Pedagogy on the Fly: Faculty Experiences during a Pandemic

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Abstract: The COVID-19 pandemic brought about sudden changes in pedagogical strategies in higher education. How faculty processed these changes, as well as their lived experiences during these shifts, has informed fundamental shifts in higher education that will last long into the future. The aim of this phenomenological investigation was to explore the lived experience of new and experienced faculty at one midwestern university during the COVID-19 pandemic. In a qualitative phenomenological study using a stratified purposive sample, through learning management virtual LMS tours and semi-structured interviews, investigators explored the experiences of 27 new and experienced faculty members across 20 disciplines. Findings included themes of panic and stress, teaching during quarantine (quaranteaching), innovation and technology, acknowledging loss (something lost), giving grace, and carrying new learning forward (something gained). Investigators link findings to the literature, compare and contrast faculty experiences with those of a student, and discuss implications for teaching and research. This study contributes to the literature chronicling the fundamental shifts in higher education occurring as a result of the COVID-19 pandemic, and the impact of these shifts on faculty and students.

Keywords: COVID-19, pedagogy, innovation, flexibility

A Pandemic and Unique Challenges

The spring of 2020 brought sudden changes in higher education due to the COVID-19 pandemic. From closed university doors to sudden remote, almost instantaneously created online courses, college faculty revised their practice, essentially on the fly. In a few months' time, with the start of academic year 2020-21, faculty were able to shift their emergency remote teaching practices to more planned pedagogy. Yet, the challenges of the pandemic were extensive and pervasive.

It is important to document changes in higher education during the COVID-19 pandemic for several reasons which include, among others, 1. The pandemic had enormous (and heretofore not yet fully understood) effects on humanity, including higher education, 2. The environments of face-to-face, online, and hybrid modalities were already common, but the pandemic led to further (and perhaps accelerated) innovations, alterations, and disruptions, and 3. Pandemics are thankfully rare in human populations, but what might be learned from them has relevance for future generations who will problem-solve in their own time. Research in this capacity is not simply looking at interesting phenomena, but rather it is a type of sincere message to and solidarity with future generations.

This research in this study is driven by a phenomenological methodology, so the individual experiences of faculty are not necessarily generalizable to the whole of collegiate teaching (Glaser & Strauss, 1967; Ulin, Robinson, & Tolley, 2005; Watkins, 2012). However, given the duty and honor to document the experiences of the pandemic, these experiences can inform how faculty today and tomorrow shape their own practices. In other words, there is something to learn from this experience, and it should inform the revision of practices in future course design. We therefore triangulate our research in a way that honors the originality of the University of Indianapolis faculty while relating their experiences to the literature and to emerging practices. The express aim is to explore the lived experience of new and experienced faculty at one midwestern university during the COVID-19 pandemic. Specifically, investigators examined the pedagogical shifts that occurred from the Fall 2019 (Semester I, 2019-2020) to emergency remote teaching in the latter half of Spring 2020 (Semester II, 2019-2020). Secondary purposes included examining how those shifts informed pedagogical choices in Fall 2020 (Semester I, 2020-2021), and how those shifts are anticipated to inform pedagogical changes in the future. Investigators also qualitatively compared responses from faculty who were new to the university (fewer than three years) compared to faculty who had been at the university for three vears or more.

Higher Education and the Covid-19 Pandemic: A Survey of Literature

In the early months of 2020, a coronavirus spread rapidly through the human population; the World Health Organization labeled it a pandemic on March 11, 2020, "...the first pandemic caused by a coronavirus" (WHO, 2020, para. 9). What followed in higher education included a brief period of rapid shift to online teaching to limit or, in most cases, completely cancel in-person classroom learning (García-Morales, et al. 2021). The shift to emergency remote learning was nearly universal around the world (Ali, 2020; Crawford et al., 2020; de Oliveira Araujo et al., 2020; Kummitha et al., 2021; Mishra et al., 2020; Moralista & Oducado, 2020) and across disciplines (Connolly & Hall, 2021).

Understandably, there is an emerging body of literature examining the response of higher education to the pandemic. Existing literature has explored the shift to online learning through case-based research (Ghazi-Saidi et al., 2020; Kang & Zhang, 2020; Mishra et al., 2020); survey of faculty in higher education institutions (Kummitha et al., 2021; Moralista & Oducado, 2020); and qualitative interviews (Rapanta et al., 2020). Additionally, many authors have explored anecdotal observations of teaching and learning shifts during the pandemic (Dickson-Deane, 2021; McMurtrie, 2021; Miller, 2021; Voelker, 2021).

Multiple studies attest to the panic, stress, and concern for family members and students experienced by faculty in the early phases of the pandemic (Miller, 2021; Moralista & Oducado, 2020; Rapanta et al., 2020; Voelker, 2021). These concerns have been well-founded particularly in relation to student needs due to cultural and socioeconomic differences (Antee, 2021; Beschorner, 2021; Engerman & Otto, 2021; Jaggars et al., 2021). Moreover, students were suffering from emotional needs that required extra consideration (Kaplan-Rakowski, 2021). These factors were only compounded by the societal changes underway at this time (Bridges, 2021), particularly in issues related to social justice and racism (Powell, et al., 2021). In other words, even though the pandemic was a worldwide event with significant implications, it did not occur in a vacuum; many other stressors occurred simultaneously which contributed not only to the society-wide problems, but also the possibility of enormous change within education: "Education in its various forms is always an outgrowth of struggle...This urgency demands that educators develop a new language, vision, and politics to address the current challenges faced by educators and the wider society" (Giroux, 2021, p. 9).

Despite the proven effectiveness of online learning, it was the rapid shift itself, forced by the pandemic conditions, which caused the distress and discomfort experienced by faculty (Ghazi-Saidi et al., 2020). Some faculty had online teaching experience prior to the pandemic (Ghazi-Saidi et al., 2020), yet early indications suggested moving faculty online "overnight" exacted a "human toll," particularly with regard to learning new skills to "keep pace with ongoing technology advancements" (Pelletier et al., 2021, p. 28; p. 16). There was serious "cognitive overload" with "multi-tasking" and "toggl[ing]" (Miller, 2021, para. 11). During this sudden change, many questions arose for those of us who study teaching and learning, since faculty and students became part of the "largest-ever nontraditional teaching experiment" (Glantz et al., 2021, para. 1). Problems with infrastructure and staff readiness only made the shift more difficult (Ali, 2020). Higher education institutions needed quick funding for training and technology (Pelletier et al., 2021). Certainly, resilience was a requirement of both faculty and students (Ghazi-Saidi et al., 2020). The opening of the academic year 2020-21 came quickly, but at least with more knowledge of the pandemic that had ravaged our society and a few months' time to assess and refine previously-arranged emergency remote teaching practices (Curtin, R., 2021; Glantz et al., 2021; Hodges, 2021; Ilgaz, 2021).

Course redesign, under typical circumstances, has required an iterative, reflective process that is objective driven from the top down (Bennett et al., 2017). However, the pandemic forced rapid shifts without the careful consideration that occurs when employing an instructional design model (Karakaya, 2021), often without the organizational support in place needed to make these shifts (Meier, 2021; Stefaniak, 2021) or the professional development needed to understand the new technologies being employed (Curtin, 2021; Glantz et al., 2021; Istenič, 2021) or how to manage practical skill and application content (Dickson-Deane, 2021; Gamor, 2021; Iwanaga et al., 2021). Recent work in student efficacy demonstrates the important role of faculty on campus (Ferguson, 2021), but the notion of teaching and learning in online-only capacities during a pandemic complicates how real presence can be measured and understood.

