

Original Paper

A Qualitative Study of Faculty Responses to Teaching during the Covid-19 Pandemic: Creating a Culture of Support

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Abstract

This study examines the online teaching and learning experience of twenty-one (21) faculty members at a Gulf Cooperation Council (GCC) research university from the initial campus closure of the university in February 2020 in response to the COVID-19 global pandemic, through the end of Fall 2020 semester. The methodology entailed one-on-one interviews with instructors, reviews of the course materials in the Learning Management System, and the examination of email and videoconferencing exchanges. Gagne's Nine Events of Instruction and the Quality Matters Rubric guidelines for instructional design framed the methodology. This study finds that faculty benefitted from close connections with colleagues and continuous institutional support during the pivot to emergency remote teaching and into a hybrid learning environment. These two factors – collegial connections and university resources – were crucial in sustaining faculty work during the period of this study.

Keywords

faculty, emergency remote teaching, university teaching, pedagogies of care

1. Introduction

In February 2020, the university moved all instruction online to provide a safe environment for students, staff, and faculty at the onset of the COVID-19 pandemic and to comply with national lockdown directives. This pivot, from on-ground teaching to all online teaching during spring 2020 mid-semester has been labeled “emergency remote teaching” or ERT by scholars of digital pedagogy (Strommel). Emergency remote teaching refers to the practice of moving in-class activities to completely online delivery methods in response to COVID-19 safety concerns for students, staff, and faculty at a specific and immediate moment in time.

During the summer of 2020, the university migrated to a new Learning Management System (LMS). Both continuing and incoming faculty received guidance on the use of the new LMS via several online

trainings. Beginning in July 2020, faculty received three extensive training opportunities on online and hybrid design. New hires, scheduled to begin teaching in the fall 2020 semester, also participated in these events. The teaching experience during the summer 2020 semester was completely online from initial design to final examination and no longer classified as ERT.

In the fall semester 2020, the university deployed a hybrid model. Prior to the semester, the Information Technology (IT) team worked diligently to outfit specialized classrooms with interactive whiteboards which served as large, integrated desktops mounted on smartboard space in the classroom. Remote students logged on to regularly scheduled class meetings via video-conferencing software, engaging with faculty via their video cameras, voice interaction, and the software's chat functions. The on-campus students came into redesigned classrooms specially outfitted with social distanced chairs with side-arm desks and marked intervals on the floors. All students and faculty received comprehensive trainings and written guidance on campus-wide protocols for mask-wearing, handwashing, and sanitizer stations as well as proper disposal procedures for discarded masks and gloves. Classrooms were regularly sanitized after hours. The campus has restricted access to only students, faculty, staff, and escorted visitors.

Faculty attended one-on-one classroom technology training sessions prior to the start of the fall term. In these sessions, instructors learned to use the interactive boards, adjust volume, set-up classroom "appointments" to schedule their class times, and position themselves on camera so that both on-campus and remote students could see and hear them clearly. By week 8 of the semester, approximately 90% of the instructors adopted the use of enhanced in-class microphones to ensure that remote students could hear class proceedings. Behind the scenes, the Registrar, faculty, and IT staff coordinated student enrollment into the LMS.

The LMS housed student resources, assessments, and formal feedback. While prior to the pandemic, faculty chose traditional paper examinations as major assessments, during the pandemic they moved to varied assessment types. Faculty expanded assessment types to include structured online mid-term examinations using proctoring software through the LMS, project-based learning, problem-based learning, presentations, blogging, peer-to-peer teaching, reflective learning, and gaming.

2. Method

2.1 Theories Informing the Methods

The audit used two major theoretical approaches: Gagne's Nine Events of Instructions (Reception, Expectancy, Retrieval, Selective Perception, Semantic Encoding, Responding, Reinforcement, Retrieval, Generalization) (Gagne, 1985) and the Quality Matters Higher Education peer-review rubric process used to ensure the quality of online and blended course design (qualitymatters.org).

