

Accessibility and Interaction: How Online and In-Person College Classes Compare

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Remote education has received much more attention in light of the COVID-19 pandemic; however, it has existed for decades. Before computers were widespread, remote learning occurred through the mail, with the first program starting in 1873. The first completely online college program for both bachelor's and master's degrees, the University of Phoenix, began in 1989. As technology has advanced, these programs have grown more popular. Now, more than a quarter of college students take at least one course online. However, before the pandemic, the majority of college students participated in an in-person program, leading to the question of how students and educators evaluate these online and in-person college educational experiences (Visual Academy, 2009). The increased flexibility of online courses makes them much more accessible and appeals to both students and faculty alike. However, in person classes are praised for their quality and greater human interaction.

Review of Research

Teräs et al. (2020) examined the transition to remote education, particularly the shift that occurred as a result of the COVID-19 pandemic. The researchers found that even as far back as the 1980s, computers have been seen as a solution that would help a long list of problems at schools. However, there has been no evidence that computers have actually been this magic solution. The recent pandemic required a quick transition to online education, but this speed resulted in significantly less research into the pedagogy behind these tools. Once a system has been adopted, it can be very difficult for a school system to change it. The solutionism that many Silicon Valley companies have been approaching the educational system with could have long-lasting detrimental consequences (Teräs et al., 2020).

Researchers have also been interested in student performance in and enjoyment of online classes. Jagers and Xu (2014) focused on online and in person classes at community colleges in Virginia. They found students in online classes were more likely to fail or withdraw than those in in person classes. The students in the in-person classes were more likely to stay at the school long enough to transfer to a four-year university or graduate. However, they did find differences in the demographic information between students in online classes compared to those in person. It is unclear the relative importance of the course format compared to these demographics (Jagers and Xu, 2014). In 2011, the Government Accountability Office conducted a study by planting “students” in online classes and recording comparative costs, course structures, and instructor reactions to student mistakes. The courses in the study varied widely. Some instructors gave passing grades for assignments that did not meet the given requirements or were clearly plagiarized while others were invested in the student’s learning and would repeatedly attempt to contact the student to provide additional help when they were struggling (GAO, 2011).

Some studies utilized classes that were simultaneously offered in both an in-person and an online format. The nearly identical syllabi minimized differences between the classes unrelated to their locations. Bettinger et al. (2017) studied classes at a large university. The students in the online version were more likely to drop out and more likely to get a worse grade in future classes that built upon material from the online course than the students in the in-person version. Griffith et al. (2021) focused on end-of-semester student performance for an introductory statistics course. In this study, grades and passing rates were not significantly different across the modes of instruction. While the study focused on a specific mathematical class, it suggests online classes, in at least some departments, may provide the same quality of instruction as their in-person counterparts.

Benefits of Online Classes for Students

Online classes offer greater flexibility for students. In asynchronous classes, students can watch course materials and complete assigned work at any time. Moore (2014), who took online classes at the Ohio State University, commented, “I like that if I have an entire day off that I can work ahead... so that I can live my normal life during the week.” Another student noted that the difference in format saves students time by saying, “... you don’t have that time where a classmate may come in and disrupt the class, or somebody’s not getting it” (Jaggers, 2014). However, if they are the student having trouble understanding the material, these online resources serve as an addition help. Students can watch lectures multiple times when they are confused (Gould, 2014).

For some particularly busy students, this flexibility goes beyond convenience. Other components of their lives, especially employment or family responsibilities, can be time consuming and get in the way of a traditional schedule. One student wrote, “Unless I only wanted to work part time or quit my job, I felt that [online coursework] was the only way that I was going to get my classes in” (Jaggers, 2014). In person classes can only be offered at certain times and their schedule may change from semester to semester. Ratcliff, a former online student at Southeastern Louisiana University, noticed, “The hours I have scheduled at my job conflict with the times that most classes are offered” (Ratcliff, 2001). Even if a couple classes could be scheduled around a student’s work schedule, these might not be the classes that would contribute to their major. A student’s degree requirements dictate certain classes they have to take, sometimes in a particular order, and further complicate scheduling. Online classes remove the stress of having to drastically change a work schedule every few months when the new semester schedule is released. Some managers don’t allow their employees to switch their shifts that often.

Ratcliff further explained, “The use of online courses has made life at work easier, since my manager refuses to work around school schedules” (Ratcliff, 2001).

Students in online classes have more flexibility, not only with their time, but also with their location. An assistant chemistry professor at Kenai Peninsula College, Susan Mircovich, reported that many of her online students are “working full-time, or in the military, or working on oil rigs two weeks on and two weeks off, or are in distant villages” (Gould, 2014). Monica Mogilewksy personally appreciated taking her classes from home when she lived and worked on the Myakka City Lemur Reserve. She recalled, “I worked on-call 24-7, managing a colony of lemurs, so commuting to a campus was not an option” (Gould, 2014). Even if the student is nearby, they would not need to take the time to commute to campus. Debra Sicard, a former online Southeastern Louisiana student, was glad to avoid a long commute and commented, “The extra hour and a half makes a big difference when I am a wife, a mother of three children, a full-time student, and I work part time” (Sicard, 2001).