Themes emerging from this growing body of research on higher education's response to COVID-19 suggest that there was distinct rupture of practices, technologies, and assessment, to the point which they cannot return to their pre-pandemic states (Hodges, 2022; Ewing, 2021; Senior, et al., 2021). Modalities like hy-flex and other hybrid teaching and learning arrangements will be more common (Ohshima, 2021; Miller et al., 2020; Wilson & Alexander, 2021), and higher education will remain a societal nexus with reaffirmed commitment to serving students, particularly those in underserved and marginalized groups (Blankstein et al., 2020; Kose et al., 2022).

The emerging literature closely parallels the experiences of faculty in this present study in several key ways: faculty had varied experiences teaching online prior to the pandemic; they experienced a great deal of personal, professional, and emotional upheaval during the shift to emergency remote learning; and they carried out a reflective, iterative process using student feedback when preparing for teaching and employment of technology beyond the initial pandemic lockdowns. Additionally, faculty in this study echoed these concerns and indicated they often obtained their own infrastructure (digital tools and training) at the beginning of the pandemic, as they were unable to wait for organizational resources to catch up to the present needs. Although the university in this study was able to provide digital tools as time went on and even reimburse faculty for some out-of-pocket expenses, faculty did not know of this outcome at the outset, and the expenses contributed to their distress.

While unpacking the full impacts of the COVID-19 pandemic on higher education are in their research infancy, the present study benefits the literature by capturing not only the technological changes and interventions, emotional impacts, and rapid pedagogical alterations (which give additional support to the existing literature), but also the nexus of student assistance during a period of rapid adaptation. That means the present study adds to the literature by describing and reflecting on an *ethos*

of care shown by faculty as they sought to continue their teaching work during a tumultuous time. The nexus of student assistance and an ethos of care are furthermore represented through multiple disciplines spanning a wide array of subjects.

Method

This research was undertaken with a Husserlian phenomenological method to focus on the consciousness and description of experiences (Qutoshi, 2018) which "reveal lived experiences of involved individuals" (Watkins, 2012, p. 155). Such a method is common in educational research because of "its potential contribution to re-thinking our understanding of the complex phenomena we encounter in the dynamic, and sometimes confronting, world in which we find ourselves in this 21st century" (Dall'Alba, 2009, p. 7). Though this method is contentious in some quarters, and contains multitudes of methodological debate, phenomenology was selected due to the emphasis on understanding individual experiences, detailing complexities in collected experiences, and building compelling narratives based on the themes which emerged from lengthy interviews (Eddles-Hirsch, 2015).

The primary concerns were to capture what actions faculty took during the initial pandemic lockdowns, to understand the coping mechanisms with further shifts during the pandemic, and to elaborate on what motivated those changes, so the "lived experience" was of critical methodological importance. Investigators utilized a qualitative purposive sample of faculty across all Schools and Colleges at the University of Indianapolis in the midwestern United States. Data were initially collected via a demographics Google form (indicating participation interest), virtual learning management system course site tours (where faculty would make a short recording demonstrating their course(s) in the learning management system), and individual semi-structured interviews. Investigators completed coding, code comparison, and theme extraction using Dedoose 9.0.17 (2021) (Watkins, 2012). This research design was established to "explore the complex world of lived experiences" insofar as to "to study human phenomena at a deeper level of conscious[ness] to understand lived experiences" (Qutoshi, 2018, p. 220).

Ethics

This study was approved by the University of Indianapolis Human Research Protections Program, Study #01342, as Exempt on January 10, 2021.

Participant Characteristics

Investigators recruited participants through email to all current full-time faculty at the university. Participants were directed to a Google Form requesting name, email, department, length of time at the university (less than three years, or three years or greater), start date at the university, and faculty rank. The faculty were divided into two groups: those with less than three years' experience at our institution and those with three or more years' experience. Given that new faculty had spent the majority of their time at the university during a pandemic, investigators stratified the group, predicting their perceptions might vary. This purposive sample included faculty from all colleges across the university. Inclusion criteria were: (1) held a full-time faculty position at the university and (2) taught at the university during the fall semester of 2019 and the spring semester of 2020. Faculty were excluded if they did not complete the virtual "tour" of their learning management system course site after completing the recruitment process since the "tour" served as a basis of comparison and reflection.

Instruments

Investigators collected data through (1) virtual learning management system course site tours and (2) semi-structured interviews.

Virtual learning management system (LMS) course site tours consisted of faculty taking a video of themselves describing their course site from Fall 2019 while discussing use of the LMS's features and tools. Faculty then contrasted this course with the same course, when possible, as taught in the Fall 2020 semester. Faculty who began at the university in the Fall of 2020 recorded a tour of the LMS from the Fall 2020 semester only. Investigators asked faculty to describe their decision-making process when introducing changes to the course for teaching during the pandemic, which was almost entirely virtual during that semester. Specifically, faculty were asked to comment on use of Lessons, Assignments, Tests and Quizzes, and any other pre-constructed course tools in the LMS. Faculty then reflected on how effective they felt their changes were for student learning. Finally, faculty were asked to comment on scholarship quality and quantity during the pandemic, and what had been the hardest and easiest things about working during the pandemic.

Faculty who completed the virtual LMS tours then took part in semi-structured interviews in which investigators asked them about their prior experiences with online education, their decision-making process when moving to emergency remote learning, and their pedagogical decisions for the Fall 2020 semester and their impression of the pandemic's impact on student learning. For interview questions, see Appendix 1.

Data Collection

Faculty uploaded their recorded virtual LMS tours in mp4 format into Google Folders accessible only to them, for data privacy. Graduate assistants then took notes on the virtual LMS tours, based on the questions posed. These notes became part of the dataset. Next, investigators conducted semi-structured interviews with participants. Investigators used Zoom to record verbatim transcripts, and graduate assistants listened to the interviews in order to clean the transcripts and correct any errors. Investigators de-identified both the virtual tour notes and interview transcripts by assigning numbers. Those with less than three years at the university were assigned numbers in the 100's, while those with more than three years' experience were assigned numbers in the 200's. Investigators kept a master list separate from the data for tracking purposes.

Data Analysis

Investigators used constant comparative analysis (Glaser & Strauss, 1967) to identify concepts or features of the faculty experiences. Then, investigators used open and selective coding (Strauss & Corbin, 1990) of interview transcripts and notes from the virtual LMS tours with Dedoose (2021) version 9.0.17 and multiple readings/viewings until investigators reached agreement. Investigators then extracted themes and organized, reorganized, and retitled these themes until agreement was reached between investigators (Watkins, 2012).

Findings

Participants

Forty-one faculty members completed the recruitment Google Form. Of those, 27 faculty (16 experienced, 10 new faculty, one new faculty member exempted due to the clinical nature of the course) completed the requested virtual tour of their Fall 2019 course. Investigators exempted one new faculty member from completion of the virtual tour of the Learning Management System (LMS) due to the nature of the faculty member's role in teaching clinical education and absence of use of the LMS. Demographics of participants may be found in Appendix 2.

Mean years at the University for experienced faculty was 10.313 (Standard Deviation [S.D.] 7.952) with a median of 6.25 years and a range of 3 to 30 years. Mean years at the University for new faculty was 1.614 years (S.D. 0.517) with a median of 1.5 years and a range of 0.5 - 2 years. Mean years in higher education for experienced faculty was 12.813 years (S.D. 7.176) with a median of 10 years and a range of 3 to 30 years. Mean years in higher education for new faculty was 3.364 years (S.D. 2.55) with a median of 2 years and a range of 0.5 to 9.5 years. The 27 faculty members represented 20 different disciplines (see Appendix 2).

Themes

Figure 1 outlines the themes investigators extracted from the data. Themes emerged in a timeline fashion. Faculty discussed pre-pandemic teaching and the initial panic with moving to emergency remote teaching and learning, followed by adapting to teaching during the pandemic (termed *QuaranTeaching*), innovation and technology use, determining how to create engaging learning experiences online and use of technology to facilitate learning, and reflecting on losses and gains during pandemic teaching.

