

Online, Open, and Equitable Education

Lessons from Teaching and Learning
during the Global Pandemic

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Elon, North Carolina
www.CenterForEngagedLearning.org

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

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

Cataloging-in-Publication Data

Names: Turner, Nancy K. | Baker, Nick | Hornsby, David J. | Germain-Rutherford, Aline | Graham, David | Wuetherick, Brad

Title: Online, Open, and Equitable Education / Nancy K. Turner, Nick Baker, David J. Hornsby, Aline Germain-Rutherford, David Graham, and Brad Wuetherick

Description: Elon, North Carolina : Elon University Center for Engaged Learning, [2024] | Series: Center for engaged learning open access book series | Includes bibliographical references and index.

Identifiers: LCCN 2024938941 | ISBN (PDF) 978-1-951414-12-2 | ISBN (PBK) 978-1-951414-13-9 | DOI <https://doi.org/10.36284/celelon.0a7>

Subjects: LCSH: Distance education | Education, Higher – Computer-assisted instruction | Educational equalization

Classification: LCC LC5803.C65 O55 2024 | DDC 378.1734 On5tu

CHAPTER 6

Pedagogical Adaptions in Undergraduate Health Sciences Courses during the COVID-19 Pandemic at Hispanic-Serving Institutions

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In response to the COVID-19 pandemic, by mid-March of 2020, nearly all colleges and universities in the United States (and worldwide) had canceled or were in the process of canceling in-person classes, converting to full-time online instruction, and requiring many students living on campus to relocate (Davidson College 2020; National Conference on State Legislators 2020). Although some students were already enrolled in online programs or courses, this pivot resulted in a significant change in the educational experience for approximately 26 million college students in the United States alone (US Department of Education 2019).

In addition, faculty across the nation were thrust into a teaching environment that many were not prepared for and had potentially never experienced before. Throughout the 2020–21 academic year, I served as a facilitator for a faculty development course to aid faculty with the transition to virtual learning, providing mentoring and support to faculty as they navigated this new territory. This course, which I participated in as a student while facilitating, was the inspiration for some of the interventions used to address the issues observed in the 2020 spring semester. While I facilitated the course, several faculty in the social sciences, humanities, and life sciences shared with me that they had never taught an online course prior to the sudden shift. Although the campus does not track what percentage of faculty have online teaching experience, in the two semesters prior to the COVID-19 pandemic, 11% of the

total sections of scheduled courses were fully online, and approximately 3% were blended with an online component. Thus, it is reasonable to assume many of the instructors had limited, or not any, online teaching experience. With very little time to prepare and transition, they suddenly had to familiarize themselves with the pedagogical methods and technological requirements of online learning. Given the short notice, although faculty at my university were given an extra week of non-instructional time to prepare, and support staff was made more available, no formal training was provided until the summer of 2020, when the university offered an optional faculty development course to better prepare faculty for the fall 2020 semester.

Case Study

This case study was undertaken at a primarily undergraduate university composed of 58% first-generation students and a total student population just under 7,000. It is a designated Hispanic-serving institution (HSI) with the student body that is 53% Latino, 27% White, 6% Asian, 4% mixed race, 2% Black, and 1% all other reported ethnicities. The majority of students, 81%, are eligible for government-sponsored financial assistance, indicating they are of lower income. Campus wide, female students constitute 65% of the enrolled population, but within the health sciences program, the selected major of the students in the classes used for this research, 82% are female.

The main purpose of this case study was to investigate the impact of the pandemic and pedagogical interventions on undergraduate health sciences students at a public four-year university. In my spring 2020 courses, there was a notable change in student attendance (95% to 65%) and number of students submitting assignments on time (91% to 69%) from pre-pandemic face-to-face instruction to the sudden transition to virtual instruction. Specific interventions were implemented in the first full semester of 100% remote learning (fall 2020) to address the concerns observed in class attendance, students submitting assignments on time, and students maintaining

course performance. This research sought to answer the following question: How did students respond to interventions aimed at improving class attendance, increasing the number of students submitting assignments on time, and maintaining a consistent level of student performance throughout the term?