The audit featured classic qualitative research methodologies (Berg, 1995) including one-hour long scheduled interviews with all twenty-one faculty. All meetings were held via the University videoconferencing system, arranged with faculty via their official email. All faculty and the researcher

accessed the system from their homes. Faculty members walked the researcher through their respective course materials during the interview. Framing this study through following Gagne's Nine Events allows us to examine discrete teaching activities (Gagne, 1983). Using the framework of the Quality Matters (QM) Higher Education peer-review rubric affords educators a mechanism to examine the use of teaching resources in an online environment (qualitymatters.org). QM is a nationally recognized, faculty-driven peer-review process used to ensure the quality of online and blended course design. The Quality Matters Higher Education Rubric is a set of standards used to evaluate the design of online and blended courses. Course design is critical to the quality assurance process as it affects the course delivery and overall success of online and blended learning programs. Many factors can affect the quality of an online or blended course. These factors include course design, course delivery, the learning management system, faculty readiness, student readiness, and infrastructures. QM standards were developed and revised based on research and established standards in the fields of instructional design and online learning. Reviews are conducted by a team of certified peer reviewers, who actively teach online and have been trained and certified by Quality Matters. The researcher is a QM certified peer-reviewer.

Evaluation plays an important role in the teaching-learning transaction. As Farrant (1999, p. 206) maintains, "No period of practical teaching is complete without some form of evaluation." Robert Gagne remained one of the most prominent thinkers and creative figures around instructional design and the field of instructional technology at large (Reiser & Dempsey, 2007). This is particularly indicated in the work of Reiser et al. (2007, p. 26), who argue that "another important event in the history of instructional design occurred in 1965 with the publication of *The Conditions of Learning* by Robert Gagne who described five domains or types of learning outcomes that require different set of instructions to promote learning." Joyce and Weil (1996, p. 367) consider Gagne to have produced a careful analysis of the important variables in learning and also how to organize instruction to take these variables into account. Glatthorn, Boschee and Whitehead (2009, p. 80) regard Gagne among conceptual empiricists who take their research methodologies into action.

This researcher also follows the work of Z. Nicolazzi with respect to positionality in qualitative research design. Dr. Nicolazzi explored the positionality of the researcher in a major publication in Chapter 2 (Nicolazzi, 2018). This positionality is crucial to understanding the role of the interviewer-interviewee relationship. In this study, the researcher was recently hired by the university, both in a consultancy position and then as a professor. The positionality of the researcher as insider allows for more access to materials and enhanced understanding of the faculty experience during the COVID-19 pandemic environment.

The challenges faced by instructors in crisis teaching have not been studied extensively. The response of the education community and the rise of "culture of care" and pedagogies of care are very recent in the literature. The research on culture of care began in 2020 with the work of Maha Bali and other international pedagogues in the response to the pandemic. In GCC education she contributed to this

body of work with an entry in the meta-analysis, *A Global Outlook to the Interruption of Education due to the COVID-19 Crisis*. The work explored the entire landscape of education during the pandemic. “While there are support communities and mechanisms, ... all parties are experiencing trauma, psychological pressure, and anxiety to various degrees, which necessitates a pedagogy of care, affection, and empathy” (Bozkurt et al., 2020). While the Bozkurt study focuses on the educational ecosystem during the pandemic, the meta-analysis does not focus specifically on faculty work. This study contributes to the research on the culture of care by highlighting the factors of institutional support and collegial connections for faculty.

This study features qualitative research methodologies (Berg, 1993). This includes hour-long interviews with faculty during the spring 2020, summer 2020, and fall 2020 semesters. Every faculty member was interviewed once each semester for at least sixty minutes; sometimes the meetings went much longer. All meetings were held via virtual meeting through videoconference software. Faculty shared resources in their respective LMS classrooms and allowed the researcher access to this material for review.

Each semester covered in this study every faculty member was asked the following questions: *What technologies are you adopting to teach? What is working? What isn't working for you or your students? How do you feel about teaching now?*

The interviews were analyzed using qualitative ethnographic coding software. The transcription and coding process produced modal terms used by faculty in describing their experiences in the respective spring, summer, and fall 2020 semesters. The analysis included a virtual “walk-through” of the online learning environment, examining the classroom materials from the pivot to ERT in spring 2020 through the end of fall 2020.

2.2 Review of LMS Course Materials

During each interview, every faculty member was asked for an overview of their teaching and a “walk through” of their online learning resources in their respective LMS classrooms. Faculty also shared information about their teaching techniques and strategies, ideas for future development of resources and assessments, the challenges of emergency remote teaching, and challenges vs. benefits of the hybrid model. Typically, instructors shared details of their experiences creating and re-creating assessments to meet student needs. Faculty shared their teaching techniques using the new systems, strategies, ideas, and how they modified materials during the pivot in spring 2020. They also shared responses to the new LMS system and its features, as well as challenges and advantages using technology in the summer and fall semesters. The interviews themselves were a mechanism of support as instructors adapted to new teaching methods. They welcomed the opportunity to talk through their experiences.

