



# ONLINE TEACHING AND LEARNING IN GLOBAL HIGHER EDUCATION DURING COVID-19

Thomas J. McCormack<sup>1</sup> | Pamela A. Lemoine<sup>2</sup> | \*Michael D. Richardson<sup>3</sup>

<sup>1</sup>Columbus State University

<sup>2</sup>Troy University

<sup>3</sup>Global Tertiary Institute

## ABSTRACT

In the 21<sup>st</sup> century higher education must use technology to further society's future growth and development. The focus of society in the 21st century is knowledge-based: learning is critical, and information will continually become obsolete. Technology implementation has accelerated tremendously during the last decade, particularly changes in development and delivery of education, specifically online education. In the current world of globalization and heightened accountability for global higher education, technology should provide enlightened, far-sighted and highly qualified persons and systems to assist in societal concerns. A significant key is the relationship between online learning and its application in global higher education, particularly using online learning.

**KEYWORDS:** Online learning, online teaching, global higher education, technology, COVID-19 pandemic.

## INTRODUCTION:

The COVID-19 pandemic has forced most of the higher education community to implement technological applications for instruction and delivery through online learning (Ali, 2020). Global higher education has been slow to change; although some universities extensively use online education, or some other form of technology-driven instruction, the vast majority of institutions were unprepared for the rapid move to online learning (Callo & Yazon, 2020). As a result, new organizational structures and systems to promote quality learning were needed to move from face-to-face to online learning (Dhawan, 2020). Managing changes in moving university instruction to an online environment has proven difficult and demanding, particularly for many faculty (Houlden & Veletsianos, 2020). Global higher education has recognized that innovation in teaching and learning is absolutely essential, but not without numerous challenges (Dunn & Kennedy, 2019).

Increasing global competition is forcing global higher education to modify traditional pedagogy and accommodate technology-mediated learning, primarily online learning (Waller, Lemoine, Garretson, & Richardson, 2020b). Although technology adds complexity and uncertainty for global higher education, online technology provides a service and guide for current and future learning (Waller, Garretson, Lemoine, & Richardson, 2020). The accelerating pace of change demands more flexible, adaptive, and agile teaching and learning in global higher education institutions (Daniela, Strods, & Kalnina, 2019).

Online learning is an important means of changing teaching and learning in order to prepare students with the 21st century skills they need to be successful (He, Xu, & Kruck, 2019). The use of 21<sup>st</sup> century technology in education is imperative as educators attempt to prepare 21st century students for future jobs in a globally competitive and interactive digital workplace (Cleveland-Innes, 2020). The use of technology is a necessary condition of doing business in global higher education (Dennis, 2018).

## COVID-19 and Online Education:

The COVID-19 crisis continues to present challenges for global higher education institutions (Adedoyin & Soykan, 2020). Globally colleges and universities responded to the COVID-19 pandemic with varying strategies, typically the dramatic move to online education (Bozkurt & Sharma, 2020). The COVID-19 pandemic forced global higher education institutions to rapidly shift to online learning whether the institution, faculty or students were ready for the move (Karalis, 2020). Issues associated with COVID-19 on higher education campuses include online learning techniques, student health and wellbeing, and financial constraints (Johnson, Veletsianos, & Seaman, 2020).

Online learning is not new to most learners, but it was largely untried by many faculty. However, COVID-19 intensified the need to explore online teaching and learning opportunities to ensure continued learning for students (Lemoine, Waller, Garretson, & Richardson, 2020). The rapid onset of the pandemic forced educational administrators and academics to critically and rapidly identify different techniques for delivering instruction to students (Naciri, Baba, Achbani, & Kharbach, 2020). Online learning is an important source of information, due to its ubiquity, low cost, ease of use and interactive nature (Karalis & Raikou, 2020).

The rapid move to online learning was not without challenges (Baliga, 2020). According to some research, students expressed reservations about online learning. Among the most prevalent were: (1) technological factors, including less than adequate computer equipment and lack of support from the institution; (2) e-learning system quality factors; (3) trust factors related to relations with faculty and support staff; (4) self-efficacy factors including lack of specific and timely feedback, and (5) cultural aspects. (Almaiah, Al-Khasawneh, & Althunibat, 2020).

## Globalization and Online Learning:

The digital economy offers opportunity and markets for global higher education institutions who can adapt and modify learning opportunities, thereby creating wider access to a global marketplace (Richardson, Garretson, Waller, & Lemoine, 2019). Two major world changes, moving from a manufacturing-based economy to an information-based economy and the globalization of higher education have led to many innovations in teaching and learning (Singh & Atwal, 2020). In recent years nothing has affected global higher education as profoundly as the use of technology for teaching and learning (Zorn, Haywood, & Glachant, 2018). New technologies enable online learning to be a phenomenon of participative and shared learning. New technologies are creating learning environments to increase the number of students impacted and the quality of those services and is currently undergoing great transformation (Altmann, Ebersberger, Mössenlechner, & Wieser, 2018).