Literature Review

The sudden change from in-person learning to remote due to the pandemic and the inexperience of some faculty with virtual instruction were significant challenges on their own. However, the challenges of the switch to online learning were compounded with the unprecedented mental health issues that have come with the isolation, lockdowns, and other restrictions of the pandemic response (Cullen, Gulati, and Kelly 2020; Pfefferbaum and North 2020). Students and faculty alike had to overcome many unique obstacles to successfully complete the spring 2020 terms at colleges and universities across the globe.

In a survey of chemistry students, Petillion and McNeil (2020) discovered nearly all students experienced increased stress, fear, and anxiety with the transition to online learning from the pandemic. In most cases, the reported emotional responses related to a lack of familiarity with remote learning. Students also expressed concerns about losing dedicated study spaces on campus, increased family responsibilities with returning home, and the inability to adequately prepare for the transition with the suddenness of it. More concerning, though, were reports from students who experienced issues with engagement with their classes and course content; 69% reported a decrease in engagement, and 64% stated their performance in class was impacted by the pandemic and the unexpected requirement to shift to remote learning. From their findings, these researchers recommended college instructors design courses during the pandemic with opportunities for active learner participation and interaction, clear and regular feedback and communication, and flexibility with assignments (Petillion and McNeil 2020).

Allan, Garriott, and Keene (2016) found that first-generation college students often come from lower socioeconomic backgrounds and experience academic challenges from limited resources to acquire the needed materials to be successful in their courses. Further, these students have lower levels of perceived life and academic satisfaction. Similar research established a relationship between financial strain, mental health, and academic engagement among first-generation college students (Adams, Meyers, and Beidas 2016). Prior research has also shown that first-generation students are more likely than other college students to have family obligations, such as taking care of a sibling or providing physical care for an older family member; these outside obligations were generally greater for females (Covarrubias et al. 2018). Knowing the economic consequences of the pandemic and that families from lower socioeconomic levels, people of color, and women were more adversely affected, it is reasonable to assume first-generation college students were under even more extreme stress during the pandemic (Fairlie 2020).

There are some concerns with online learning, even with the best of circumstances. Xu and Jaggars (2014) determined that a performance gap exists between traditional and online courses. The gap widened for younger, male, Black, or lower performing students. It was also more significant in the social sciences, business, law, and nursing disciplines. Additionally, research has confirmed that a digital divide exists for many students. Approximately 20% of US students, particularly students of color or those from lower socioeconomic groups, were unable to maintain access to technology needed for virtual learning. Students had damaged or broken hardware, data plans with insufficient limits, and other such problems accessing the internet (Chulkov and VanAlstine 2013; Gonzales, McCrory Calarco, and Lynch 2020).

With these issues in online learning identified, the COVID-19 pandemic served to exacerbate them. Dumford and Miller (2018) stressed the importance of student engagement, which they defined as “student involvement in educationally purposeful activities” (454). Collaboration with peers and student-faculty interactions

are important components of student engagement, which can be particularly challenging in the online environment. The specific challenge, though, given the pandemic, was maintaining this engagement while students were struggling with extraordinary and unanticipated stressors (Cullen, Gulati, and Kelly 2020; Petillion and McNeil 2020; Pfefferbaum and North 2020). Theodosiou and Corbin (2020) reported both a student preference for and improved academic performance with online courses that provide opportunities to create connections, build a sense of community, and promote engagement. These opportunities for connection included interaction with peers and instructors, time for discussion of personal non-class related items in synchronous sessions, and opportunities to connect outside of scheduled class time.

Students can have emotional reactions to feedback provided on assignments, and they prefer feedback that is clear and motivational. Some students prefer to have written feedback that is accompanied by direct interaction and explanation from the instructor (Pitt and Norton 2017). Researchers identified the most common reactions to assignment feedback in college courses are annoyance and frustration; these emotional reactions can limit the effectiveness of the feedback as it is not interpreted objectively (Wass et al. 2018). This research also indicated the emotional response and limited effectiveness of the feedback can be aggravated by stressful conditions. Given the conditions of the pandemic and the unexpected forced remote learning, it could be reasonably predicted that students would have exceptional challenges to processing instructor feedback, particularly feedback that was indicative of poor performance (Cullen, Gulati, and Kelly 2020; Petillion and McNeil 2020; Pfefferbaum and North 2020; Pitt and Norton 2017; Wass et al. 2018).

