Tarrying with Trauma While Improvising Gender in *Who Do You Think You Are?*

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Abstract

Online education is no new phenomenon, but has recently gained traction due to the closure of educational institutions as a result of the COVID-19 pandemic. Given the possibility of e-learning becoming more relevant in the education system, researchers have observed the implications it has for students. While some studies have found little to no variance in academic performance, others have detected increased levels of engagement from students completing online courses. Mental health and student well-being have also been evaluated, with researchers coming to the conclusion that e-learning increases negative emotions, such as depression and anxiety, due to the lack of interaction students have.

      This essay discusses the evolution of online education, addressing its increased popularity over this past year, as well as discussing its pre-pandemic prominence. Following that is a dissection of the advantages and disadvantages of e-learning from students' perspectives. Further, I will discuss how these findings suggest that online education has both improved and worsened students' academic performance, engagement levels, and mental health, as well as that blended learning is the most effective and efficient method. Lastly, some possible suggestions of how to mitigate the complications posed by e-learning, as well as expectations for the post-pandemic educational system will be discussed.

Introduction

Over the past year and a half, students and teachers have had to quickly adapt to the implementation of online education. Due to the drastic alterations of the education system caused by COVID-19, many countries around the world are pursuing an effort to continue teaching and learning through alternative channels, significantly or mostly on an online basis. E-learning is part of a broader concept, namely distance education; Face-to-face learning on the other hand is an instructional method where course content and learning material are taught in person to a group of students and is considered to be the most traditional type of learning. In addition to courses taught entirely online, blended learning (i.e., instruction that combines face-to-face with online elements) has become increasingly popular at the course and student level (Allen & Seaman, 2013). On top of its easy access to shared materials, online education resolves the problem of keeping social distance with synchronous education during the pandemic.

Studies suggest that online education does not degrade the understanding or knowledge of a subject (Lei et al., 2021); however, it does limit the amount of student-teacher and student-student interactions and socialization (Gherhes et al., 2021). This lack of interaction can result in high levels of negative emotions, such as psychological distress, anxiety, and depression (Saha et al., 2021). Through research and analysis. I've found that blended learning encompasses the strengths of both in-person and e-learning and should be the preferred method of learning moving forward. Based on the findings, I will also provide a potential image of what post-pandemic education could look like for future undergraduate students. Review of the evolution of online learning, advantages and disadvantages, and an overall discussion will put forth many observations that support the superiority of blended learning.

Evolution of Online Education

Online (distant) education can be traced back all the way to the early 18th century, but its rapid growth began in the late 1990s with the advance of the online technological revolution (Kentnor, 2015, p. 22). Massive Online Open Courses (MOOCs) were first initiated by Ivy League schools in the United States about a decade ago (Lei et al., 2021, p.314). Wang et al. (2019) mention that according to the Ministry of Education of China, 3000 national-quality curricula were established for undergraduate students in 2019 (p. 664). Over three million students per year benefit from approximately 80 official or civil online educational organizations that provide online course credits (National Centre for Education Statistics, 2016, Table 311.15).

More recently, e-learning has had more of a role in protecting the health of those engaged in the educational process. As of August 20, 2020, based on online course recommendations by the WHO during the spread of COVID-19, remote education has reached 1.5 billion students worldwide during the period of shutdown (Lei et al., 2021, p. 314). The increased usage of online courses has in turn increased the amount of research on the effects of online education on students and whether or not it is an effective means of learning. Oye et al. (2012, as cited in Gherhes et al., 2021) point out that e-learning is more student-centred, compared to face-to-face learning, which is more teacher-centred as it does not focus exclusively on instructions and guidelines coming from teachers, but is individually adjustable to the student (p. 2). Close to 70% of higher education institutions in the United States reported that online education is crucial to their long-term strategies (Allen & Seaman, 2013), and as of 2013, there were over 5.5 million students enrolled in at least one online course at post-secondary institutions (National Centre for Education Statistics, 2016, as cited in Dumford & Miller, 2018). According to the United Nations (2020, as cited in Saha et al., 2021), 99% of the student population from lower and lower-middle income countries have had their education disrupted due to the closure of all kinds of education institutions (p. 171). Although there are some discrepancies between first-world and third-world educational practices and challenges, it is still important to take into account the effects the pandemic has had on education all around the world.