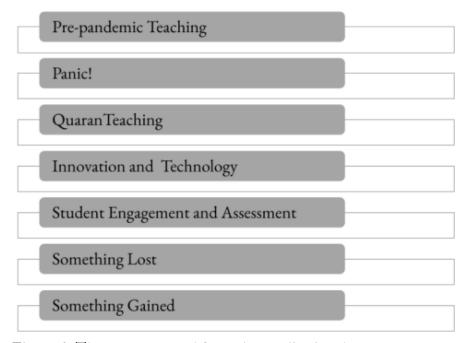


Figure 1. Themes extracted from the qualitative data.

Pre-Pandemic Teaching

Investigators specifically asked about teaching experiences prior to the pandemic and prior online teaching. New and experienced faculty alike spoke of experiences teaching as graduate students, adjunct instructors, and even in secondary education. Some had taught online asynchronous courses. Some reported experiences as students in online courses which helped frame their pedagogical choices. Experienced faculty talked about this topic much more frequently than new faculty, not surprisingly, since most experienced faculty had much more teaching experience than the new faculty. Regardless of the type of course or length of time teaching, faculty discussed that they were in a routine, they found what worked for them, and they were in a groove prior to the pandemic:

I was teaching three sections of [a course] that I've taught probably 40 or so times in my life and [another] course that I taught like six or seven times before, so [it] was all very routine, I was just doing, you know, the same things in the same ways and there was nothing notable about it. (211, lines 130-131)

In regard to prior teaching online, faculty provided a mixed response. Some had taught fully online, some hybrid, and some not at all, in both the new and experienced groups. Some had taught fully asynchronous online courses. One experienced faculty member reported having distance learning experience, but not with today's technology:

Before coming to [this university] I taught one remote course at [another university], where I did have students in the classroom, but it was also filmed and beamed out live to remote campuses in very small towns around [the state] and then the students would mail their essays to me and I graded them. Other than that, I had no remote or online teaching experience; that's the only item. (Participant 211, lines 38-39)

Some mentioned using technology for flipped classroom experiences prior to the pandemic:

I learned my first three years where I taught previously and just through lessons and pre-recorded videos... to kind of get learners engaged in the material before actually coming to lecture; that seemed to prove effective my first three years of teaching. Then, with follow up recordings of the class, ... I've heard the first three years of teaching I heard multiple times students say... I can't listen and take notes, so I thought the recordings would be very beneficial, so that, for those that just want to sit and be the auditory learner they could take notes at a later time, so [I] utilized post class videos as well (Participant 209, lines 14-17).

One reported having a very poor experience teaching online prior to the pandemic:

Prior to this, I had taught one online course total ever, and it was a turnkey course that another faculty member had designed and basically sent me. We were using [a different LMS] at that institution. They basically sent me the entire course on [the LMS] and said, "I don't know, if you want to change something, go for it, otherwise you can just kind of set the start date and just let it run." It was a dismal experience. I don't know who hated it more, the students or me. There were some students who were using it as a Gen. Ed. and it was very much a check-the-box type course for them. But there were some actual music majors who were taking this, sort of introductory music and

technology type course, and I just, I can't imagine they got anything out of it. You know, the textbook was really bad and it was just kind of pre-recorded PowerPoint slides that just cycled that were released every week or so. And yeah it was so impersonal and kind of cold, there was no synchronous component at all (Participant 107, lines 24-27).

One New faculty member, despite having no online teaching experience, ended up being a resource person for other faculty:

Once COVID hit I was still serving as a teacher assistant at [a different university] so I had a few labs that need to be converted to completely online format, and senior faculty that were incapable of doing that, so I got a really quick crash course in converting labs that way, but other than that all of my experience prior to that had been in person (Participant 110, lines 64-65).

The topic of LMS use generated a great deal of conversation. Most faculty reported that they had used the LMS with less organization prior to the pandemic. Course virtual LMS tours indicated that most faculty utilized the LMS as a repository to store files, but with no coherent or consistent organization style; used Assignments for due dates; and would "strip out" other LMS tools or leave tools such as Lessons, Overview, and Assignments empty. Faculty indicated that they did not see a need to use the LMS fully since their courses were entirely face-to-face. They would spend time in class telling students where to find documents, rather than organizing them well:

[My LMS use] has been primarily through just the LMS's support to in-person activities, sometimes doing the flipped classroom approach, where I'd have students come prepared having watched a few videos or something so we could do more active learning in class, but otherwise I don't think I taught anything online (Participant 210, Lines 25-26).

I probably did not do it very well, I had absolutely no training or understanding of how to work a learning management system and I think I just kind of, if I'm being honest, didn't take it very seriously. (Participant 101, lines 35-36)

Panic!

On Wednesday, March 11, 2020, the university made the difficult decision to move all classes online for emergency remote learning. Students were sent home and faculty were given 12 days to move courses to a fully online format. Faculty expressed panic, stress, and worry in regard to this shift:

After I stopped crying and...You laugh...but you know it's true. I was...I don't think I slept for the first six months, I really do. I was panicked. I was frustrated. I think I would have felt more calm had I cared less about my student outcomes, [I] had a lot of compassion for them. (Participant 202, lines 46-48)

Faculty also shared that they were overwhelmed, shocked, overworked, stressed, and worried. They worried about the health and safety of family, co-workers, and students; whether or not their pedagogical shifts would work; and about managing the significantly increased workload generated by the shift to remote learning:

I did asynchronous lectures, mostly so they couldn't see me panic in real time too often (Participant 202, lines 91- 92).

I don't think anybody handled that shift. You know I mean just in terms of our labor but also just in terms of our emotional [health] (Participant 101, lines 98-99).

Worrying about people staying safe and healthy, I would say. Especially when it got to the period of time in late October [2020], I think it was when people in my class started to get sick or exposed. That is worrisome for me in terms of them, of course, [but also] for me and my family (Participant 205, lines 609-615).

It was stressful because I didn't know what to do, right, and so I read ... a lot of course higher ED stuff online (Participant 211, lines 229-230).

Amidst all the worry and uncertainty, faculty began to explore how they would carry on and move forward during the pandemic and its ensuing restrictions.

QuaranTeaching

Over just a very short period of time, I think, just two or three days, I knew I had to just make choices and get on with it, and those are the choices I made but I found it stressful. (Participant 211, lines 229-230).

As instructors very quickly began to "get on with it" and adapt for emergency remote teaching, they found themselves rethinking almost all pedagogical choices for instructional design, content delivery, and assessment. Recent literature refers to this phenomenon as Quaran Teaching (Pace, et al., 2020; Jelińska & Paradowski, 2021). Having clear course objectives in mind facilitated this adaptation. Faculty reported various shifts for content delivery. Many opted for asynchronous, pre-recorded lectures to provide flexibility for viewing and an option to review and re-watch. This option provided the opportunity to move synchronous online sessions to interactive content and learning activities. Synchronous sessions included use of audience response activities, like Kahoot! (2022) and Google Jamboard (n.d.). In terms of student workload, faculty reported many shifts, including: Decreasing student workload by having them work in groups, or switching to individual work to avoid requiring students to meet; shifting to real-world case studies; asynchronous student interaction through Google docs and forms to allow for work and life schedules and varying internet capabilities; making homework worth more (or fewer) points; extending assignment due dates; and sharing decision-making with the students. Faculty from a variety of disciplines integrated real-life case studies into their pedagogical strategies to provide a way for students to work and learn on their own. The overarching impression indicated that faculty were rethinking every aspect of their pedagogy while teaching during quarantine in a very time-consuming process:

I think this whole process has forced me to streamline and really think through every aspect of my pedagogy. In terms of what kinds of assignments I give, how I'm going to ask students to do them, how I'm going to pace when those assignments come in, how I'm going to provide meaningful feedback on them,

because I feel like I owe them that feedback if I can't give it to them in person (Participant 101, lines 247-250).

