

Remote Learning Environments for Students who are Academically at-risk, Non-traditional, or from Diverse Backgrounds

CHRISTINA M. COBB AND MEREDITH ANNE (MA) HIGGS

The Covid-19 pandemic brought severe challenges and unprecedented changes around the globe. In particular, the educational world had to shift quickly to accommodate the new normal for pandemic-era classes. The need for online and remote courses increased, and teachers everywhere were faced with trying to reach students in novel or non-traditional ways. Traditional face-to-face courses were no longer the best or only option. Teachers began to explore different remote platforms such as Zoom and Microsoft Teams, and these virtual formats were implemented across all levels of higher education. Therefore, the Covid-19 pandemic and the ensuing changes to higher education were challenging for students across academic disciplines and degree types; however, the virus and its aftermath were perhaps not fair in their disparate treatment of some higher education student populations. Indeed, some persons may have experienced the pandemic with greater concerns for personal safety and privacy than others.

While the pandemic was exceedingly difficult for many students, some may have experienced additional barriers to higher education attendance. For instance, numerous students worked in industries deemed essential, and essential employees were required to work during the initial waves of the pandemic. Students from diverse backgrounds or in certain occupations may have experienced higher likelihood of virus exposure or contraction (Hawkins, 2020) in industries such as health care (Nguyen et al., 2020) and food processing as was well-documented in many high-profile outbreaks (Donahue et al., 2020; Rogers et al., 2020). Leonhardt (2022) states that the pandemic initially had a “disproportionate toll on Black and Latino Americans” (para. 1). Consequently, these students were then more likely to be required to quarantine for Covid-related exposures or to isolate for illness. In addition, essential employees experienced work schedule changes due to pandemic-related staffing issues, which also necessitated classroom experiences that were remote or online. Indeed, remote learning became the standard to address higher education. Therefore, while remote higher-education attendance was initially a standard practice for all instruction at many higher educational institutions early in the pandemic, it proved to become a necessity for some student populations.

Moreover, home spaces changed dramatically overnight. Many families began sheltering together to address childcare issues. Communal spaces became over-run with extra people, possessions, and remote work and school areas; multiple children and adults attempted to use the same technological resources at the same or similar times. This chaotic life was not only difficult to sustain, it could have been embarrassing when seen on Zoom by peers and teachers.

This chapter introduces some of the issues and successes that remote teaching brought during the pandemic, as well as continual issues for students who are academically at-risk, non-traditional, or from diverse backgrounds.

Definitions

For the purposes of this chapter, the following working definitions are used in describing the impact of remote learning environments on students who are academically at-risk, non-traditional, or from diverse learning backgrounds.

Students who are academically at-risk are defined as students with academically deficient backgrounds or with past

academic histories that make them more likely to be unsuccessful. The term “at-risk” has challenges; however, it has been long used to describe students who are more likely to fail (National Center for Educational Statistics, 1992).

Students who are non-traditional are learners who are over the age of 24 years and/or have family and work responsibilities that can complicate higher educational attainment (National Center for Educational Statistics, n.d.).

Students who are from diverse backgrounds are learners who have “racial, cultural, and/or life experiences” that are different from the instructor (Nishioka, 2018, para. 4).

Disparate implications is an author-derived term describing the unintentional, unequal consequences of educational policies or activities.

Camera usage refers to the videographic or imaging technologies required for instructional participation including live video and image recording.

Test proctoring describes the various means of monitoring students while they are taking examinations. These include methods such as live video observations, body movement monitoring, lock-down browsers, and remote computer control.

Private spaces is an author-derived term describing the homelife or living situations of students that are typically not engaged in the traditional classroom setting.

Cameras: The Good, the Private, and the Unequitable

Student Engagement and Cameras

The sudden move to remote and online coursework during the pandemic left many teachers scrambling to identify ways to keep their students engaged. In the remote and online environment, camera usage became the primary means of face-to-face interaction and a tool for student engagement. Truly, whether to require student cameras to be turned on during class meetings is a continuing conundrum for faculty (Torchia, 2021). Requiring cameras to be turned on during class time positively changes the culture of the classroom for students who are academically at-risk, non-traditional, or from diverse backgrounds (Racheva, 2018). By requiring cameras to be on, students are visible to faculty and peers in most videoconferencing platforms. Names, email, or nicknames are often visible as well and make it easier for students and faculty to identify each other. Also, faculty can better monitor student reactions to work and look for those moments of confusion that are the hallmarks of poorly described problems. According to Will (2020), despite the challenges with requiring students to turn on their cameras, teachers find that it is easier to check to see if students are participating, following the instructional content, or looking puzzled. With cameras turned on, students get to know each other and can form a culture that encourages further engagement and forges community. In addition, knowing that others are watching, and perhaps recording, may change student behavior and encourage students to stay on-task. Instructors also may find it easier to remember students who are visibly present rather than a stationary caricature or photograph.

