacy teacher education practices across culturally and linguistically diverse contexts, eds J. Sharkey and M. M. Peercy (Bingley: Emerald Group Publishing), 115–142. doi: 10.1108/S1479-368720180000030010

CONCLUSION

Findings of this study contribute timely information regarding initial faculty perspectives when forced to move coursework to a model of emergency remote learning. Faculty participants had varying levels of experience with online course delivery and communicated a range of emotions related to this abrupt change. The world of higher education has experienced drastic changes as a result of the COVID-19 pandemic and results of this study can be utilized to inform university leadership, instructional design support personnel, and faculty as they navigate this new version of the university experience.

DATA AVAILABILITY STATEMENT

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by the Institutional Review Board, Northern Michigan University. The patients/participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

All authors listed have made a substantial, direct and intellectual contribution to the work, and approved it for publication.

ACKNOWLEDGMENTS

Thank you to this amazing team of educators, researchers, and colleagues.

- Bletzer, K. V. (2015). Visualizing the qualitative: Making sense of written comments from an evaluative satisfaction survey. J. Educ. Eval. Health Prof. 12:12. doi: 10.3352/jeehp.2015.12.12
- Boyer, E. L. (1990). Scholarship reconsidered: Priorities of the professoriate. Princeton: Carnegie Foundation for the Advancement of Teaching.
- Bozkurt, A., and Sharma, R. C. (2020). Emergency remote teaching in a time of global crisis due to CoronaVirus pandemic. Asian J. Dis. Educ. 15:2020 i-vi,
- Braxton, J. M. (1993). Selectivity and rigor in research universities. J. High. Educat. 64, 657–675. doi: 10.2307/2960017
- Brooks, C., Grajek, S., and Lang, L. (2020). Institutional readiness to adopt fully remote learning. Available online at: https://er.educause.edu/blogs/2020/4/ institutional-readiness-to-adopt-fully-remote-learning, (accessed on April 9, 2020).
- Brown, K. W., and Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *J. Personal. Soc. Psychol.* 84, 822–848. doi: 10.1037/0022-3514.84.4.822

- Cameron-Standerford, A., Bergh, B., Edge, C., Standerford, S., Sabin, J., Reissner, L., et al. (2013). "Textualizing Experiences: Reading the "texts" of teacher education practices," in *Proceedings of the American Reading Forum Annual Yearbook.* (Jalgaon: NMU)
- Cavanaugh, J. K., and Jacquemin, S. J. (2015). A large sample comparison of grade based student learning outcomes in online vs. face-to-face courses. *Online Learn. J.*19, 25–32. doi: 10.24059/olj.v19i2.454
- Clandinin, D. J. and Connelly, F. M. (2000). Narrative Inquiry: Experience and Story in Qualitative Research. San Francisco, CA: Jossey-Bass.
- Clandinin, D. J. (2006). Narrative inquiry: A methodology for studying lived experience. *Res. Stud. Music Educ.* 27, 44–54. doi: 10.1177/1321103X0 60270010301
- Connelly, M. F., and Clandinin, J. D. (1990). Stories of experience and narrative inquiry. *Educ. Res.* 19, 2–14. doi: 10.3102/0013189X019005002
- Creswell, J. W. (2013). Qualitative Research and Research Design: Choosing Among five Approaches. Thousand Oakse, Sage.
- Creswell, J. W., Plano Clark, V. L., Gutmann, M., & Hanson, W. (2003). Advanced mixed methods research designs," in *Handbook of Mixed Methods in Social and Behavioral Research*, eds A. Tashakkori and C. Teddlie (Thousand Oaks: Sage), 209–240.
- Davidson-Strivers, G. V. (2009). Frequency and types of instructor-interactions in online instruction. J. Interact. Online Learn 8, 23–40.
- Deacon, A. (2012). Creating a context of care in the online classroom. *J. Fac. Dev.* 26, 5–12.
- Dennen, V., Varabi, A., and Smith, L. (2007). Instructor-learner interaction in online courses: The relative perceived importance of particular instructor actions on performance and satisfaction. *Dis. Educ.* 28, 65–79. doi: 10.1080/ 01587910701305319
- Dewey, J., and Bentley, A. F. (1949). *Knowing and the known*. Boston, MA: Beacon Press.
- Docter, P. (2015). Inside out [Film]. California: Walt Disney Studios Motion Pictures.
- Draeger, J., del Prado Hill, P., Hunter, L. R., and Mahler, R. (2013). The anatomy of academic rigor: the story of one institutional journey. *Innov. High. Educ.* 38, 267–279. doi: 10.1007/s10755-012-9246-8
- Driscoll, A., Jicha, K., Hunt, A., Tichavsky, L., and Thompson, G. (2012). Can online courses deliver in class results? A comparison of student performance and satisfaction in an online versus a face-to face introductory sociology course. *Teach. Soc.* 40, 312–331. doi: 10.1177/0092055X12446624
- Edge, C. (2011). Making meaning with "readers" and "texts": A narrative inquiry into two beginning English teachers' meaning-making from classroom events. Ph. D. dissertations, (Thailand: Graduate School).
- Edge, C. U., and Olan, E. L. (2020). "Reading, Literacy, and English Language Arts Teacher Education: Making Meaning from Self-Studies of Teacher Education Practices," in 2nd International handbook for self-study of teaching and teacher education, eds J. Kitchen, A. Berry, S. Bullock, A. Crowe, H. Guðjónsdóttir, J. Kitchen, & M. Taylor. (Singapore: Springer), 779–821. doi: 10.1007/978-981-13-6880-6_27
- Elbaz, F. (1991). Research on teachers' knowledge: The evolution of a discourse. J. Curr. Stud. 23, 1–9. doi: 10.1080/0022027910230101
- Finkelstein, N. D., Adams, W. K., Keller, C. J., Kohl, P. B., Perkins, K. K., Podolefsky, N. S., et al. (2005). When learning about the real world is better done virtually: A study of substituting computer simulations for laboratory equipment. *Phys. Rev. Spec. Topics Phys. Educ. Res.* 1:2005.doi: 10.1103/ PhysRevSTPER.1.010103
- Gares, S. L., Kariuki, J. K., and Rempel, B. P. (2020). Community matters: Student-instructor relationships foster student motivation and engagement in an emergency remote teaching environment. J. Chem. Educ. 97, 3332–3335. doi: 10.1021/acs.jchemed.0c00635
- Gilligan, C. (1982). In a Different Voice. Cambridge: Harvard University Press.
- Giorgi, A. (2009). The Descriptive Phenomenological Method in Psychology: A Modified. Husserlian Approach. Pennsylvania, PA: Duquesne University Press.
- Graham, C., and Essex, C. (2001). "Defining and ensuring academic rigor in online and on-campus courses: Instructor perspectives," in Annual Proceedings of Selected Research and Development and Practice Papers Presented at the National Convention of the Association for Educational Communica-tions and Technology (California: ERIC).