Case Study: Student Reactions to the Pandemic

I taught three undergraduate classes in each of the spring 2020 and fall 2020 semesters which were examined for this case study. The classes were undergraduate health sciences courses at a public

four-year institution in Southern California with just under 7,000 students, nearly all undergraduate.

In the spring 2020 semester, the classes were being taught in-person and transitioned, along with the entire university, to virtual instruction with synchronous meetings. The comparison classes, in the fall 2020 semester, were taught virtually the entire semester, with live synchronous lectures and specific interventions implemented to address the issues observed during the spring semester. I was the sole instructor for all these classes, with full discretion over how to implement (or not implement) any interventions to improve student success. I did not, however, have any say whether the class was virtual, meeting on campus together, or if I needed to record my lectures ahead of time.

Context and Issues Identified

Most of the students enrolled in the classes were under the age of twenty-five. Many had employment outside of their student responsibilities. There was a blend of students who attended the university straight from high school, and who transferred from a community college. In the fall semester, due to the pandemic, some of the newly enrolled students had never physically been on campus as they were unable to tour the campus or attend in-person orientation. One class in each semester was a lower division course, primarily made up of students who were new to the university, whether incoming first-year or transfer students. The other two courses were upper division courses made up entirely of students with third or fourth year standing.

With the transition to virtual instruction in March 2020, there was an immediate change in student engagement. Attendance at synchronous Zoom meetings was 69% of what the pre-virtual instruction average had been. There was a marked change in the number of students submitting assignments on time or at all (table 6.1). Even prior to the formal announcement from university leadership, in-person student class attendance started to drop off with increasing fears and concerns regarding COVID-19. Over

one-third of the students finished the course with a lower grade than they had earned prior to the transition to virtual instruction; two of the three classes had at least one student who was active prior to the transition but completely disengaged and failed to successfully complete the course afterward.

	Pre- Transition	Post- Transition
Attendance	95%	65%
Submitting assignments on time	91%	69%
Submitting assignments at all	99%	95%
Receiving passing grade	99%	95%
Maintained same or better grade	n/a	65%

Table 6.1. Change in student engagement and performance before and after transition to virtual instruction in spring 2020 semester (n=74)

Many of these changes in performance are explained by the stress of economic and emotional factors of the pandemic, as reflected in student communications and responses to the end-of-course surveys (Cullen, Gulati, and Kelly 2020; Fairlie 2020; Pfefferbaum and North 2020).

When students missed class or failed to submit an assignment in a timely fashion, they communicated to me such issues as being:

- too tired to attend class after virtually working from home all day;
- distracted due caring for younger siblings as parent(s) is/are essential workers and student returned home after campus closure;
- unable to concentrate after using digital devices to complete all school work through virtual instruction;
- stressed about contracting COVID;
- stressed about economic issues (family member or student losing employment);
- concerned about the state of the country or world in general;

- restless while stuck in their home all day given public health lockdown orders.

Revised Teaching Methods

The change in student engagement and performance in the spring 2020 semester indicated that something needed to be done differently, from a pedagogical perspective, in subsequent virtual semesters. Although the COVID-19 pandemic lasted longer than many predicted, students were still moving forward with their lives, deserving the same high-quality education despite the unique challenges they and faculty were presented with. From the observed engagement and performance issues, combined with student communications, universities and colleges knew they needed to prioritize several things. Among these were improving class attendance, increasing the number of students submitting assignments on time, and maintaining a consistent student performance throughout the term.