Advantages of Online Education

Due to the increased usage of online education, an abundance of research has emerged distinguishing the advantages from the disadvantages. In face-to-face learning, students are evaluated exclusively by teachers, who represent their main source of information and the quality of learning is strongly dependent on them. However, in e-learning, students' evaluations can be carried out using tools allowing them to access information from various documents uploaded on platforms (Gherhes et al., 2021, p. 2). According to Beaunoyer et al. (2020), e-learning has its advantages, such as flexibility, no need to travel to school, and a low cost, requiring only an Internet connection (pp. 2 – 3). In a survey conducted by Gheres et al. (2021), the three main advantages of e-learning reported by students were "time efficiency" (15.7%), "convenience" (14.7%), and "accessibility" (11.6%) (p. 7). In regards to the medical education sector, traditional emergency nursing courses indeed provide benefits for students in terms of conceptual understanding, but they still need reinforcements, such as online courses, to increase information perspective, especially during the COVID-19 pandemic (Lei et al., 2021, p. 315). Lei et al.'s (2021) study of emergency nursing had students complete a whole schedule of emergency nursing either traditional or online (16 classes) along with one examination after every two classes, followed by a final examination at the end of the semester (p. 315). Students who completed the course face-to-face proved better at concept explanation, while the online students were better at analysis evaluation; however, there was no statistically significant difference in the filling-in-the-blank, selection, and short answer evaluations (Lei et al., 2021, p. 316). The results demonstrated that online education does not lessen the knowledge or understanding of a subject and showed superiority only in whole-course comprehension and the ability to respond to changes (Lei et al., 2021, p. 316).

In a study that evaluates learning outcomes for students who self-selected into the online format for a macroeconomics course, researchers found that after correcting for sample selection bias, test scores for the online format students were four points higher than for the traditional format (Harmon & Lambrinos, 2006, as cited in Nguyen, 2015, p. 311). Due to COVID-19, students didn't have the option of completing their courses in person, so this finding may not be applicable to the current education crisis. In addition to this digression, there are slight variances in first year and senior students who embark in online courses, as well as the number of online courses they take. Dumford and Miller (2018) point out that first-year students taking more classes online reported higher levels of quantitative reasoning use (p. 459). Course management systems, such as MyMathLab and Pearson Revel "contain online video functions, programming to accommodate special characters and formulas, and interactive guided problem-solving" (Dumford & Miller, 2018, p. 459). Many of the quantitative courses that adapted this way for an online format are entry level courses, which could be the reason that this same finding was not seen in senior students.

Nguyen (2015) lists some of the most important benefits of e-learning, these being "its effectiveness in educating students, its use as professional development, its cost-effectives to combat the rising cost of postsecondary education, credit equivalency at the postsecondary level, and the possibility of providing a world class education to anyone with a broadband

connection" (p. 310). Though there are many positive aspects to online education, we must also evaluate its downfalls, as covered in the next section.

Disadvantages of Online Education

Students accustomed to face-to-face learning and who subsequently enrolled in an online platform have developed high levels of negative emotions, such as fear, anger, or helplessness (Butz, 2015, as cited in Gherhes et al., 2021, p. 3). Limiting social interaction produces and maintains negative emotions, reducing overall well-being. Gherhes et al. (2021) point out that students' main dissatisfaction is the lack of student-teacher interactions, the lack of socialization with fellow students, and the lower level of teaching quality (p. 4). In face-to-face learning, both teachers and students could use different intonations, facial expressions, body language expressions, and other elements of communication to transmit all kinds of emotion or feedback. Through different platforms, such as Zoom, Webex, or Google Meet, these types of interactions are limited and produce different forms of alienation (Gherhes et al., 2021, p. 4). Zgheib et al. (2020) discovered multiple disadvantages, but the most challenging limitations had to do with the "process of learning, what facilitates or hampers it, the students' ability to self-regulate and to motivate themselves, the negative impact of isolation, loss of socialization and interaction with peers and faculty, and the almost total lack of hands-on experiences" (p. 51). Due to the closure of all educational institutions, a massive number of students have become addicted to technology which can cause regular interruptions to their schoolwork; this problem causes ongoing depression and anxiety in students, continuously harming their mental health (Islam et al., 2020, para. 2). On exploring the level of psychological distress among university undergraduates of Dhaka City, Bangladesh, the majority of the students in the study portray a mild (40.00%) to moderate (30.56%) level of psychological distress due to pursuing online education (Saha et al., 2021, p. 176).