- Gu, J., Strauss, C., Bond, R., and Cavanagh, K. (2015). How do mindfulness-based cognitive therapy and mindfulness-based stress reduction improve mental health and wellbeing? A systematic review and meta-analysis of mediation studies. *Clinic. Psychol. Rev.* 37, 1–12. doi: 10.1016/j.cpr.2015.01.006
- Gudmundsdottir, S. (2001). "Narrative research on school practice," in *Fourth Handbook for Research on Teaching*, ed. V. Richardson (New York,NY: MacMillan), 226–240.
- Hodges, C., Moore, S., Lockee, B., Trust, T., and Bond, A. (2020). The Difference between Emergency Remote Teaching and Online Learning. EDUCAUSE*. Available online at: https://er.educause.edu/articles/2020/3/the-differencebetween-emergency-remote-teaching-and-online-learning (accessed June 18, 2020).
- Ivancevich, J. M., Matteson, M. T., Freedman, S. M., and Phillips, J. S. (1990). Worksite stress management interventions. Am. Psychol. 45, 252–261. doi: 10.1037/0003-066X.45.2.252
- Jeffery, K. A., and Bauer, C. F. (2020). Students' responses to emergency remote online teaching reveal critical factors for all teaching. J. Chem. Educ. 97: 2472–2485.doi: 10.1021/acs.jchemed.0c00736
- Jha, A. P., Stanley, E. A., Kiyonaga, A., Wong, L., and Gelfand, L. (2010). Examining the protective effects of mindfulness training on working memory capacity and affective experience. *Emotion* 10, 54–64. doi: 10.1037/a0018438
- K-12 Teachers Alliance (2014). What is Academic Rigor and What Do We Do with It? California: K-12 Teachers Alliance. doi: 10.12968/prtu.2014.1.32.12
- Keng, S.-L., Smoski, M. J., and Robins, C. J. (2011). Effects of Mindfulness on Psychological Health: A Review of Empirical Studies. *Clinic. Psychol. Rev.* 31, 1041–1056. doi: 10.1016/j.cpr.2011.04.006
- Knowles, M. S., Elwood, H. F., and Swanson, R. A. (2005). The Adult Learner. Texas: Gulf Publishing. doi: 10.4324/9780080481913
- Meyer, K. (2002). Quality in Distance Education: Focus on Online Learning. ASHE-ERIC Higher Education Report, New Jersey: Wiley.
- Moen, T. (2006). Reflections on the narrative research approach. Internat. J. Q. Methods 5, 56–69. doi: 10.1177/160940690600500405
- Moustakas, C. (1994). Phenomenological Research Methods. Newcastle: Sage. doi: 10.4135/9781412995658
- O'Keefe, L., Rafferty, J., Gunder, A., Vignare, K. (2020). Delivering high-quality instruction online in response to COVID-19: Faculty playbook. Every Learner Everywhere. http://www.everylearnereverywhere.org/resources (accessed on May 18, 2020).
- Osmond, M. E. (2020). Global impact of COVID-19 on education systems: the emergency remote teaching at Sultan Qaboos University. Netherland: Elsevier. doi: 10.1080/02607476.2020.1802583
- Petillion, R. J., and McNeil, W. S. (2020). Student experiences of emergency remote teaching: Impacts of instructor practice on student learning, engagement, and well-being. J. Chem. Educ. 97, 2486–2493. doi: 10.1021/acs.jchemed.0c00 733
- QM Higher Education Rubric, Sixth Edition. (2018). MarylandOnline, Inc. Used under license. All rights reserved. Retrieved from MyQM. Available online at: https://www.qualitymatters.org/qa-resources/resource-center/articlesresources/reference-use-qm-in-research
- Redick, T. S., and Engle, R. W. (2006). Working memory capacity and attention network test performance. *Appl. Cogn. Psychol.* 20, 713–721. doi: 10.1002/acp. 1224
- Rosenblatt, L. (2005). *Making meaning with text: Selected essays*. Portsmouth, NH: Heinemann.
- Rosenblatt, L. (1978/1994). *The reader, the text, the poem: The transactional theory of the literary work*. Carbondale, IL: Southern Illinois University Press.
- Rose, E. and Adams, C. (2014). "Will I ever connect with the students?" Online teaching and the pedagogy of care. *Phenomenology & Practice* 7, 5–16. doi: 10.29173/pandpr20637
- Russell, M. (1999). Online learning communities: Implications for adult learning, Thousand Oaks: Sage. doi: 10.1177/104515959901000410
- Schuchter, P., and Heller, A. (2018). The Care Dialog: the "ethics of care" approach and its importance for clinical ethics consultation. *Med. Health Care Philos.* 21, 51–62. doi: 10.1007/s11019-017-9784-z
- Serrat, O. ed. (2017). "Understanding and Developing Emotional Intelligence," in *Knowledge Solutions*, (Singapore: Springer), doi: 10.1007/978-981-10-09 83-9_37

