12. Online Education as a Learning Strategy in the COVID-19 Global Pandemic

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Abstract

This paper is a result of participation in the 2020 STAR Scholars Conference panel that covered the topic of Learning Strategies in the COVID-19 Global Pandemic; it focuses primarily on practices and strategies in higher education. The paper discusses the advantages, disadvantages, challenges, and opportunities of online learning and explores research on the efficacy of online learning as a tool and strategy in education. Institutional leadership qualities to bring about excellence in online learning are also included in the paper.

Keywords

COVID-19; learning strategies; online learning institutional leadership

Introduction

Online learning is one of the imminent trends and learning strategies in the education sector around the globe. Soon after the COVID-19 pandemic struck, brick-and-mortar schools scrambled to bring their courses online. The result wasn't just an overnight transformation for traditional institutions; it was the most significant boost in online learning participation. In 2018, only 7 million postsecondary students were enrolled in distance learning courses in the U.S. (Table 1). Fast forward to 2020, many more students found themselves learning primarily online out of necessity. Although enrollment across nearly all public and private institutions declined in 2021, institutions with well-established distance education (DE) courses and programs experienced the opposite; their undergraduate and graduate enrollments increased. For example, at Arizona State University, online enrollment of undergraduate and graduate students from fall 2019 to fall 2020 increased by more than 20 percent; at Southern New Hampshire, it was up by 18 percent; and at Western Governors University, it was up by nearly 7 percent (Kis, 2021).

In the spring of 2020, the pandemic brought change unprecedentedly, as colleges of all types shifted to remote instruction. Research suggests that online learning has both advantages and disadvantages for student learning. Regarding faculty support in higher education, the proportion

Table 1: Status of Online Learning by Higher Educational Institutional Type Pre-Pandemic

Level of DE Courses	Public	Public	Private non-profit	Private non-profit	Private for-profit	Private for-profit
No DE Courses	4%	3%	26%	53%	29%	60%
Some DE Courses But no DE Programs	18%	29%	20%	30%	27%	26%
DE Courses and DE Programs	78%	68%	54%	17%	44%	14%
TOTAL	100%	100%	100%	100%	100%	100%
Type of Institution	4 yr.	2 yr.	4 yr.	2 yr.	4 yr.	2 yr.

Source of Data: US Department of Education for Education Statistics (2018)

of instructors who saw online learning as effective was under 49 percent at the pandemic's beginning (Lederman, 2020). In a *Chronicle of Higher Education* article (2021), a survey reveals what faculty and administrators thought about their emergency efforts to provide online instruction during the pandemic in 2020; about 60 percent of faculty and a similar share of administrators said, "their spring 2020 courses were worse than face-to-face offerings". However, other research showed improved faculty support (74%) for online instruction by the 2020 fall semester (Lederman, 2020).

Advantages of Online Learning

Although much work is still needed to improve graduation rates, completion rates, and time-to-degree metrics, online education offers dynamic student and teacher communication in a student-centered virtual learning environment (Cellini, 2021). Whether a full-time or part-time online student, the online education experience provides a much more manageable schedule and educational access. As a result of the COVID lockdowns, online study is becoming more popular due to its convenience and easy operation and has several advantages (Singh, 2020). It is very convenient for both student and teacher as interactions occur from home. In the case of higher education, there is no need for office hours to speak to the instructor; you can immediately access them through chat or email. Additionally, given the recent pandemic that the world is recovering from, the online study has become more critical in case of a natural calamity or emergency (Singh, 2020).

While there exist some negative impacts to online learning, one study reveals that online classes may allow students to move through their degree requirements more quickly (Cellini, 2021). Also, a report from the Northeastern University Center for the Future of Higher Education

and Talent Strategy (December 2021) reveals that employers grew more optimistic about online education during the pandemic. The center surveyed a nationally representative sample of 1,000 'C-suite" executives about their regard for online credentials when hiring. Notably, 71 percent said they considered an online certificate generally equal to or higher quality than one completed in person (Blumenstyk, 2022).