The biggest shift was just having to do all the detail work behind that planning to make sure that all the links worked. Previously, I would have given them a hard copy hand out. So when we shifted to [online], I had to make sure things were available electronically and make sure links in the agenda were all functional and they've been shared properly and so forth (Participant 212, lines 128-129).

Faculty also reported building off earlier pedagogical design, but with an eye to greater organization, taking a "less is more" approach, and focusing on flexibility as a key element of class design.

Key to quaranteaching was a greater emphasis on designing the organization of the class. Rationale for improved organization included ease of finding content and assignments, decreasing anxiety, and making the course look nicer and easier to follow:

My rationale first, you know the first piece was the organization. I wanted it to be organized on my end. I wanted it to be organized for the student and because I thought that would help lessen the anxiety of it...So I moved everything online and tried to organize it in a lot nicer format. I really wanted to keep that in mind that, I'm sure, students' minds were as scattered as mine was so I wanted to provide more organization, more information about expectations (Participant 105, lines 60-61, 83-85).

Innovation and Technology

Innovation emerged as a necessary part of teaching during quarantine, as well as employing new learning technologies. Faculty reported using substantial amounts of their own time, money, and resources to create learning tools and experiences. Many instructors recounted the hours and hours of work it took to record asynchronous video lectures. One participant purchased video production equipment, a document webcam that worked similar to an old-fashioned overhead projector, and software to run it while in synchronous online sessions. Instructors also had to innovate for creating hands-on learning experiences in virtual environments. A geology instructor who normally had students examining lab specimens of fossils had students go outside and take pictures of rocks, and then identify what those rocks were. A clinical nursing instructor had students debrief after their clinical sessions not in a classroom, but in their cars on their phones using Zoom in order to facilitate social distancing and debriefing in a comfortable environment. One faculty member secured funding to send kits to each student at home for lab work. Another instructor reverse-designed labs, providing results from lab experiments from previous semesters and having students work backwards to show how those results might have been produced. For student presentations, one faculty member used Google Jamboards for display boards rather than an in-person gallery walk. For clinical classes, some content had to be delayed until in-person clinical experiences could resume, or delivered via video simulation experiences using pre-recorded content available online.

Faculty members also found that, to create interactive learning experiences, they needed to create their own materials. One instructor created "resources made over the summer...a

comprehensive set of notes and videos" (Participant 108, line 200). Another designed a set of case studies:

If I'm going to use outside case studies, I'm either going to have to drastically change the content I'm teaching them so that they can do the case studies, or I'm going to have to write my own. So I decided that it was easier for me to write my own case studies, and publish them, than it was for me to try to find the perfect case studies that were out there that would overlap exactly with my learning objectives for the courses (Participant 214, lines 56-59).

Faculty described the learning curve required to employ technologies such as Zoom, greater use of the LMS, Screencastify, VoiceThread, Google applications such as Forms and Jamboards, and various phone apps. One instructor reported being "behind the times" and needing to catch up on technology. For LMS use, faculty built out and organized previously unused tools such as discussion forums, tests and quizzes, rubrics, attendance, lessons, resources, and assignments. Instructors also explored use of resources external to the university such as YouTube videos, embedded content, Google Drive, and virtual whiteboards. With recording lectures, one faculty member reported completely revising all course lectures:

I actually went through and redid all of my lectures, to try to make them flow more because it had been a couple of years so it's time anyway, and I recorded all of the lectures, so that they were anywhere from 15 to 20 minute chunks of different powerpoints that I would usually cover in three hours, so that the students could watch them on their [own] time (Participant 206, lines 53-55).

Additionally, instructors considered how use of these innovative techniques and tools might impact student engagement and how they grade and provide feedback to students.\

Student Engagement and Assessment

As faculty employed their newly redesigned courses both at mid-semester of Spring 2020 and again in the Fall of 2021, they reflected on how well their pedagogical shifts during the pandemic facilitated student learning and engagement. Faculty noted a stark shift in students' approach to engagement in learning. Specifically, they noted that students were feeling just as overwhelmed and disconnected from the learning environment as they were. Faculty quickly began an adaptation process of trial-anderror to determine what might engage students the best. One faculty member reflected on working harder to find an engaging topic related to the course that will hold students' interest: "People love dinosaurs. How can I use dinosaurs as a gateway for students to get into some of the geology content?" (Participant 110, lines 160-161). Use of synchronous online sessions increased active learning and had the side benefit of social contact with other students. Reflecting on this social interaction, some faculty made a point of creating more opportunities for contact between students:

[It] was initially about pedagogy, and then later it became more about them, that they had no social life other than some of these group projects they were working on. And that's what some of my students told me: "Other than my team in your class, I don't talk to any other human beings." So the teamwork actually formed some sort of social net for them (Participant 214, lines 127-128).

An additional strategy was to not require class attendance, but make it in students' best interest to attend the synchronous sessions:

My intention was then they can get practice working on problems they can ask questions that they have, which I thought sounded good because I didn't want to be, you know, penalizing students for not attending class and students have such a variety of situations. And my thought was even if they don't even look at the notes or the videos, if they don't look at anything, if they come to the problem-solving sessions, I think that will be enough for them to get a sense of the material, even if they're not doing anything else, and maybe they'll be more inclined to be engaged if I'm helping them on homework and things like that (Participant 108, lines 81-84).

As faculty considered student needs, they considered reducing costs. However, this also meant additional work for the instructor:

We moved from about a \$250 textbook and \$90 online homework to a completely open source textbook, free and available all the time, no requirements for finances and about \$30 a semester for the online homework... which meant I had to rewrite homework assignments (Participant 202, lines 108-110).

Pandemic strategies also required changing methods of assessment. While some instructors reduced the number of quizzes and tests, others increased weekly low-stakes quizzes to facilitate engagement with the material prior to synchronous sessions. These assessments had the additional benefit of allowing faculty to check in with students sooner and notice when students were falling behind. Another method of low-stakes or no-stakes assessment included use of polling to see if students understood the content. One instructor sought additional feedback from students using Google Forms.

With switching to online tests and quizzes, many instructors allowed students to access course resources. One faculty member noted that they had not noticed a difference in assessment scores between open and closed resources. One faculty member adapted online tests and quizzes to allow students to create one page of notes, front and back, for use during the tests and quizzes, and students had to turn in the note sheet. Another faculty member employed labor-based grading in a writing class:

If we want to grade students based on the writing process...you read something, you think about it, you brainstorm, you're going to draft something, you get really specific feedback from a qualified expert, you think about that feedback, respond to it, revise it, then that's all we should be grading on is whether or not they've gone through that process (Participant 101, lines 143-145).

One side benefit of moving to online tests and quizzes was using the metrics feature to look at question performance. A detriment was having to write more unique test questions to make sure students were not cheating.

Not everything went well with student engagement and assessment. In some synchronous sessions, students kept their cameras off and faculty felt they were not getting any feedback to know if students were understanding content. When synchronous sessions were not required, students

would not show up. Likewise, students would not always use asynchronous materials that faculty had carefully crafted:

The only issue is that if I ever looked to see how many students visited that page... I don't think they actually looked at it. What was new is that teaching has become a series of clicks, and I think [it is] totally necessary to do that right now, I mean there's no way around it, but you know that's a challenge (Participant 101, lines 192-194).

Faculty reflected on their pedagogical choices and changes, and their impact on students:

Going forward, a lot of these concerns still exist, pandemic or not, you know they're still juggling a lot, they're still balancing a lot, there's still a lot of demands on their time. And I think that just the flexibility that online has offered has given me things I want to take when we're in person, how can I make in person learning more flexible. How can I think about due dates and assignments and make those more accessible right, how can I keep the things that online have really worked. You know, a lot of students, they'd like to be able to have some degree of choice, so how can I keep that (Participant 110, lines 406-413).