3. Result

3.1 Faculty Technology Choices

Responses to the first question of the study, *[What technologies are you adopting to teach?]* are below.

Note that faculty used a variety of communication tools, from videoconferencing to emails.

Below is a list of all the technologies used by faculty and their level of satisfaction with the tools.

Key for TYPE category: C=Communication Tool; LMS=system; T=Textbook; V=Videos; D=Demonstration tools; A=Assessments attached. Numbers reflect number of faculty using the technology.

Table 1. Faculty Technology Choices

| Technology | Type | Useful? | Prior to Fall 2020? | Since Fall 2020? | Feedback |
|----------------------------|-------|---------|---------------------|------------------|--|
| Video Conferencing | C | Yes | 80% | 98% | Improved over Spring 2020. |
| Email | C,A | Mixed | 80% | 98% | Improved interaction because LMS emails came automatically and extensive use of Announcements in LMS. |
| Chat | C | Yes | 43% | 93% | Useful, especially with a channel. |
| LMS | LMS,A | Yes | 80% | 98% | See discussion below. |
| Whiteboard | D,A | Mixed | 30% | 48% | Some issues with handwriting; “nice because it’s easy to save.” |
| Test-Gen | T,A | Yes | 80% | 93% | Most used materials from textbook providers and modified questions; most used PPT and other visuals from textbook materials. |
| Textbook videos | T,A | Yes | 43% | 48% | LMS review reveals no consistency in where videos are posted. |
| Other videos | D | Yes | 38% | 38% | |
| Khan Academy | D,A | Yes | 30% | 30% | Math & Science support for student learning. |
| Lynda.com | D | Yes | 1 | 1 | Design support for student learning; potential for faculty & staff PD. |
| LMS Analytics | LMS | Yes | 13% | 14% | One of the favored features of the new LMS. |
| Gradebook- | LMS | Yes | 80% | 98% | Faculty utilized this extensively to monitor student engagement & performance. |
| Class Notes | A | Yes | 8% | 38% | Some issues: most went back to using LMS. |
| Live recordings | C | Yes | 1 | 1 | Potential for growing library of faculty lectures. |
| DVDs | D | Yes | 8% | 8% | |
| Discussion Question Forums | LMS | Mixed | 11% | 80% | Used this for class credit more than SP2020. |

| | | | | | |
|---------------------|-----|----------|-----|-----|---|
| Games software | D | Yes | 19% | 19% | Potential for leveraging student engagement. |
| Plagiarism software | LMS | Yes | 19% | 38% | Some connectivity issues with LMS. |
| Channels | C | Yes | 0 | 19% | More challenging than other platforms. |
| Proctoring software | A | Positive | 30% | 43% | Some faculty will return to paper examinations after COVID. |
| Feedback | LMS | Positive | 0% | 8% | New Tool. |
| ESL Interact | T,A | Positive | 0% | 30% | Online textbook. |

How did faculty leverage the LMS? The majority of faculty used the Module format (either Week 1, Chapter 1, or Module 1, for example). 81% of instructors embedded assessments within Modules. The other instructors stored assessments in special sections accessed via the LMS navigation bar. Faculty extensively used quizzes for examination. However, there were some challenges with importing previous LMS assessments and with appropriate use of proctoring software. 90% of the instructors used the LMS to provide supplemental materials, videos of class sessions, and materials supporting assignment completion. During the fall 2020 semester, faculty received training on video creation best practices in hybrid/online teaching. One third of the 15 returning faculty (spring 2020) responded in the fall 2020 semester that they had incorporated more video use in their instruction.

Faculty next answered the following guiding questions: *What is working? What isn't working for you or your students?* The responses were coded by semester using ethnographic techniques.

Table 2. Modal Words in Order of Frequency

| Spring 2020 (ERT) | Summer 2020 | Fall 2020 |
|-------------------|--------------------|--------------------|
| Isolation | Interaction | Interaction |
| Interaction | Feedback | Adapting |
| Feedback | Innovation | Technology |
| Virtual | Teaching | Innovation |
| Alienating | Student-engagement | Student-engagement |
| Coping | Online | Hybrid |
| Secure | Virtual | Campus |

For the final interview question in spring 2020 during the original move to ERT [*How are you feeling now that instruction has moved entirely online?*] the data best presents as a series of comments.

General comments made by faculty in descending order of frequency included the following responses:

- “We are doing our best.”
- “I miss interacting with my students.”
- “I miss interacting with my colleagues.”