After completing a summer faculty development course and enrolling in ongoing faculty development, both designed around evidence-based methods to help with virtual instruction during the pandemic, I implemented a variety of methods in my fall semester courses. Primary and secondary interventions were designed to address the identified priorities, with primary interventions intended as the main strategy and secondary interventions to support the main strategies. The primary interventions, aimed at directly addressing the issues observed in the first semester of virtual instruction and described in detail below, included accountability groups, individual student outreach, quality feedback, quick assignment turnaround times, and careful alignment of the course content with reinforcement from assignments. The secondary interventions, designed to provide additional support to the students and also elaborated on later, included utilizing a learner intake survey, creating a welcoming environment, and having flexibility with assignment due dates.

Accountability Groups

At the first class meeting of the semester, groups of four to five students were randomly created. Students were given ten minutes in breakout rooms to introduce themselves, get to know one another, and exchange contact information. At the beginning of each class session throughout the term, students were given approximately thirty seconds to one minute to peruse the participant list logged into the virtual session. Group members were asked to reach out to any other members who were not in attendance. If a student communicated to me in advance of a class meeting that they would be absent, they were encouraged to also communicate that to their accountability group. These same groups were used for any group work done throughout the semester in breakout rooms.

The goal of these accountability groups was to increase class attendance by having students hold their classmates accountable for attending class. This acknowledged the challenging emotional and stressful times of the pandemic, and the benefit of a support system to encourage one another. I would reinforce the idea that the accountability groups' intentions were to support one another at each class session's group check-in time.

Individual Outreach

Students who performed below 80% on any individual assignment or examination received an individual communication from me via course email. The email identified specific university resources (e.g., the university writing center) that the student should consider utilizing with relevant links to schedule an appointment or access services. I also requested my students attend virtual office hours with me to discuss the assignment or examination. If a student did not attend the next available office hour or reply to the communication within 48 hours, I sent one additional email communication; however, additional email communications were sent if the criteria were met by the same student on a subsequent assignment regardless of whether they engaged previously.

The primary goals of the individual outreach were to ensure that students (a) understood the course content; (b) read, understood,

and knew how to apply feedback; (c) knew how to access applicable campus resources; and (d) felt engaged and valued by me, as their instructor, despite poor performance. These goals were particularly important without the face-to-face time the students would have normally had prior to the transition to virtual instruction. Additionally, the stress and other mitigating factors from the COVID-19 pandemic made it even more important that students felt engaged and valued, and knew how to utilize the campus resources in the virtual environment.

Feedback Quality and Turnaround Time

Each assignment received extensive feedback in a timely fashion. Feedback was provided within the learning management system (LMS) in three different areas for written assignments: I wrote detailed comments focused on content and writing embedded within the students' submitted documents; I added comments in the grading rubric on all criteria if less than full points were awarded; and in the general assignment feedback area I summarized the overall feedback, directed students where to find the more detailed feedback, and, if warranted, suggested university resources or an individual meeting, with me, to review the assignment together.

Prior to the commencement of the semester, I blocked out sufficient time in my schedule to evaluate each assignment in every course within 48 hours of its due date. This also required careful planning so that assignments in different courses were appropriately spaced to not have this be an overwhelming process. Additionally, prior to the due date of the first assignment, I reviewed the LMS notification settings with the class during one of our synchronous class meetings and asked that they change their settings from the default to receiving notifications whenever an assignment was graded or an instructor comment was added to a submission.

The goal of this quality and extensive feedback was to help students master the course content despite the unique challenges of the pandemic. Students always need clear and thorough feedback on their assignments, but it was particularly important during the pandemic. The intent to provide feedback in a timely manner was to

keep students engaged with the content soon after they completed their assignments, and to keep their minds focused on the course material rather than distracted by the stressors of the pandemic. This feedback also provided the opportunity to interact with them directly and individually for those who needed additional support. Reviewing the LMS settings in class and requesting students modify them was to address previous observations of students not receiving notifications of feedback; they, at some point, noticed a grade for a given assignment but did not always notice the instructor feedback.