Some students felt they were able to get more personalized attention from their professors in online classes. Brandi Ratcliff, an online student at Southeastern University, commented, “[Online] classes offer more of a one-on-one teacher-student relationship rather than a teacher having to spread their focus amongst thirty other students” (Ratcliff, 2001). Ratcliff’s classes were conducted asynchronously so the instructor was not spending lecture time answering other students’ questions or changing the lecture pace based on the reading the class’s reactions. Instead, when the students had a question, they received one-on-one attention answering the question and the professor wasn’t distracted by feeling the class was falling behind or that the other students were becoming bored (Ratcliff, 2001).

Other students prefer taking online classes because they do not want frequent interactions with their classmates. This sentiment may be especially felt by older students afraid of feeling alienated by their age. One such student remarked, “I’m the oldest thing in here and these kids just got out of high school. I can’t remember all of this stuff.” The same student felt “stage fright” when thinking about going back into an in-person classroom (Jaggers, 2014). Another student simply didn’t want to make small talk, commenting that for online classes, “I don’t need to interact with [the other students], so I’m not going to” (Jaggers, 2014). For these students, online courses removed the unwanted expectation to converse with strangers who had unrelated interests.

Benefits of In-Person Classes for Students

However, some college students greatly prefer in-person classes because they interact more with their peers. After transitioning to remote learning following the COVID-pandemic, a University of Wisconsin student remarked, “I personally struggle with learning remotely... I like to connect with other students and my professors” (Lederman, 2020). This connection can also create a sense of community. A student who participated in online and in-person programs observed, “I think that being in the specific curriculum that I am, with the on-campus classes, it has given me a stronger tie to the school” (Jaggers, 2014). Moore (2014), an online student from the Ohio State University, agreed, “[With] online learning, [it] can be difficult to communicate only via email... I personally like making relationships with others and it provides a feeling of security for myself.”

Students also reported that in-person classes gave them more interaction with their professors. While online classes can be structured in a variety of ways, some arrangements can

feel like nothing more than a collection of resources. A student currently taking an online class complained, “Essentially this program is nothing more than independent study” (Phillips, n.d.). However, the face-to-face instruction during in-person classes can prevent this perception. In an in-person program, students can physically find their professor after class or in their office. However, remote students must depend on their professor seeing and responding to their messages. A student in an online class reported, “\$2,800 [did not] buy me ... an instructor who replies to e-mails” (Phillips, n.d.). Besides a lack of contact in lectures, there may also be reduced communication during grading. Another remote student wrote, “... the level of faculty interaction has been, in my experience, mostly nonexistent. With the exception of one or two professors, I never saw any feedback...” (Phillips, n.d.). The interaction that is more likely to occur in on-campus classes can be also very educational. Moore (2014), a student who had taken both remote and in-person classes, noticed, “One thing I miss when I take online courses compared to face-to-face courses is the ability to orally ask a question in front of the rest of the class... Sometimes other students ask questions that really spark my thought process...”

The disconnect with students in online college programs may extend to the school administrators. When reflecting on their online experience, one student noticed, “... you quickly get the sense that students are herded through the curriculum as fast as possible in their paths toward graduation” (Phillips, n.d.). Another student felt similarly, noting a lot of inconsistencies between different professors in online classes and remarked, “The program lacks adequate oversight” (Phillips, n.d.). A third student felt that not only was their interaction with professors limited, but that the professors did not care about their students. They commented, “While I’m sure (for legal reasons only) the instructors are qualified to teach at the college level, evidently possessing a ‘desire’ to help a student excel and succeed in academia is not a hiring criteria”

(Phillips, n.d.). Remote education places a barrier between the student and interactions with any level of the program. While some may appreciate this divide, it can also create frustration and a feeling of isolation.

Some students also lack an appropriate home environment for online classes. To complete courses online, students need consistent access to the internet. As one student explained, “Yet, problems arise when some students may not have technology, internet, studying resources or the materials they need for remote learning” (Lederman, 2020). There could also be other problems with studying at home. As another student stated, “Just because students have a place to live does not mean that the environment is healthy” (Lederman, 2020). Students studying online need more than just technology; they also need to live in a stable and safe household.

Remote classes can be more tiring for students. Michael Alderman, a business major at John Carroll University reported, “Being on Zoom all day and being on your computer is really mentally draining...” (Maltese, 2020). Julia Singleton, a finance and accounting major at Baldwin Wallace University, commented, “I’m definitely really drained... It’s hard to find motivation to do things I used to love to do, because it’s all over Zoom” (Maltese, 2020). This phenomenon, sometimes referred to as “Zoom fatigue,” can occur from spending hours in video chats. Online meetings require a higher cognitive load than in person interactions. It is harder for people to pick up on nonverbal cues online and there is pressure feeling that everyone in the meeting is constantly staring at them (Ramachandran, 2021).