As stated by Raicu (2020), to help build community in an online environment, faculty members should educate their students on the multidimensional need for authentic community. In doing so, students can see the real benefits for building community even in a remote or online setting. In a study done by Bedenlier et al. (2021), peer-to-peer interaction was an identified issue because students may feel less social support which may cause them to be less engaged in the course. Therefore, when students feel as though they belong and have social interaction with their

peers, they are more likely to feel comfortable engaging in the course. Taken together, engagement, interaction, community-building, and classroom culture are compelling reasons for faculty to require student camera usage in remote environments.

Challenges with Cameras: Private and Unequitable

Although there are important student engagement-related justifications for requiring cameras to be turned on, there are also some inhibiting considerations for students. Factors such as Zoom fatigue (Moses, 2020) may persist in remote and online environments, especially during prolonged periods like the Covid-19 pandemic. Zoom fatigue, or fatigue associated with any videoconferencing platform, is when students are exhausted or experience burnout from the overuse of video platforms. Moses (2020) states that although most think that Zoom fatigue is no different from routine educational fatigue, there is a difference, and continuous video meetings may intensify the issue. Having cameras turned on during remote and online courses can facilitate engagement, but teachers should also consider the possible negative consequences of continual video usage.

The reliance on new formats of technologies increased as the world of higher education shifted to virtual classes, and this shift is now seen as the new custom for many classes. While this was very helpful to ensure that students were still being taught during the crisis phase of the pandemic, it also brought on challenges for some students. Dutta et al. (2020) states that these “digital spaces reify and reproduce ongoing inequalities” in addition to the disparities that Covid-19 also reproduced (p. 18).

During the pandemic, not only was access to technology a challenge, but the issue of cameras in students’ private spaces also arose. Truly, engagement comes at several costs. As previously mentioned, students who are academically at-risk, non-traditional, or from diverse backgrounds may have complicated home situations, may be using technology from a free internet source, such as a restaurant, or may have to show private spaces that are embarrassing. Traditionally, students were not required to reveal any information about their personal lives but requiring cameras to be turned on invades that shield of privacy (Moses, 2020). With a focus on creating equitable and inclusive classrooms, teachers were faced with the dilemma of asking and/or requiring camera usage during class. While this may seem a small consideration, to a student with a complicated home environment, turning on the camera could be embarrassing or seen as a source of anxiety.

In a study by Castelli and Sarvary (2021), surveyed students responded as to why they did not turn on their cameras during class. The study revealed that 41% of respondents were “concerned about their appearance” while 26% were worried about “other people being seen in the background” (p. 3568). In a study done by Tobi et al. (2021), a lack of quality internet connection was the highest-ranked reason for cameras to be turned off during class. Students’ access to stable internet service is a major concern that teachers should remember when requiring cameras to be turned on during their remote and online courses.

Another worrisome consideration is students who lack social skills and behavioral norms and who may then over-display these inappropriate behaviors in remote and online environments. In a world where some students post every thought and action, it may be difficult for those students to discern what is and what is not appropriate to either share with or record from others. Students may be concerned that their peers are going to use their class responses as opportunities to record the newest TikTok or create an internet meme. Students with children may be further concerned for their children’s safety if inadvertently recorded in class. Not surprisingly, when cameras are required to be turned on, students’ feelings of distress and nervousness can be intensified during their remote and online courses (The Sheridan Center, n.d.).

Finally, Trust (2020) suggested that educators should be trained on how to evaluate technologies for the classroom

because they may be unknowingly violating students' privacy rights. These violations may, in turn, put students in dangerous or exploitative situations, such as providing personally identifiable information over an internet-based technology, showing students' location details, and sharing various computer usage information. Creating dangerous or exploitative situations should, most assuredly, never be the intent or consequence when utilizing technologies to enhance the higher education classroom. Such potential violations of privacy and security can create additional anxiety and stresses for students and raise equity issues.

Test Proctoring

Test proctoring platforms often use behavioral algorithms, recorded sessions, computer control, or observers to monitor testing. Obviously, many of the same considerations given to camera usage apply to test proctoring. Moreover, as many test recordings are stored off-campus, students may have additional safety and security concerns for themselves and their families. Students may be more concerned utilizing third-party companies' products as opposed to products from higher education institutions (Levy et al., 2011). Normal student behaviors may also be an issue. Test anxiety in proctored online exams is not well studied and could impact student success (Woldeab & Brothen, 2019). In academic support courses, which are often required for students who are academically at-risk, non-traditional, or from diverse backgrounds, test anxiety may especially be a concern. Using the test proctoring platforms may add to technological concerns for students as the platforms could require specific computer processing speed, camera quality, microphone use, and strong bandwidth. Household sharing of computers may have resulted in a physical lack of resources while multiple devices using the same internet connection could compromise bandwidth (Richards et al., 2021). Not understanding the security features or behavioral expectations of the testing platform may also unfairly target students who have never been exposed to the technologies. All things considered, test proctoring platforms can add barriers to success for remote or online students who are academically at-risk, non-traditional, or from diverse backgrounds.