- *“I miss the non-verbal cues I get while in the [physical] classroom.”*
- *“[Teaching online/tech] takes a lot more time for us and for the students.”*

Some of more specific responses, those that capture through metaphor how faculty were feeling:

- *“It’s like building the plane while flying it.”*
- *“[The app choices] are like a smorgasbord, and I’m getting indigestion.”*
- *“For some students, going online is worse than going to the dentist.”*

Almost all instructors expressed their desire to “get the job done.” They frequently commented on the time required to learn new applications while teaching classes. Some felt fatigued, but most shared examples of surprising “Teachable Moments” with curriculum surrounding the COVID-19 virus – from new ways to demonstrate the usefulness of scientific and mathematical concepts, to articles on supply chain management, to new resources for reading, writing, and comprehension. Some faculty members considered this an “adventure” in their own learning and professional development. All faculty members expressed deep concern for the welfare and success of their students.

By the summer 2020 semester all courses went online. Faculty expressed less frustration and alienation with online teaching. While there was limited time to prepare for the semester, faculty noted that the prior knowledge of an all-online semester made it easier to prepare appropriately for teaching, unlike the sudden transition in the spring 2020. Additional institutional resources for hybrid teaching were another factor that instructors cited as contributing to their increased satisfaction in teaching summer 2020. For example, the Information Technology staff offered more software options and training for software and applications adopted by the faculty.

By the fall 2020 semester, faculty had support with online development through the transition to a new LMS system. The fact that faculty had more lead time to prepare and design new materials for the upcoming semester allowed them to better leverage software and learning resources. Increased training and the establishment of a formal teaching center afforded instructors more support from the university. The institution created a hybrid teaching environment via classroom smartboard interfaces for faculty to teach from campus to both on-ground (face-to-face) students (under COVID-19 protocols) and to students logging into the classroom via the videoconferencing application. However, the transition to hybrid learning itself also caused fatigue and challenges; one faculty member attributed this to “a new learning curve.”

Faculty shared their challenges and successes with the new fall 2020 hybrid model. Consistently, instructors discussed their struggles with adapting established teaching techniques to the spring 2020 ERT and then into the fall 2020 hybrid learning environment. They balanced flexibility in teaching with maintenance of standards in assessments and juggled multiple classroom and online technologies. Some challenges included connectivity, sound, resource use, plus the learning curve involved in managing both new classroom technologies such as the interactive smartboards and the LMS. Their successes centered on new ways of engaging students using varied technology. For example, faculty comments included insights into issues such as attendance and engagement. *“They come to class*

because all they have to do is wake-up and turn their phone on!” However, one interesting behavior perplexed faculty: students arrived on campus for an on-site class but instead of attending in the classroom, they chose to log into classes virtually in other parts of the campus with their friends. Faculty responses ranged from both shock and concern to understanding that students may have needed the connection afforded by shared student spaces.

4. Discussion

First, the pivot to online learning created a stressful experience for faculty. While instructors around the world shared this experience, this study offers insight into how their specific responses shaped their activities as teachers. Consider three challenges that faculty expressed in pivoting from an on-campus classroom environment to an online environment involved creating entirely new teaching materials in mid-semester. For example, faculty created examinations prior to the semester in anticipation of on-ground paper testing scenarios. With the online pivot in spring 2020, this became impossible, and instructors had to create new assessments – typically projects to replace examinations. Most subjects involve some major summative assessment, so this created a lot of extra preparatory work. Time and effort used prior to the semester had to be replicated to create new assessments aligned with course learning outcomes. Another challenge involved the classroom itself. In an on-ground campus classroom everyone has awareness of what to do, when and where to meet, etc. The online classroom does not have doors, chalk or whiteboards, even intuitive places where instructors teach, and students sit. Each instructor in the spring 2020 semester had to improvise in creating these learning spaces in online environments.