- Synodinos, N. E. (2003). The "art" of questionnaire construction: some important considerations for manufacturing studies. *Integr. Manuf. Syst.* 14, 221–237. doi: 10.1108/09576060310463172
- Taylor, M. T., and Rendon, L. I. (1991). The American history curriculum in North Carolina's public community colleges and universities: A comparative study. *Comm. Coll. Rev.* 19, 36–41. doi: 10.1177/009155219101900107
- van der Klink, J. J., Blonk, R. W., Schene, A. H., and van Dijk, F. J. (2001). The benefits of interventions for work-related stress. *Am. J. Publ. Health* 91, 270–276. doi: 10.2105/ajph.91.2.270
- VandenAvond, L., Menard, K., Johnson, K., Cameron-Standerford, A., Bergh, B., and Edge, C. (2020). Care and rigor in online courses: An analysis of faculty and Student Perspectives. International Council for Distance Education. Jalgaon: NMU.
- Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Cambridge, MA: Harvard University Press.
- Webster, L., and Mertova, P. (2007). Using narrative inquiry as a research method: An introduction to using critical event narrative analysis in research on learning and teaching. Abingdon: Routledge. doi: 10.4324/9780203946 268
- Welker, J., and Berardino, L. (2005). Blended learning: Understanding the middle ground between traditional classroom and fully online instruction. J. Educ. Technol. Syst. 34, 33–55. doi: 10.2190/67FX-B7P8-PYUX-TDUP
- Wentworth Institute of Technology (n.d.). *Backward course design*. Boston: Wentworth Institute of Technology.

- Wiggins, G., and McTighe, J. (2012). Understanding by design, expanded second edition. Alexandria: Association for Supervision and Curriculum Development.
- Winston, R. B., Vahala, M. E., Nichols, E. C., Gillis, M. E., Wintrow, M., and Rome, K. D. (1994). A measure of college classroom climate: The college classroom environment scales. J. Coll. Stud. Dev. 35, 11–18.
- World Health Organization [WHO] (2020). Coronavirus disease (COVID-19) pandemic. Geneva: World Health Organization.
- Wyatt, G. (2005). Satisfaction, academic rigor and interaction: Perceptions of online instruction. *Education* 125, 460–468.
- Wyse, S. A., and Soneral, P. A. (2018). Is this class hard?" Defining and analyzing academic rigor from a learner's perspective. *Life Sci. Educ.* 59, 1–14. doi: 10.1187/cbe.17-12-0278

Conflict of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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