Disadvantages of Online Learning

As a result of past research, online coursework generally yields worse student performance than in-person coursework. The adverse effects of online course taking are particularly pronounced for less-academically prepared students and students pursuing bachelor's degrees. Switching to online course-taking in the pandemic also led to declines in course completion. According to Cellini (2021), various studies have assessed online versus in-person learning at the college level in recent years; virtually all studies found that online instruction resulted in lower student performance relative to in-person instruction; although, in one case, students with hybrid instruction performed similarly to their in-person peers. Adverse effects of online course-taking were particularly pronounced for males and less academically prepared students (IBID).

Previous Challenges

For years, advocates of online learning bemoan the fact that even as more instructors taught in virtual settings, professors' confidence in the quality and value of online education hadn't risen accordingly (Lederman, 2020). Documentation of this trend has been provided in the *Inside Higher Education* annual surveys of faculty attitudes on technology since 2010.

In pre-COVID, faculty skepticism about online learning and other technological approaches to higher education was a long-standing issue for campus administrators and technology advocates in higher education. In addition to faculty skepticism, additional challenges stemmed from logistics, inadequate hardware, software, and curriculum (Lederman, 2020). Many faculty and students were unprepared to teach or learn remotely due to insufficient faculty and student support technology resources. For example, many institutions lack robust online programs, sound instructional design and technology staff, and appropriate course development processes. Moreover, some students did not have access to computers or laptops. Many institutions lacked adequately structured student support mechanisms, such as online library offerings, access to registration, advising, tutoring support, timely feedback, and communication. However, survey results from the *Inside Higher Education* annual survey (2020) showed professors' support for the statement "my institution is achieving an ideal digital learning environment" their area of most significant concern revolved around equity. Problems like fitting

coursework in with home and family responsibilities, managing student mental health and wellness, ensuring reliable internet access, and managing financial stress during COVID-19, were highlighted as faculty concerns for students (Lederman, 2020).

The pandemic revealed the persistence of the digital divide. When asked about remote teaching and learning challenges, 65 percent of faculty members and 77 percent of administrators reported that students who do not have computer technologies or internet connections or live in low bandwidth areas are cut off from educational opportunities (Nworie, 2021).

Current Opportunities

The COVID-19 pandemic interrupted the traditional operation of educational institutions worldwide. According to a UNESCO press release in 2020, the educational experiences of nearly 1.4 billion students of all ages were disrupted (Nworie, 2021). The pandemic forced colleges and universities to swiftly move their courses online while faculty, administrators, and staff worked remotely to protect their students and themselves. There have been favorable consequences from efforts to fill the educational gap created by the pandemic. Faculty have learned that they can develop and engage students in virtual classrooms. Faculty members have discovered new technology skills. Institutions have realized the potential for scalability of offering online courses. Such positive experiences give hope to adopting more broad-based online learning strategies and technologies.

New online innovations need to be harnessed and institutionalized to sustain the gains made during the pandemic. The success of an eLearning program, its rigor, recognition, and accomplishments depend significantly on the support provided to its faculty teaching online. The literature on the topic indicates that training and support are two of the main pillars that ensure the endeavor is sound, high quality, and sustainable (Bigatel et al., 2012). In a study by Lederman (2020), the increased, if forced, experience with remote learning enhanced instructors' view of how they can use technology to improve their teaching and enable student learning. Additionally, the study further suggests that most professors in the survey now feel much better prepared to teach with technology than they were in the spring of 2020. They generally credit their institutions for helping them prepare to teach remotely because of support for training.

Along with the four-year institutions mentioned earlier, several two-year institutions are leading the way in strategies to provide quality online educational opportunities to students. At TCC Connect Campus-Tarrant County College, USA, the campus oversees the eLearning faculty's hiring, training, supervision, and quality. The campus has made faculty support a cornerstone of its values and goals, investing significantly and consistently in the exercise of its faculty (Morales, 2019). Other educational institutions getting it right include Coastline Community College, a public two-year online college in California. The coastline provides online learning that

has been recognized for eight consecutive years as one of the 150 colleges by the Aspen Institute for Community College Excellence. Blue Ridge Community College in North Carolina is a two-year college offering degrees and certificates that can be completed 100% online.