I think it actually makes a lot of sense now for the students, because I don't know that any of them are I don't know where any of them are doing their learning so the idea that I would assess people, according to the same standard when we're not even meeting in the same physical space doesn't seem fair to me. I don't know where students are working, I don't know what their home situations are or their dorm situations are, and so, why would, I expect that someone's going to be able to produce their best possible work right now. So I think... the pandemic, certainly, I guess did influence my decision to do this in that I'm trying to meet students where they're at a little bit (Participant 101, lines 182-186).

These reflections led faculty to consider what they had lost, and what they had gained while teaching during the pandemic.

Something Lost

The pandemic exacted a heavy toll in all areas of life, and college teaching was no exception. For the efforts of faculty in their immediate and long-term responses to the pandemic, it was also important to acknowledge the challenges, difficulties, and points of frustration. This is a brief engagement with academic loss in the pandemic, which can be understood in a number of personal, professional, and emotional ways.

Life Challenges and Working from Home.

I recorded all my lectures at night when my children were sleeping. I put all my posts up in the morning before they woke up (Participant 216, line 191).

Perhaps a common refrain from the pandemic was the difficulty in balancing work-life balance, particularly since home and work became the same domicile for many working professionals. This was also compounded by other factors like virtual homeschooling for children and caring for family

members:

I have an elementary kiddo who was at home while I was teaching, which was kind of terrible during that window of time (Participant 205, line 170).

Beyond the stressors of having days and weeks at home for all waking hours, faculty also noted that working around these constraints proved challenging. Whether designing asynchronous or synchronous classes, the shift to online instruction also meant working around schedules of other family members. Some faculty noted the difficulty in internet bandwidth (i.e. multiple people using high definition, for example) but also emotional bandwidth to manage multiple demands:

I burst my eardrum that second week...because I was wearing these headsets for so much because we were instructed to record all of our lectures because they were concerned that we would not have the bandwidth to actually do synchronous with our students (Participant 206, lines 23-24).

Not Doing One's Best Work

The pandemic affected scholarship. There was a negative impact on both quality and quantity (Participant 108, virtual LMS tour notes, line 21).

With the serious stressors of working from home and managing day-to-day activities, faculty noted that their scholarship suffered as a result. They had to cut down on their expectations of what could be produced and published. The abrupt shift to remote emergency learning coupled with the other significant changes in routine meant that scholarship quality and quantity decreased. They additionally noted that this was a bandwidth issue because focusing on instruction and handling other life concerns (children and their schooling, caring for family members, etc.) simply left little or no time for scholarship. Once new routines were established, this was modified somewhat, but faculty discussed how the significant interruptions during the initial emergency remote teaching period affected scholarship.

Fellow Colleagues and Social Isolation

I'm an adjunct and I have literally no conversations with anybody so I'm just kind of my own island (Participant 105, line 51-52).

Many faculty value the professional relationships they have with colleagues in their departments and the university as a whole. Early pandemic lockdowns and remote teaching precluded professional relationships and friendships, as well as sharing that goes on at the departmental level (at least in a face-to-face way). Faculty noted the isolation from colleagues and the fact that this was generally unpleasant. Further, faculty noted that they were not aware of what other faculty members were doing during the emergency remote teaching, nor how they were responding to many of the same stressors of moving all instruction online in a very short timeframe. Some faculty felt that they were likely changing their pedagogies much more than other colleagues did (i.e. not just transposing instruction to hours on Zoom), but that they simply did not know. Faculty noted that being isolated from colleagues was a net negative because they value professional camaraderie.

Learning Management System Use

The lockdown browser was used for tests/quizzes to prevent cheating. It was more of a headache (Participant 109, virtual LMS tour notes, line 27).

I know that I want to prioritize [LMS use] with inclusivity, diversity, and fairness into the way that I teach and assess students; right now, I think the learning management system kind of gets in the way of that a little bit. It's not as flexible as I feel like it needed to be (Participant 101, lines 111-112).

Prior to the pandemic, faculty used the learning management system (LMS) in various ways in their courses. Some faculty conducted fully online courses (asynchronously) on it, while others utilized the LMS for different forms of hybrid (part classroom, part online) learning courses. Other faculty used the LMS for little more than a grade book and syllabus repository. Once emergency remote teaching became necessary, faculty had to quickly learn how to use the LMS for many more functions. This was not without its share of difficulty, as many faculty noted. Some of the concerns of expanded use included assessment security, prevention of academic cheating, and best practices regarding its extensive use for instruction. Some faculty also noted that the LMS was not as flexible as they would prefer, particularly when addressing the various pedagogical needs of their domain. For some faculty, this directly impacted their efforts to consciously prioritize inclusivity, fairness, and diversity in their courses.

Student Academic Misconduct

I think another big issue was academic misconduct because students were cheating up the wazoo, and so I spent a long time writing questions that are not just things they can find in other places (Participant 108, line 157-158).

While the true extent of student cheating and academic misconduct may not be known, particularly in the early days of the pandemic, faculty noted their suspicions that students were taking advantage of the rapidly changing circumstances. Faculty used tools like lockdown browsers, academic cheating detection software, and specially designed assessments which had items not easily found by an internet search. In turn, faculty noted that such additional efforts, which normally would be mitigated by proctoring an assessment in a classroom setting, took additional time and effort which detracted from other duties.

Negative Impact in Student Learning

Faculty noted that student learning was affected by the pandemic in a number of ways including curricular challenges, life challenges, and the abrupt alterations in instructional capacity that they experienced on the learning end:

I have a few other [students] that have been really needing some extra support in this time and I've had to do a little extra reaching out and encouraging and discussion with them on the side to make sure they're understanding the concepts (Participant 104, lines 222-224).

Faculty noted their willingness to help students and to schedule further small group and individual meetings to help with instruction, but like additional efforts needed to maintain assessment

security, this, too, detracted from other duties. Faculty noted poor performance indicators in classes, a general lack of focus, and emotional and motivation problems, particularly in the early days of the pandemic.

The challenges faced by faculty and students, which included a plethora of digital, physical, emotional, and motivational aspects, were not all for naught, however. There were glimmers of hope and of unexpected benefits which emerged from pandemic teaching and learning.

Something Gained

Benefits of Learning in a Pandemic

Though there were serious and life-altering circumstances in the pandemic, there were things gained which include silver linings, new opportunities, a feeling of being proud of curricular changes, giving flexibility grace to students, giving grading grace to students, and recognizing the "pastoral" role in teaching. That is to say for the negatives of the pandemic and its effects on teaching and learning, there were tangible benefits. These deserve to be explored further because they can help shape teaching and learning after the pandemic:

I just think it's kind of an exciting time for people in my field to try to figure this stuff out because we've been wrestling with these questions about how do we be fair for so long and now we're actually starting to come up with mechanisms that might work right (Participant 101, lines 220-221).

Faculty listed a number of unexpected benefits from the pandemic. For example, they listed an increased knowledge of technology for student engagement – and the impetus to learn new(er) technologies. This included increased use of the learning management system to organize class, as well as synchronous technologies like Zoom. Faculty also indicated a greater tenacity to learn newer field-specific technologies to see if they contributed to their curriculum. Faculty also discussed the lack of commute time, so they could devote more time to students, particularly in one-to-one synchronous meetings. Even if there were stressors of working at home, faculty seemed to appreciate the additional time that could be devoted to course design and student interactions. Though it may seem like quite a task, faculty also discussed how they had to rebuild their own (class) curriculum to suit online learning. Whereas prior to the pandemic, changes might have been more subtle and slower to adopt over time (particularly with good teaching evaluations), the pandemic provided the motivation to reconsider teaching practices, learning activities, and assessments.