Benefits of Online Classes for College Instructors

Some instructors prefer teaching their courses with an online format as opposed to in-person. They feel the virtual environment is more dynamic. Hogan, reflecting on her experiences teaching an online journalism class at New York University, felt, “[T]eaching online... was often *more* fun than standing at a lectern working through a well-worn set of PowerPoint slides” (Hogan, 2020). There are a lot of new online tools to help support online classes. Tammatha O’Brien, an entomology instructor, prefers providing recorded lectures because students can better tailor the class to their level of understanding. O’Brien explains, “They can pace it, slow it down, go faster, go slower. Students actually really do enjoy it” (Anderson, 2020). Online classes have more features and options due to recent technological advancements.

Some instructors also felt the class got to know each other better than if the class had been in person. Hogan, who taught a New York University journalism course online, commented, “But as the weeks wore on, the students got to know one another, perhaps better than if they simply filed in for class and left. As one student observed, in his regular classes, he was usually just staring at a lot of ‘backs of heads.’” Hogan made sure to give personalized attention to all of her online students and felt it really helped the class dynamics. She specifically commented on the effects it had for one of her introverted students, saying “From then on, she spoke more in class—maybe even more than she would have in an in-person course” (Hogan, 2020). Michelle Everson, a psychology instructor at the University of Minnesota, agreed saying, “In the regular classroom, I can’t know every thought or observe every group, but online I can look into every discussion group for information on how they are doing” (Chamberlin, 2009). In a large classroom, it is very difficult for a lecturer to keep track of each student’s individual

understanding. However, the tools available to online classes can give the instructor more insight.

Teaching online classes also gives the instructor more flexibility. Jennifer Coy, a computer science professor who has taught both in person and online classes, commented about her remote courses, “I am enjoying the additional time with my husband and children” (Deluhery, 2020). Online classes do not have to be structured to require everyone to be present for a certain block of time. The instructor could prerecord lectures at times most convenient for them and then post the videos to a course website for the students to view. Similar to the student experiences, professors can use this flexibility to better engage with other aspects of their lives, including their families or hobbies.

Benefits of In-Person Classes for College Instructors

The online environment, however, can also require more time and effort from college educators. Sue Kuba, a psychology professor in California, remarked "In my experience, faculty work harder in online courses" (Chamberlin, 2009). The format requires instructors to not only lecture and prepare class materials but also handle technical difficulties. Some universities provide little support to help instructors with these technical problems. A London College of Communication professor, Lewis Bush, explained, “You need to be as much tech troubleshooter as educator” (Hogan, 2020). Recording lectures can also be more time consuming than lecturing in a traditional, in-person classroom environment. Unlike live lectures, if an instructor misspeaks while recording an online lecture, they can just make a new recording and correct the mistake. This ability may make professors feel a need to have near-perfect recordings of their lectures.

Cara Miller, an English Professor, said, “I understand the technical part of it, but I keep starting over when I mess up, so it takes twice as long as it should” (Deluhery, 2020).

It can be harder for professors to engage their students in an online class than it was in person. An English professor currently teaching remote classes, Cara Miller, commented, “I’m also struggling to find a good balance between having enough content so that students are still learning and fulfilling the basic requirements of the class without feeling overwhelmed or unnecessarily stressed” (Deluhery, 2020). Teaching online may also make it more difficult for professors to cater to certain learning styles. Sue Kuba, a psychology professor at Alliant International University in California, observed, “[Remote] classes don’t work well for students who prefer to sit in a class and be taught and take notes” (Chamberlin, 2009). That challenge can be exacerbated in classes on certain subjects. Material for foreign language classes is especially hard to communicate over an online meeting. Carrie Clay, a Spanish professor, said, “With teaching a foreign language in particular, I have to figure out how to encourage the development of interpersonal speaking skills without the ease and simplicity of regular face-to-face communication” (Deluhery, 2020). The online environment introduces different norms and obstacles that can interfere with teaching.

Online classes can also make it more difficult for college instructors to separate work from their personal lives. Online classes can be taught from their home. Jennifer Coy, a Computer Science professor, speaking about online classes said, “[B]alancing the roles of ‘professor,’ ‘mom,’ ‘school teacher’ and ‘wife’ is definitely more challenging” (Deluhery, 2020). The flexibility and portability some people prefer also make it easier for home and work life to mix.

Conclusion

Remote and in-person approaches to college education in the United States are both compelling formats. Online classes are an especially good fit for non-traditional students who may have other obligations, such as jobs or families, and need flexibility. However, previous research has suggested online classes may be more likely to lead to worse outcomes than in person classes. Most of the students who prefer the online format were most appreciative that they could take these classes as opposed to the quality of the courses. Faculty enjoy the flexibility of remote classes but, like students, also like the increased interaction of in person classes. The specific structure of the class also plays a significant role. The classes that students and faculty spoke highly about were designed to utilize the advantages of the online or on campus format. The students most frustrated were in classes not properly set up for remote learning. The personal circumstances of the student or instructor likely determine which format is a better fit for them.

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