Content Schedule and Assignment Alignment

The scheduling of course content and assignments was closely reviewed and considered when planning the course and syllabus. The different assignments throughout the semester were closely timed to align with the completion of the relevant content. Due dates for assignments, while reasonable in turnaround time, were close to when content finished so that students immediately put into practice the material that was covered in their reading, lectures, and other course material. There was also a reasonable amount of time in between due dates before another assignment was due.

The realities of the pandemic came with a lot of distractions and stressors. The goal of aligning the content schedule and assignment due dates so closely was to prevent students from being distracted from these realities before solidifying the course concepts in their minds. With immediate application of the course concepts, the intent was to keep their minds focused on the course material and its application before stress of the pandemic kept them from doing so. The goal of spacing out the different assignments, though, was to allow students appropriate downtime to relax and refresh before another assignment was due.

Learner Intake Survey

During the first week of class, students were asked to complete a brief survey containing three questions:

- What is one goal you have for this course?
- In one word, how are you feeling about this course?

- Is there anything I need to know that may impact your success in this course? This information will remain confidential between you and me.

All student responses were acknowledged through the LMS. Students who provided any responses that indicated a need for academic or social support received acknowledgement through the learning management system and a direct email providing specific campus resources relevant to any issues they indicated. If a concern was noted that was worthy of ongoing support (e.g., extreme anxiety regarding the pandemic), a flag was indicated in the LMS gradebook to function as a reminder that the student needed follow-up throughout the semester.

Creating a Welcoming Environment

Two different techniques were implemented to create a welcoming environment with the students: a slide presentation to share personal information about one another and starting each class session with music playing. In the first week of the semester, students were asked to add a slide onto a class Google slides file sharing their name, where they are from, something interesting about themselves, and at least one photo of themselves or something they were passionate about. I prepared a slide prior to the start of the semester as an example that included a summary of my professional background, academic interests, and love of travel, with pictures of different countries I have been to. After the due date to complete this, I shared it in a synchronous class session together so that everyone could learn about their classmates.

Ten minutes prior to each synchronous class session, I logged into the Zoom session and started a preselected playlist of current music. The music was selected from current popular hits that would appeal to the young age of the students; it was intentionally played at a high volume to create a fun atmosphere. This music was played while the screen shared a recent humorous meme relevant to either the pandemic or the course content; given that these were health sciences courses, it was generally easy to find appropriate memes.

As the class progressed, I solicited requests from the students to add songs to the playlist so that it consisted of songs of interest to them.

The goal of sharing this personal information presentation and pre-class music and humorous meme was two-fold. First, it was intended to provide social connections and stress relief despite the issues presented by the pandemic. Additionally, though, it was to recreate some of the atmosphere that students would have experienced if classes had been in-person on campus: the interaction, opportunities, and spontaneity that occur while students and faculty are arriving to a classroom prior to the class time. Rather than students logging into yet another Zoom session when almost every other aspect of their life incorporated digital devices and Zoom, this allowed them to listen to some upbeat, current music, while enjoying a quick laugh from the meme, before resuming their virtual lives.

Flexibility with Firm Expectations

The reality of the pandemic was that it was stressful for many. In the spring 2020 semester, after the transition to virtual learning, there was a marked increase in the number of students who submitted assignments late; this was anticipated to continue in the fall 2020 semester. Students were given flexibility to submit assignments late without any penalty but, in agreement with me, a new due date was established, and the student was held to that due date. Students were given wide latitude to determine the new due date; however, this flexibility was not explicitly offered to students without them first coming to me with an expressed need.

The goal of this flexibility with firm expectations was to acknowledge the stress the lockdown environment and other stressors of the pandemic created while still establishing reasonable expectations for students to meet. This policy recognized the unique situations the pandemic created without giving students carte blanche to turn assignments in without any regard to scheduling.