New Opportunities

Me getting bored with myself on Zoom inspired me to try to be more creative and make the class more interactive for students (Participant 106, lines 68-69).

I was able to design the course in a way I felt like was going to be really effective (Participant 216, line 673).

The forced lockdowns of the early pandemic forced classes into online modalities. Faculty had to adapt quickly to the changes, but once they had settled into a routine, innovation became a normal part of the pedagogical process. This spurred new opportunities like pushing boundaries in teaching and learning; no longer able to concentrate learning in a physical classroom, faculty were able to take risks and chances that they likely would not have prior to the pandemic. In turn, this created additional

flexibility in the use of synchronous learning. Faculty expressed that they felt able to be creative in ways that they had either avoided in classroom teaching or simply had not occurred to them before.

Being Proud

I spent many, many hours putting [the classes] together and I just feel proud of how that turned out (Participant 102, line 129).

The sudden move to emergency remote teaching and then fully remote teaching compelled faculty to reconsider every element of their courses. Many indicated that they felt like they had become better teachers in the process, even though it was a difficult process. This enabled them to feel proud of their accomplishments, particularly as they learned new skills. Multiple faculty expressed happiness with their efforts put into the curriculum.

Giving Flexibility Grace to Students

...realizing that it really is just like mentally, emotionally exhausting for everyone (Participant 206, lines 52-53)

So I would say, like, I tried to as much as I could still hold them accountable, but make their lives a bit easier and less stressful (Participant 205, line 191).

As a society-level event, the pandemic created enormous stressors; one of the positive byproducts of that stress, arguably, was new-found grace being given to students. In other words, recognizing the ubiquity of the stress inspired faculty to cultivate attitudes of flexibility which may not have been fully realized prior to the pandemic. For example, the conscious recognition of empathy led many faculty to adopt policies of purposely ill-defined flexibility for coursework submission, timing on assessments, and other measures to decrease student stress. Such ill-defined flexibility was purposely vague because faculty said they knew their students were facing incredible stressors (for example, taking on more work hours, caring for sick faculty members, etc.) even if they didn't know the individual circumstances.

Giving Grading Grace to Students

I think that's probably the biggest thing is you know, to really empathize with students and to hear where they were coming from, and I feel like sometimes that gets lost when it's like an asynchronous class or when we're only meeting once a week. But I think that's probably you know, the biggest takeaway in all honesty is you know, to maintain that flexibility and you know, to really empathize with what they're going through as well (Participant 105, lines 187-189).

As a natural extension of flexibility in grading, faculty also discussed grading grace. For faculty, they focused on concrete learning while downplaying the role of formal assessment. For example, this means faculty focused on assessing incremental skills and then performance or understanding of those skills while downplaying high-stakes assessments like final exams. Faculty recognized that students had anxieties and worries which directly interfered with their academic performance. In this case, grace means working through those anxieties and worries rather than simply penalizing students. Some faculty also modified their academic policies at the start of the lockdown to make sure all students had a fair chance in spite of the circumstances. For example, some faculty had to radically alter or do away

with synchronous meeting attendance; rather, for the early pandemic, some faculty worked with students in a completely asynchronous capacity, meeting with them virtually when needed.

Giving Grace: The Pastoral Role in Teaching

I have an open door policy I may not have the answers, but I can help you find that people who may have those answers and so I feel like when I'm with my students, they can see that, like they can understand that I am truly genuine about that desire to help them and to connect them and support them (Participant 206, lines 98-99).

When faculty discussed a concept like "grace," they often emphasized the notion of taking care of their students. This type of pastoral role is intrinsic to teaching, yet prior to the pandemic it may not have been given a place of priority. The conditions of the pandemic, however, renewed the pastoral sense of care for many faculty members. They felt a real and personal responsibility to care for students not only in their academic endeavors, but also in their mental and social needs. For example, faculty would try to create a community with synchronous digital tools; this sense of connection was important in the early months of the pandemic because many students expressed stress of the lockdowns as well as social dislocation. In this way, grace extended to a form of pastoral care because many students simply needed more than academic support.

Self-Justification?

When analyzing the qualitative data regarding themes like grace and flexibility, an interesting trend emerged: there was a tension between new faculty (i.e. untenured) who spoke more about giving flexibility and experienced faculty (i.e. tenured) who spoke more about empathy and giving grace. It's unclear why this tension exists, though it could be speculated that new faculty may have worried about teaching evaluations (and their subsequent effect on a tenure bid) while experienced faculty may have been more attuned to the plethora of student stressors (because they had more years working with students). This is, however, speculation. What might be said with some confidence is the need to rationalize in the face of uncertainty in lockdowns and highly unusual teaching circumstances. In other words, rapidly changing teaching methods and academic policies would cause stress and, so, it follows that rationalizing those changes makes sense. What might be said, too, is that such introspective practices could have been a form of self-justification, particularly during a time period when faculty expressed not knowing what their own departmental colleagues were doing in response to the pandemic.

Comparing New and Experienced Faculty

Investigators compared responses of faculty who had worked at the university for fewer than three years with those of faculty who had been at the university for three years or more. It is of note that faculty members may have been new to university but not new to teaching. Investigators compared these two groups because of an assumption that faculty new to the university may have had different perceptions of the pandemic as compared to those who had been at the university longer, with more collegial connections intra- and interdepartmentally. Investigators compared the percentage of excerpts in each code made by each group after normalizing data to provide a 50:50 ratio between groups. Findings indicated that faculty who had been at the University of Indianapolis longer than three years talked more frequently about their pre-pandemic instructional design, stress, significantly increased workload, content reorganization, making videos, organizational design with end user in

mind, and student interactions. Faculty who were newer to the university (fewer than three years) talked more about challenges, inclusivity and diversity, increased LMS use, rethinking many pedagogical choices, learning from mistakes, creating community for students, receiving grace, negatives regarding communication with students during the pandemic, LMS use negatives, and moving back to in person. See Appendix 3 for a comparison of codes in which at least 75% of the excerpts are dominated by either new or experienced faculty.

Discussion

This qualitative study with a purposive sample investigated the lived experience of faculty during the COVID-19 pandemic regarding pedagogical shifts and how those shifts are anticipated to inform pedagogical changes in the future. These findings contribute to the literature chronicling the fundamental shifts in higher education occurring as a result of the COVID-19 pandemic, and the impact of these shifts on faculty and students. Additionally, this study documents the ethos of care which faculty at the University of Indianapolis displayed during the pandemic. This ethos was displayed in a number of ways including purposeful shifts in pedagogy, revision of assessment depending on the circumstances, and flexibility with students working remotely.

Comparison to Graduate Student Investigator Experience

As faculty investigators working with a graduate assistant (Spencer) as co-author, the faculty authors found discussions of her experiences paralleled the faculty experiences they were investigating. The authors felt it was important to include her reflections on learning experiences during the pandemic, and compare and contrast these experiences with those of faculty (see Appendix 4). Her fears and concerns at the outset of the pandemic closely mirror the theme of *panie!* reported by faculty. The unknown, the difficulty of creating learning experiences to replace practical skill learning, and the mental strain were all experienced by faculty as well. Faculty also experienced the social and physical isolation and ensuing distractions brought about by quarantine. By contrast, however, Spencer's report of the student experience does not include a sense of "getting on with it," of experiencing a sense of trying out new teaching methods (or learning methods) and going through an iterative process of resilience and future considerations. Instead, the student experienced the pandemic as "still affecting us to this day." Although more research is indicated, Spencer's case suggests that students may carry mental health concerns and loss of learning opportunities from this time far into their future careers. Universities and professional organizations may need to put systems in place to support students entering the working world during this time that are available far into the future.