Best Practices for Safety and Security

Higher education faculty can take basic steps to aid in student safety and security in remote and online environments while still fostering student engagement. Encouraging students to use their cameras whenever possible can help build community, foster classroom culture, and increase engagement. Faculty should consider surveying the class to determine who may have any technological issues and if they prefer to turn on their cameras during class. This survey will allow faculty members to manage their next steps in creating a classroom that is inclusive and fair for all.

Also, to prevent student embarrassment, students should be encouraged to utilize appropriate backgrounds or the blur function as well as to be given the option to leave the camera off when needed. Specifically, in Zoom, faculty members may utilize the "ask to turn on camera" option. This gives students the option whether to turn on their cameras, while still demonstrating that camera use is preferable. Another alternative is to provide backgrounds that are institution-specific. Many students will require demonstrations on how to use and upload backgrounds.

One very important step is to have specific dialogue and syllabus statements concerning safety, security, camera usage, and class recording. Specifically, instructors should create and implement a "cameras on" policy for the course syllabus. This will inform students from the start of the course what the class expectations are for camera usage. Faculty members may consider providing in-class and out-of-class sessions that address safety and security settings of technological platforms and devices. Instructors should promote access to safe campus technological resources and technical support options. Truly, protecting the most at-risk students is vitally important. By providing both

synchronous and asynchronous instructional options, students who are most impacted by remote and online instruction can access content when, where, and how they feel most safe. Further, for test proctoring, consider utilizing instructor-proctored opportunities to reduce the disparate implications of lack of technological resources.

Perhaps the most basic and most useful strategy is building a rapport with students in a remote or online course from the very first opportunity. As repeatedly demonstrated in higher educational literature, utilizing High Impact Practices (HIPs) such as collaborative assignments and projects (Kuh et al., 2017) can aid in increasing engagement. Increased student engagement may, in turn, aid in the development of a culture of safety and security. Consequently, students may be more forthcoming with all types of issues and concerns. Therefore, building a classroom culture with clearly delineated behavioral and community expectations will enhance engagement, comfort, safety, and participation.

Conclusion

Since the beginning of the pandemic, the world of higher education has transitioned into a more diverse learning environment with additional remote or online learning opportunities. Early in the pandemic, traditional face-to-face courses were transformed into technology-based courses. During this rapid transition, instructors were faced with developing new techniques for teaching remotely. Some of those techniques included using platforms such as Zoom and Microsoft Teams to attempt to create an environment that was as engaging as traditional face-to-face classes. However, with use of these new platforms came new safety and security concerns and equity issues. Indeed, safety, security, and equity issues abound in remote and online instructional formats for students who are academically at-risk, non-traditional, or from diverse backgrounds.

Remote and online instructors are faced with novel challenges and must work towards making all their classrooms inclusive, equitable, and safe. Having cameras turned on in the students' private spaces was and still remains a conundrum. Although the world of higher education is attempting to return to pre-pandemic normalcy, many classes have returned to a traditional in-person format. However, there are still many courses that employ technology-based platforms for instruction and are continuing to wrestle with the issue of cameras in students' private spaces. As mentioned in the best practices section, offering students alternatives during class, such as the use of a virtual background or the blur setting, can ease some of these concerns.

As we strive to improve student engagement in the online and remote settings, we should continue to remember that students who are academically at-risk, non-traditional, or from diverse backgrounds may already be dealing with outside stressors (Higgs et al., 2021). Fullan (2020) states that "Covid-19 and its associated pandemic exposed more explicitly great inequalities such as access to devices, platforms, and/or places to do schoolwork outside schools in education systems" (p. 26). Surveying students on or before the first day of class to consider their individual technological issues and needs may open avenues to enhanced dialogue and engagement. This survey information may inform the creation and implementation of camera-use policies that are fair for all students.

While institutions and faculty push for technology implementation, "the question of how to create a learning environment where all voices are equitably empowered in a broader context of technological disparity" ought to be at core of this push (Workneh & Lin, 2021, p. 499). Remember, the overall goal for any higher education faculty member is for all students to be successful. Ensuring that the class is meeting the needs and concerns of all students, no matter their characteristics, in remote and online environments can aid in student success. To support success and survival, institutions must adjust to the everchanging individualities of student populations (Higgs et al., 2020). Addressing the issues and challenges of students in remote learning environments is one area that needs continuing consideration, especially for students who are academically at-risk, non-traditional, or from diverse backgrounds.

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