Second, technology both eased the pivot and created challenges in teaching. The availability of videoconferencing software – already a system available to faculty and students – emerged as the most helpful tool in the pivot to online instruction. Videoconferencing software allowed consistent online and hybrid instruction to continue through subsequent semesters during the pandemic. This powerful communication tool allowed classes to continue at structured timings and reinforced a sense of normalcy in collegiate life. During the spring 2020 semester pivot to online learning, many faculty members loosened some attendance requirements and met with students more often in a one-on-one conference. For example, allowing for individual student challenges in accessing classes during regularly scheduled classes. In subsequent semesters, faculty held both online and on-campus class sessions during regularly scheduled class times. Another advantage came with the enhanced use of the LMS to improve course material delivery. The system allows students to submit materials without coming to campus. The act of organizing online material in conjunction with training and support, raised the skill levels of faculty and students with respect to educational technology. For example, faculty learned that quizzes given through the LMS can be placed in sequential order at a specific site in the online classroom. During the pivot, faculty sought out and experimented with new technologies in support of student learning, implementing several for future semesters. Some software with similar

functionality was adopted in the summer and fall 2020 semester. For example, the move from one texting application to a university-wide application was chosen after the ERT semester.

However, the technology itself created challenges. For example, there was a steep learning-curve involved to become competent in setting up and using the LMS and other unfamiliar systems. This and the time commitment to set up and manage the hybrid learning environment created a lot of stress for the professorate. The comment referring to “flying while we are building the airplane” illustrates similar comments from faculty as to how they sought to ensure that students achieved the course learning outcomes at levels compatible with pre-COVID teaching environments. Some technologies created more problems than solutions, with faculty struggling to create workarounds when various software did not interface well with the LMS system or student information systems.

Third, a culture of support is crucial to success in this type of teaching environment. The comradery felt amongst the faculty served as an important network of care. Faculty frequently shared challenges and solutions with each other and across the institution during pandemic teaching. Likewise, institutional support, such as the establishment and leveraging of the teaching and learning center grounded the professorate in a shared practice, as well as creating spaces for problem-solving, brainstorming, and adaptation. Significantly, the specter of the pandemic brought people together even while they were physically separated and often teaching entirely from home. The degree to which faculty found ways to connect with colleagues reflected both creativity and a strong desire to maintain relationships despite sometimes months of isolation. For example, faculty created informal ways of connecting such as outdoor walks together, social media connections, and establishing phone trees.

Fourth, the post-COVID teaching landscape will undoubtedly be changed forever. While technologies for videoconferencing had been available for years, faculty and students at this site became sophisticated users, moving deftly between software and devices during online and hybrid class time. At this study site, the IT staff accelerated the deployment of hardware solutions, such as the in-class interactive smartboards for remote students to engage with live classes. Adoption of the LMS systems eliminated many of the conflicts with turning in paper assessments, such as lost or damaged papers, or conflicts over whether the paper had been submitted at all. Likewise, the hybrid interface gave students more opportunities to attend classes and reduced interpersonal conflict between students and faculty over absences. The hybrid option allowed students with minor illnesses or other classroom attendance barriers to simply login from home to access classes and class materials. Hybrid options also afford solutions to scheduling problems, for example, lack of classroom space. The hybrid model centers on flexibility and engagement for students. Faculty used this model in various ways and developed their capacity for technology integration in positive ways during the summer and fall 2020 semesters. In this study, the experiences of faculty reflect their flexibility and commitment to adapt quickly to what likely will be the new normal in course delivery.

5. Conclusion & Recommendation for Future Study

This study focused on the teaching experiences of twenty-one faculty over three semesters during the COVID-19 pandemic. Teaching started with the mid-semester spring 2020 ERT pivot, followed by an all-online summer 2020 semester, and finally a fall 2020 semester teaching in hybrid learning modality. The study used qualitative techniques involving individualized interviews over the three-semester period, review of teaching artifacts, and faculty feedback. Gagne's Nine episodes of teaching, research on the culture of care, and the Quality Matters framework shaped the theoretical approach of this study. The study finds that a culture of institutional support and close connections with colleagues created an environment for sustaining teaching.

The study shares limitations with other single-site studies in that it should not be applied to all teaching environments without further research. For example, this university faculty cohort compared to others is relatively small, because the institution is young. Likewise, the pandemic itself constitutes a unique situation for education unlike any seen globally since the 1918 Influenza pandemic. The early twentieth-century higher educational landscape differs widely from today's globalized, post-modern structures (Jenks & Riesman, p. 65). For example, broader access to education and widely available resources for learning contrast with the localized and limited role of higher education in the previous century.

The challenges faced by instructors in crisis teaching warrant further study, specifically faculty work within the culture of care. Further research on faculty teaching challenges should examine education technology adoption and adaptation in discipline specific issues (such as mathematics or composition). Future studies should focus on other entire faculty cohorts with larger populations. Future studies should center on how best to support faculty by comparing the variables of training design, social support, interpersonal support, or individual support in determining which are the most beneficial to sustaining faculty work.

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