Implications for Teaching

To translate the data into future considerations of teaching techniques and methods in online, hybrid, and face-to-face modalities, investigators recommend: 1. Recasting empathy, grace, and flexibility to help students with multiple stressors; 2. Taking less rigid responses to innovation, which includes an openness to experimentation and feedback (and, additionally, consequences to be considered in faculty evaluation and promotion), 3. Making adjustments when new technologies and resources become available, 4. Rethinking how synchronous and asynchronous modalities can be used to push the limits of both teaching and learning, and 5. Considering how social practices of teaching and learning can lead to multi-modal participatory methods in a post-pandemic world. Pelletier et al. (2021) indicated that remote work and learning, mental health issues, the widening digital divide, hybrid learning models and increased use of learning technologies are here to stay. Faculty need to prepare themselves for

these trends with faculty development, keeping in touch with both digital tools and rapidly expanding trends and demands for their disciplines and professional programs, all with an eye to shrinking budgets and uncertain economic times (Pelletier et al., 2021).

Implications for Research

Research regarding the impact of the COVID-19 pandemic on higher education continues to emerge. Further research is needed to explore the effectiveness of new trends and technologies in teaching across disciplines, including digital tools, practical skills courses, and the impact of socioeconomic and cultural factors on learning in higher education; the impact of the pandemic on student and faculty mental health and resilience; and university policies and infrastructure needed to teach and learn in a higher education environment that has experienced seismic changes since the onset of the pandemic.

Limitations

As a qualitative research study undertaken at one university, this study is inherently limited in its generalizability (Glaser & Strauss, 1967; Ulin, Robinson, & Tolley, 2005; Watkins, 2012). Investigators sought to increase validity of the data through repeated readings with multiple investigators reviewing the data and discussion until consensus was reached (Watkins, 2012), as well as using virtual LMS course site tours to triangulate data. However, investigators did not use member checking with participants to further validate their findings. Additionally, a lack of diversity in the sample demographics further limits generalizability of the findings. Investigators attempted to mitigate these limitations by correlating findings to the existing literature.

Conclusion

The insights gained in this study regarding the sudden shifts to emergency remote teaching and then more purposeful teaching techniques during the mitigation efforts in the 2020-21 academic year will translate into actionable elements in the coming years. By capturing the lived experience of faculty at the University of Indianapolis, we posit that they displayed an ethos of care toward students, which can be extended into post-pandemic practices. Our research contributes to the burgeoning body of educational literature regarding the COVID-19 pandemic, while suggesting that some of the observed practices may inform new models of teaching, learning, and assessment in the next decade.

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Appendix

Appendix 1. Interview Questions.

Faculty who started at the University prior to Fall 2019

- University in the fall of 2019
- Faculty who started at the Faculty who started at the University in the Fall of 2020
- 1. Please describe when you came to the University of Indianapolis and what teaching experience(s) you had prior to your appointment here.
- Please describe vour experiences in teaching on-line or in any virtual spaces prior to coming to the University of Indianapolis.
- 3. I would like to begin with the course you taught in the Fall of 2019 (i.e. the course you submitted the video on). Can you briefly summarize the teaching choices you made for that course?
- 4. Can you detail how you conducted class during the first half of Semester II in early 2020 (January to March), prior to the university shifting to emergency remote teaching?
- 5. When the school shifted to emergency, remote teaching, i.e. online only, in mid-March 2020, what shifts did you have to make in your teaching?
- 6. What decisions accompanied your shifts to emergency, remote teaching? How did you adapt to the change?

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- 1. Please describe when you came to the University of Indianapolis and what teaching experience(s) you had prior to your appointment here.
- Please describe vour experiences in teaching on-line or in any virtual spaces prior to coming to the University of Indianapolis.

- 2020 in August, what elements from the springtime did you keep? Why?
- 7. As you began to plan for Fall 7. As you began to plan for Fall 2020 in August, what elements from the springtime did you keep? Why?
- 8. As you began to plan for Fall 2020 in August, what elements from the springtime did you change? Why?
- 8. As you began to plan for Fall 2020 in August, what elements from the springtime did you change? Why?
- 9. What pedagogical choices did 9. What pedagogical choices did you use in Fall 2020?
 - you use in Fall 2020?
- 3. I would like to begin with the course you taught in the Fall of 2020 (i.e. the course you submitted the video on). Can you briefly summarize the teaching choices you made for

- 10. I'd like to discuss some specific teaching strategies you used in Fall 2020.
- What, specifically, was new?
- What creative solutions a. did you employ?
- Do you think you're doing anything differently than colleagues in your department or other departments?
- Do you think you're c. c. anything innovative compared to colleagues in your field?

- 10. I'd like to discuss some specific teaching strategies you used in Fall 2020.
- What, specifically, was . new?
- What creative solutions did you employ?
- Do you think you're doing anything differently than colleagues in your department or other departments?
- Do you think you're anything innovative doing compared to colleagues in your field?

- that course? 4. I'd like to discuss some specific teaching strategies you
- What, specifically, was new?

used in Fall 2020.

- What creative solutions а. did you employ? How did you adapt to the learning environment caused by the pandemic?
- Do you think you're doing anything differently than colleagues in your department or other departments?
- Do you think you're c. anything innovative doing compared to colleagues in your field?

- 11. What was most exciting about teaching in Fall 2020?
- 11. What was most exciting about teaching in Fall 2020?
- 5. What was most exciting about teaching in Fall 2020?

- 12. What was most challenging about teaching in Fall 2020?
- 12. What was most challenging about teaching in Fall 2020?
- 6. What was most challenging about teaching in Fall 2020?

- 13. What pedagogical choices 13. What pedagogical choices 7. What pedagogical choices from the pandemic do you future terms?
 - future terms?
- from the pandemic do you from the pandemic do you intend to continue using in intend to continue using in intend to continue using in future terms?
- teaching has changed, how do you think it has impacted student learning?
- 14. As you reflect on how your 14. As you reflect on how your teaching has changed, how do you think it has impacted student learning?
- 8. As you reflect on how your teaching has changed, how do you think it has impacted student learning?

| Item | Category | New Faculty (n=11, 40.74%)* n(%) | Experienced Faculty (n=16, 59.26%)* n(%) | Total (n=27) n(%) |
|-----------|----------------------|----------------------------------|---|----------------------|
| Age Range | | | | |
| | 20-29 | 1(9.1) | 0(0) | 1(3.70) |
| | 30-39 | 9(81.8) | 5(31.25) | 14(51.9) |
| | 40-49 | 1(9.1) | 7(43.75) | 8(29.6) |
| | 50-59 | 0(0) | 1(6.25) | 1(3.70) |
| | 60-69 | 0(0) | 3(18.75) | 3(11.1) |
| Race | | | | |
| | White | 10(90.9) | 16(100) | 26(96.3) |
| | Other | 1(9.1) | 0(0) | 1(3.70) |
| Ethnicity | | | | |
| | Non-Hispanic/ Latino | 10(90.9) | 13(81.25) | 23(85.19) |
| | Other | 1(9.1) | 3(18.75) | 4(14.81) |
| Gender | | | | |
| | Female | 6(54.5) | 12(75) | 18(66.67) |
| | Male | 5(45.5) | 4(25) | 9(33.33) |