	Spring Semester	Fall Semester
Attendance	65%	88%
Submitting assignments on time	69%	86%
Submitting assignments at all	95%	96%
Received passing grade	95%	96%

Table 6.2. Comparison of student engagement and performance after transition to virtual instruction in spring 2020 semester (n=74) versus after interventions implemented in fall 2020 semester (n=83)

Findings: Identified Priorities

Class Attendance

There was a considerable increase in class attendance between the post-transition semester in the spring and the fall semester with the interventions in place (table 6.2). An increase from 65% of students attending class post-transition to 88% attending after the interventions was observed. Students commented in their course evaluations that their accountability groups helped motivate them to attend class even when they felt down and stressed from the realities of the pandemic.

Submitting Assignments

Table 6.2 also shows an improvement in the number of students who were submitting assignments on time, with an increase from 69% in the spring semester to 86% in the fall semester. There was minimal change in the number of students who submitted any assignment at all (on time or late) from 95% to 96%.

Maintaining Performance

Student performance did not drastically change at any point during the fall semester as it did during the spring semester. However, there was not a meaningful difference in the number of students who passed the courses in the two semesters with a change from 95% to 96% (table 6.2). In the course evaluations, several students

did comment that they appreciated the timing of the assignments to the content and that “it helped reinforce the course material well.”

Other Observations

Accountability Groups—Extra Benefits

Although the intention of the accountability groups was to increase class attendance, other benefits were noted as well. One student who performed poorly on an assignment emailed me, stating, “I was upset about my grade but when I talked to my accountability group about it, I realized that I did it wrong and failed to meet expectations. They reminded me about the resources you provided regarding this and I will be reviewing them.” Some of the students turned the accountability groups into more than just holding one another accountable for showing up to class. Additionally, at the beginning of classes, students would often update me if a member of their accountability group was going to be absent or was ill. There was clearly regular communication between the group members and a support network created.

Individual Outreach and Office Hours

Although the number of students attending office hours was not specifically tracked in either semester, the number attending the virtual office hours was markedly higher than the number attending in previous semesters in-person. Historically, there would be many weeks with no students attending office hours at all and, at most, one or two students attended. With the virtual office hours in the fall semester, approximately 30% (around twenty-five different students) attended office hours at least once. This increase is likely because of the individual outreach efforts indicating to students that they needed to follow-up with me to discuss their performance. It is also, likely, partially due to the ease and flexibility of attending virtual office hours versus in-person office hours, particularly given that our campus is primarily a commuter campus with most students living off-campus.

Feedback Quality and Turnaround Time

Students made comments, both in email communication to me and in the course evaluations, that they appreciated the thorough feedback and how timely it was provided. Several students commented along the lines of “the thorough feedback on the earlier assignments helped me perform better on later assignments.” Another student stated that the most helpful part of the class for them was the “honest, thorough, clear, and timely feedback, even though Dr. C is dealing with the pandemic too.”

Learner Intake Survey

Due to the promised confidentiality of the learner intake survey, I am not providing details of what the students shared. However, there were between one and three students in each course who were dealing with very stressful events directly related to the pandemic. Utilizing this survey and using the flagging tool in the LMS allowed me to be aware of the students who were dealing with unusually stressful events and make appropriate accommodations.

Sense of Community

Students seemed to enjoy the environment created with the music before each class session. When students were asked to submit suggestions for songs to add to the playlist, quite a few students from each class took the time to make suggestions. In the end-of-course evaluations, several students commented about “the fun music before class” that put them in a good mood.

Challenges

I would be remiss if I did not point out the time commitment these interventions required. The workload during the pandemic semesters was considerable. While many of these tasks are routine for university faculty, such as providing extensive feedback on assignments, individually reaching out to students, following up with those who do not respond, and setting up one-on-one meetings takes a considerable amount of time. For example, there was one day that I had back-to-back individual virtual meetings with students from 10:00 a.m. to 4:30 p.m. while trying to complete

other work in between. However, I justified this with my own work-life balance since I had no commuting time nor wasted time finding a parking space on campus given that all instruction was conducted remotely. Nonetheless, given the time demands on and assigned workloads of many faculty, some of these interventions may simply not be practical. Administrative policy changes are necessary to reduce workload assignments and other obligations for faculty to focus more on students and provide this individualized attention.