In Gherhes et al.'s (2021) study, teachers consider the biggest disadvantage of the online education system for students to be the need to adapt to the courses' new teaching conditions, followed by students' low efficiency in the accumulation of new knowledge (p. 4). More than one-fourth of the respondents in Saha et al. (2021) study "face time management (30.00%), the inappropriate environment at home (31.67%), and inefficiency in understanding online materials (20.00%)" as key barriers in attending online classes during the pandemic (p. 175). Wijekumar et al. (2006, as cited in Dumford & Miller, 2018) suggests that "the feedback loop between teachers and students that is taken for granted in a face-to-face setting must be adopted as well, since online students may feel more isolation from their professors if traditional assessments like multiple-choice quizzes and exams are used too heavily in an online setting" (p. 453).

In addition to psychological barriers and mental health challenges, remote education has also proved to somewhat negatively impact not only academic performance, but future career performance amongst students. In emergency nursing education, skill-training sessions are more crucial than empirical recapitulation in class, as proficient clinical skills are required in the healthcare field (Safazadeh et al., 2018, as cited in Lei et al., 2021).

Discussion

Online education has allowed educational institutions to proceed with teaching during the pandemic, but at the expense of students' well-being and mental health. Being a student myself, I can quite relate to the psychological barriers and academic challenges of online education; however, I have also experienced the benefits that have come with participating in online classes. One of the major shortcomings of e-learning compared to face-to-face learning seems to be the lack of interaction and increased isolation. Most studies find no real difference in academic performance between online and traditional education, which suggests that the optimal learning strategy may be a blend of the two techniques. If a primary goal of e-learning is to reach a wider range of students and provide educational opportunities for those who might not otherwise have such access, then it is important to ensure that students enrolled in online courses are partaking in equally engaging educational experiences that contribute to their learning and success.

As it pertains to the pandemic, the current education system has its benefits and its flaws that are intensified by the uncertainty of future lockdown measures. More than half of the respondents in Gherhes et al.'s (2021) study asserted that after the end of the COVID-19 pandemic, they wanted to return to face-to-face learning (p. 10). Saha et al. (2021) also conclude that traditional learning procedures are preferred by most students (50.56%), followed by the blended method (35%), and lastly the online method (14.44%) (p. 176). Contradictorily, some respondents in another study stated "I really hope we can make online learning standard coming out of this phase" and "Please never stop recording lectures, regardless of the status of live classes" (Zgheib et al., 2020, p. 52). Some studies show the students' preferences for e-learning, especially those of introverts who may feel shy and lack of confidence, of those who have learning challenges, of those who find public speaking a burden, as well as of those who are reluctant to speak in class (Stern, 2004, as cited in Gheres et al., 2021, p. 3). Once again, this further insinuates that blended learning is something educational institutions should permanently adopt coming out of the pandemic.

It is difficult to determine if the advantages of remote education outweigh the disadvantages, or vice-versa. According to Dumford and Miller (2018), first-year students who take more classes online report lower levels of collaborative learning in their courses, fewer diverse discussions with others, and lower quality of interactions (p. 458). The loss of motivation and potential for procrastination result in a greater effort from students in regards to time management skills and self-sufficiency. The increased requirement of work and effort from students partaking in online education may partially explain why students are eager to return to in-person classes. However, it is important to note that in all studies mentioned, generally, online education does not reduce the understanding or knowledge of a subject. Academically, students are performing almost equally as well online as they are traditionally. Positive aspects of e-learning, researched by Gherhes et al.'s (2021), have shown that students are particularly pragmatic, considering time-saving as the main advantage, closely followed by the comfort offered by staying home, as well as the accessibility provided by the online environment (p. 12). Bernard et al. (2004) said that "there are better learning outcomes in the traditional format for

activities that have to be done simultaneously and better outcomes in the remote format for activities that can be done at various times" (p. 403).