Conclusion

A significant change in higher education was created because of the COVID-19 pandemic. Favorable consequences have emerged from efforts to fill the vast educational gap created by the pandemic (Nworie, 2021). Institutions have grown their catalogs of online courses. Faculty have learned that they can develop and engage in virtual classrooms. Faculty have learned new technology skills. Institutions with a minimal footprint in the online environment deployed large numbers of emergency remote courses almost simultaneously, demonstrating the potential for scalability in the online learning mode. However, more research on virtual learning will be needed post-pandemic to determine the impact of virtual education on college completion, graduation, and time to degree (Cellini, 2021). Ultimately, and if not attended to, the negative learning impacts related to the reduced course completion and lack of connection with other students and faculty in a virtual environment could reduce college completion rates.

As forementioned, positive gains were made during the pandemic, such as overcoming faculty skepticism, and institutional culture changed more favorably toward innovation, experimentation, and creativity. Higher education's COVID-19 response resulted in an unstructured boost in online teaching and learning and fast-forwarded the adoption of more broad-based online learning strategies and technologies. It demonstrated a resilience that created a prototype for excellence in online education (Nworie, 2021).

To ensure that the success of online learning experiences during the pandemic is improved upon, institutional leadership should consider establishing best practices from lessons learned:

1. Consider reexamining the emergency courses to determine how they can be improved to meet the necessary standards, format, and quality of online lessons.
2. Institutionalize the gains made during the pandemic by encouraging consistent professional development for faculty and staff, experimentation, and creativity.
3. Establish benchmarking tools, checklists, and rubrics for faculty new to devices that measure the quality of online learning.
4. Develop and implement policies and procedures for online learning that will cover assessment of best technologies and delivery methods to prepare faculty in course development and improvement for online teaching.
5. Employ strategies for online learning that include access to hands-on experiences in science labs, studios, music conservatories, and other

specialized learning environments. In such cases, well-developed digital simulations, educational video games, augmented reality, demonstrations in hybrid models, virtual reality, and interactive learning applications could substitute for traditional lab or studio learning environments (Nworie, 2021).

Finally, senior administrators in higher education need to rethink how to plan, advance, and deliver system-wide online instruction using what has been gained from the pandemic experience. Good leadership plays a significant role in where and when technology is successfully implemented in teaching and learning. This includes administration at the institutional and department levels. The recognition and effective completion of educational innovation(s) rely on the support of a champion, a critical institutional administrator who, along with motivated faculty and engaged staff, has the vision, drive, and commitment to bring the innovation to fruition (Dempster & Deepwell, 2002).

Although in one study, nearly eight out of ten faculty members felt a better sense of engagement between themselves and their students and were more confident about returning to teach online in the fall semester of 2020, faculty and administrators were still needing to navigate a host of remaining challenges, including helping students gain better access to technology, establishing improved online student support, achieving better rates of completion, graduation and time-to-degree attainment (Cellini, 2021). Institutional leaders must be prepared to re-evaluate their institutions' commitments to online learning by adjusting priorities to meet the needs across all institutional levels, developing online educational policies that ensure high-quality pedagogical and technological online learning, and providing sustained professional development for all faculty and staff. Four in five instructors said they had participated in professional development for online learning to prepare for the 2020 fall semester, with community college professors (86 percent) more likely than their peers at four-year colleges to say so (Lederman, 2020). Professional development for faculty and administrators will help provide a deeper understanding of online learning and instructional technology, which will help guide them in formulating online policy. Higher education institutions have a vast universe of opportunities to improve online education. Faculty and students who had not previously considered online learning authentic education have tasted it, and there can be no turning back.

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Author

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