There were also challenges in that there simply were some students, despite my best efforts, who disengaged. Some students still did not attend class regularly and several did fail their respective classes. Others, though passing, could have done better with higher levels of engagement.

Discussion

Students responded, generally, to the pandemic and transition to virtual instruction in an undesirable way in terms of attendance, on-time assignment submission, and maintaining their class grade. The decreases in attendance and on-time assignment submission were more dramatic. I implemented interventions to address two of the three identified priorities: improving class attendance and increasing the number of students submitting assignments on time. While no drastic change in student performance was observed during the semester, it was harder to note consistent student performance throughout the term. However, even in the spring term, with the inherent challenges and lack of preparation time, the far majority of students still received a passing grade; observing a significant change in this area was unlikely.

Bawa (2016) concluded that both social exclusion and family commitments can be reasons students withdraw from online courses or are unsuccessful in them. These obligations are also more commonly demanded of Hispanic, female, and first-generation students, who were the focus of this project (Covarrubias et al. 2018). It is likely these factors were heightened, given the stress and isolation of the pandemic (Cullen, Gulati, and Kelly 2020;

Pfefferbaum and North 2020). Several of the methods implemented in this research directly addressed these two concerns: accountability groups, learner intake surveys, and creating a welcoming environment. The success of these interventions was demonstrated by the improved class attendance and increase in students submitting work on time.

First-generation students and Hispanic students are often under additional emotional and economic challenges that were worsened by the pandemic (Adams, Meyers, and Beidas 2016; Allan, Garriott, and Keene 2016; Fairlie 2020). The improved attendance and on-time assignment submission, along with the higher number of students coming to office hours and the positive student comments, indicate that the interventions applied during the fall 2020 semester to help students adjust to the pandemic were effective in mitigating these additional stressful factors.

There is an emotional reaction to assignment feedback, particularly when the feedback is associated with a lower grade (Pitt and Norton 2017). Students' emotional responses to feedback are often negative and include annoyance, frustration, and disappointment; these are all exacerbated when experiencing other stressful life events (Wass et al. 2018). With the heightened stress everyone experienced during the pandemic, the interventions of individual outreach, feedback quality and turnaround time, and flexibility with firm expectations were much more important (Cullen, Gulati, and Kelly 2020; Pfefferbaum and North 2020). The individual outreach to students afforded me the opportunity to not only facilitate their understanding of the provided feedback, but to also reduce the emotional reactions to it by including the personal element of a one-on-one meeting with the student, which they craved and needed given the social isolation brought on by the pandemic and exacerbated by the forced virtual instruction (Bawa 2016).

Though time-consuming, the interventions used in the fall 2020 semester were ones that can easily be implemented by faculty at any institution. It is also important to not overlook the increased strain placed on faculty who had to cope with the same unique challenges

the pandemic presented (Cullen, Gulati, and Kelly 2020; Pfefferbaum and North 2020). These techniques and strategies do not require any special skills or complicated technology, though, but a dedication to students and teaching. Faculty interest and commitment to teaching is a key indicator of student success (Roksa et al. 2017). Implementing these strategies is a simple way to demonstrate that commitment and help students succeed.

Conclusion

The pandemic made learning online necessary, but inexperienced faculty and rushed circumstances created an unsuccessful experience for students. By implementing accountability groups to keep students engaged with one another, individual outreach to create a relationship with the instructor, individual outreach to help open lines of communication, and extensive feedback to become stronger students, we saw success. More students engaged with the materials and found community with their classmates and instructors. The interventions improved student performance. To obtain equity in education among first-generation students, students who qualify for financial aid, and students attending a designated HSI during the pandemic and non-pandemic times, the interventions described in this case study are critical. While it does take additional time for faculty to meet the needs of students, this can be acknowledged by reducing faculty teaching loads or reducing class sizes so that faculty have time to reach out individually to students and provide unique, individualized feedback about assignments. In the chaos of the pandemic, we saw students feeling overwhelmed, and feeling like they were being left behind. Students need and deserve the individualized attention that these interventions provide, and institutions need to provide those students with faculty who have the time and availability to provide them with those interventions.

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