It is important to note that just because there are disadvantages to online education and face-to-face education, that doesn't automatically mean that blended learning is superior. However, there is research to demonstrate that blended learning does indeed better benefit the students when it comes to a variety of factors. Günes and Alagözlü (2021) completed a study that concluded that students enrolled in classes that used blended learning had higher learner autonomy, motivation, and academic success (p. 61). Blended learning also addresses the social, pedagogical, economic, demographic, and financial aspects of education; it provides alternative opportunities for higher educational institutions to deal with these challenges and respond to external pressures to effectively deploy technological innovations in the classroom (Castro, 2019, p. 2524). In addition, blended learning allows students to learn and access material in a variety of modes – an important feature since students have very different learning styles. According to Kaur (2013), the availability of different modes has, in turn, decreased dropout rates, increased tests scores, and increased motivation on the part of the students (p. 616). Studies at the University of Wisconsin-Milwaukee (Garnham & Kaleta, 2002) also suggested that students learn more in blended learning courses than they do in comparable traditional class sections. Teachers responsible for the blended learning sections reported that "students wrote better papers, performed better on exams, produced higher quality projects, and were capable of more meaningful discussions on course material" (p. 509).

While some instructors may still argue that a traditional classroom is the "richest" teaching medium, blended learning allows ample opportunities for building social relationships between the teacher and the students. "Blended courses offer the convenience and flexibility of wholly online courses without the loss of faculty or student interaction" (Lloyd-Smith, 2010, p. 509). By combining the successful elements of a well-designed online course with the face-to-face discussions and personal interactions, blended courses maximize student participation and the preferred learning styles of more students are being met (Lloyd-Smith, 2010, p. 509).

It is important to create a sense of community for students in an online course since technology lacks a human component and can lead to feelings of isolation. Face-to-face interaction cannot be excluded from the educational process. At the same time, there is no denying the fact that the benefits of e-learning, that is, accessibility, comfort, and time-saving, may become indispensable in people's daily lives. A complete return to face-to-face learning may no longer be entirely possible, and it will be time to move on to another level, that of blended learning. A positive educational experience depends on students' satisfaction with the method and engagement level of the learning process. There are ways to combat some of these reserved and detached interactions with faculty and replace them with more amiable means of communication. To mitigate student's dissatisfaction with teachers' teaching methods in online platforms, institutions can arrange ICT (Information and Communications Technology) training for both teachers and students to make the learning process effective (Saha et al., 2021, p. 177). In addition, more informal assessments of student learning can take place during

chat-room discussions, examination of problem-solving logs, and discussion board content analysis to enhance formative feedback for students while providing a sense of enhanced faculty and peer interaction (Dumford & Miller, 2018, p. 460). Universities should prepare for an increase in student requests for mental health services and should consider offering mental health courses for students in the future.

Conclusion

There is great hope that online learning will be able to provide a world class education to anyone, anywhere, anytime, as long as they have access to the internet. COVID-19 has forced teachers and students to adapt to new learning techniques while simultaneously uncovering the strengths and weaknesses of the traditional, remote, and blended methods. I can conclude that remote education has both helped and hindered students' academic performance, engagement level, and mental health. When comparing online and traditional learning, there are no significant differences when it comes to academic performance; however, engagement levels are higher in remote education as the time and dedication required from students is greater than that of traditional education. However, the lack of interaction and motivation pose a threat to students' mental health, resulting in an increase of depression and anxiety amongst students.

When choosing between traditional, online, and blended learning, the most effective method seems to be blended; by combining the two techniques, students will benefit from the resources, flexibility and accessibility online education has to offer, as well as the interaction, socialization, and collaboration of face-to-face learning.

Post-pandemic education looks as if it will take on the blended method of learning. It would be significantly hard on both students and teachers to revert completely back to face-to-face learning, and it isn't beneficial to continue strictly remote. There are steps that institutions can take, such as ICT training and informal assessments, in order to combat some of the barriers posed by online education. As the education system evolves, it opens up the door for greater research on effective ways to deliver blended learning, as well as strategies for students who are struggling mentally and academically with the transition.

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