| Years at the University | | | | |
|------------------------------|---|---------|-----------|-----------|
| | 0.50 - 4.71 years | 11(100) | 3(18.75) | 14(51.85) |
| | 4.71 - 30 years | 0(0) | 13(81.25) | 13(48.15) |
| Years in Higher Education | | | | |
| | 0.5-5 | 9(81.8) | 1(6.25) | 10(37.03) |
| | 5-9 | 1(9.1) | 3(18.75) | 4(14.81) |
| | 10-20 | 1(9.1) | 9(56.25) | 10(37.03) |
| | 21-30 | 0(0) | 3(18.75) | 3(11.11) |
| Faculty Rank | | | | |
| | Associate Adjunct or Instructor | 3(27.3) | 1(6.25) | 4(14.81) |
| | Assistant Professor | 8(72.7) | 8(50) | 16(59.26) |
| | Associate Professor | 0(0) | 4(25) | 4(14.81) |
| | Professor | 0(0) | 3(18.75) | 3(11.11) |
| Discipline | | | | |
| | Athletic Training | 1(9.1) | 0(0) | 1(3.70) |
| | Biology | 0(0) | 1(6.25) | 1(3.70) |
| | Business | 0(0) | 1(6.25) | 1(3.70) |
| | Center for Service | 0(0) | 1(6.25) | 1(3.70) |
| | Chemistry | 1(9.1) | 1(6.25) | 2(7.41) |
| | Education | 1(9.1) | 1(6.25) | 2(7.41) |
| | Engineering | 0(0) | 1(6.25) | 1(3.7) |
| | English | 1(9.1) | 1(6.25) | 2(7.41) |
| | Kinesiology/ Master of Public Health | 0(0) | 1(6.25) | 1(3.70) |
| | Math | 1(9.1) | 1(6.25) | 2(7.41) |
| | Music | 1(9.1) | 0(0) | 1(3.70) |

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| Music Therapy | 1(9.1) | 0(0) | 1(3.70) |
|-----------------------|--------|----------|----------|
| Nursing | 1(9.1) | 3(18.75) | 4(14.81) |
| Philosophy & Religion | 0(0) | 1(6.25) | 1(3.70) |
| Physical Therapy | 1(9.1) | 0(0) | 1(3.70) |
| Physics/ Geology | 1(9.1) | 0(0) | 1(3.70) |
| Political Science | 0(0) | 1(6.25) | 1(3.70) |
| Psychology | 1(9.1) | 0(0) | 1(3.70) |
| Social Work | 0(0) | 1(6.25) | 1(3.70) |
| Sociology | 0(0) | 1(6.25) | 1(3.70) |

^{*} New (n=11) = Three years or fewer at the University; Experienced (n=16) = greater than 3 years at the University. May not reflect how long the person has been in higher education.

Appendix 3. New vs. Experienced Faculty Codes with at Least 3:1 Ratio (n=27).

| Themes | Codes* | Normalized Code excerpt count* New faculty** n(%) | | Total code excerpt count |
|----------------|-----------------------------------|---|-----------|--------------------------------|
| Pre-Pandemic | | | | |
| | Pre-pandemic instructional design | 16(17.4) | 76(82.6)± | 87 |
| Panic! | | | | |
| | Stress | 4.4(22.5) | 15(77.5) | 18 |
| | Emotional | 5.8(25.5) | 17(74.5) | 21 |
| | Challenges | 11.6(79.5) | 3(20.5) | 11 |
| | Significantly increased workload | 5.8(25.5) | 17(74.5) | 21 |
| QuaranTeaching | | | | |
| | Inclusivity and diversity | 10.2(91.1) | 1(8.9) | 8 |
| | Increased LMS use | 29.1(78.4) | 8(21.6) | 28 |

| | Rethinking many pedagogical choices | 23.3(76.9) | 7(23.1) | 23 |
|----------------------------|---|------------|----------|----|
| | Learning from mistakes | 7.3(100) | 0(0) | 5 |
| | Content reorganization | 11.6(23) | 39(77) | 47 |
| Innovation & Technology | | | | |
| | Making videos | 5.8(20.2) | 23(79.8) | 27 |
| Something Lost | | | | |
| | Communication with students negatives during pandemic | 5.8(74.4) | 2(25.6) | 6 |
| | LMS use negatives | 18.9(75.9) | 6(24.1) | 19 |
| Something Gained | | | | |
| | Moving back to in person | 4.4(100) | 0(0) | 3 |
| | Student interactions | 2.9(22.6) | 10(77.5) | 12 |
| | Create community for students | 7.3(87.9) | 1(12.1) | 6 |
| | Receiving Grace | 5.8(74.4) | 2(25.6) | 6 |
| | Organization design with End-User (student) in mind | 7.3(16.8) | 36(83.2) | 41 |

^{*}Normalized Code Count: Themes and Codes by New, Experienced Faculty (n=27), Normalized to provide 50:50 ratio between groups. Number (Percent of total) of coded excerpts relating to each theme by faculty category.

±Bold items indicate that this group made 75% or more of the comments in this code category.

^{**}New (n=11) = 3 years or fewer at the University; Experienced (n=16) =greater than 3 years at the University. The number of years at the University may not reflect how long the person has been in higher education.

Appendix 4. Graduate Student Reflections on Learning during a Pandemic.

Being a graduate student amidst a world-wide pandemic has been a tough pill to swallow, to say the very least. As someone who has always had a love for learning, being a student under the circumstances we were placed in has made my graduate school experience far from easy. Let's be honest, any graduate program is going to be challenging in its own way. However, pair that with solely virtual learning and no or very minimal in-person classes/traditional face-to-face classes, all while dealing with fear of the unknown future amongst the world we live in, you can only begin to imagine the struggles we students have faced.

I am currently a third year Master's of Occupational Therapy student at the University of Indianapolis, set to graduate in May of 2022. When I began my journey as an OT student in January of 2019, I never would have imagined that my educational experiences would be greatly affected in such a harsh way. In March of 2020, my cohort and I began learning remotely with our classes being taught solely via zoom. This meant that our in-person and hands-on experiences as we learn to become healthcare professionals were drastically taken away from us before our eyes. Now, I am not throwing punches at the University because they did what was best and safest for the faculty, staff, and students at the time; there is no doubt about that. Speaking about the faculty in the occupational therapy department specifically, each and every one of my professors went above and beyond to make our learning experiences educational, interactive, and as enjoyable as they could be despite our given circumstances. However, learning remotely has been far from easy, personally.

I am someone who learns through interaction, being hands-on, and simply by "doing." I have never been a student who could crack open a book and fully grasp the concepts at hand. That being said, I have still always been the student who completed the assigned readings and took detailed notes during lectures. However, I was challenged to alter my learning style as our classes shifted to all virtual classes with PowerPoint presentations and textbooks being my main educational resources instead of my preferred hands-on, interactional, discussion-based way of learning. I had to shift my way of learning, and I had to shift it fast. I dutifully attended all of my virtual classes as I sat on the floor of my living room, trying to learn how to safely transfer my patients onto their wheelchair through watching YouTube videos.

On top of all of the changes I experienced throughout my education, I saw my mental health begin to deteriorate. I was diagnosed with depression, anxiety and panic disorder many, many years ago long before this pandemic, but what seemed as a complete shift in the universe does not help anyone's emotional health. I have always been a social butterfly. At that time, I was living alone in my apartment, with my family and boyfriend all living out of state - the state borders closing for a period of time did not help one bit. I was scared and alone for many weeks on end, cramped in my tiny one-bedroom apartment with nowhere to go other than taking outdoor walks for miles on end. By being home 24/7, I constantly found things that needed to be done in my home – the laundry was piling up, the dishes were cluttering the countertops, the trash needed to be taken out... I was very distracted while I was trying to learn, because the household things that were never on my mind at school were readily in front of me. I wanted to leave my cramped little apartment, but I had nowhere to go. I was furloughed from my part-time job at [a health and fitness club] for 3 months, with my unemployment benefits not kicking in until 2 weeks before I was able to return to work after my gym reopened. My mental health has always been a concern of mine, but I have learned to manage it over the years. However, being stuck at home, completely alone, felt like a kick to the stomach.

I think it's safe to say that this pandemic affected us in many other ways simply than just a virus being on the loose, and it is still affecting us to this day. When will it end?

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