The nature of teaching within the global higher education system is evolving rapidly due to advanced technology, the targeted use of online learning, student flexible learning expectations, the pressures of budget constraints, and the COVID-19 pandemic (Ananga, 2020). Utilizing digital and online resources has become key in increasing student engagement and, subsequently, achievement even in difficult times (Anderson, Bushey, Devlin, & Gould, 2020). Suddenly, faculty are looking for digital tools to deliver learning materials to their students and organize communication within their online classes. No managerial strategies, no teacher training, no debates on technological design or politics, no arguments about the pros and cons—universities just did it (Neuwirth, Jović, & Mukherji, 2020).

## Teaching and Online Education:

Incorporation of online teaching methodologies has become imperative for global higher education pedagogies (Palahicky, 2020). Looking at the changing scenario of higher education, online teaching has become a vital prerequisite to create virtual learning environments so as to survive in the competitive digital world (Orakci, 2020). Faculty are expected to not only teach students the information and skills that they need to know, but they must also teach them to be able to learn from and synthesize the vast amounts of information that are available to them in the digital world (Sithole, Mupinga, Kibirige, Manyanga, & Bucklein, 2019).

Online learning is the fastest growing area of education worldwide (Adedoyin & Soykan, 2020). Online teaching requires different pedagogical approaches; therefore, institutions need to support faculty transitioning into online teaching to ensure quality. Online education requires knowledge of current technological resources, use of innovative tools for instruction, and time to produce and place

these tools within the learning management system (Waller, Lemoine, & Richardson, 2020). Understanding faculty pedagogical practices and student experiences in online courses are important areas to consider because online teaching supports student engagement and success, which are critical because online students are more vulnerable to attrition (Orr, Weekley, & Reyes, 2020). Multiple instructional methods need to be used to increase the effectiveness of the online educational process and compensate for the lack of physical presence of both teachers and students in the same space and time (Rapanta, Botturi, Goodyear, Guàrdia, & Koole, 2020).

### Learning and Online Education:

Technology-mediated online learning provides the dominant means by which 21st higher education is delivered and received (Dennis, 2018). With online learning technology, students can determine the structure of their learning process: choosing where, when, and how to learn (Gupta & Gupta, 2020). Online learning reverses the roles and learning of the typical university teacher and face-to-face classroom-learning paradigm and instead becomes a constructivist process with the student becoming the determinant factor (Kumar, 2020). Online learning can provide students with a low-cost, flexible option to expand into global markets. Given the change in student populations, there is a greater need to find more creative cost and time effective ways to draw students to institutions of higher learning (Vlachopoulos, 2020). One such way of reaching a more diverse population is through the use of online learning (Lemoine, Waller, Garretson, & Richardson, 2020). The general mission of online learning is to fully extend quality learning opportunities to diverse populations of learners who either prefer or have a special need of alternative methods of delivery (Nguyen, Nguyen, & Huynh, 2019).

Online learning programs typically have a more diverse student body which allows students to interact with students of all ages, from many different walks of life or in foreign countries. Such diversity enriches the learning process and is reflected in discussions, assignments and projects (Ossiannilsson, 2018). Online learning programs tend to be win-win for the student and for the institution. Online classes cost the university less as classes are held in 'virtual' classrooms which do not require desks, chairs and building space. Additionally, students do not have costs generally associated with classes at a physical college such as parking and housing (Noesgaard, & Ørngreen, 2015).

### CONCLUSIONS:

- (1) The digital economy offers opportunities for institutions who can adapt to and access the marketplace through the use of online learning.
- (2) Online learning is much more to do with an approach to learning than simply a set of technological skills.
- (3) Online learning is a crucial recruiting tool for global higher education institutions.
- (4) Instructional innovations are altering the skills and knowledge needed to succeed in the workplace and society.
- (5) The faculty's role is critical in fostering online learning.
- (6) The forced switch to online teaching caused by the COVID-19 pandemic caused disruptions in the learning processes globally.

### REFERENCES:

- I. Adedoyin, O. B., & Soykan, E. (2020). Covid-19 pandemic and online learning: The challenges and opportunities. *Interactive Learning Environments*. DOI: 10.1080/10494820.2020.1813180
- II. Ali, W. (2020). Online and Remote Learning in Higher Education Institutes: A Necessity in light of COVID-19 Pandemic. *Higher Education*, 10(3)16-25.
- III. Altmann, A., Ebersberger, B., Mössenlechner, C., & Wieser, D. (2018). Introduction: The disruptive power of online education: Challenges, opportunities, responses. In *The disruptive power of online education: Challenges, opportunities, responses* (pp. 1-4). Binkley, UK: Emerald Publishing Limited.
- IV. Ananga, P. (2020). Pedagogical considerations of e-learning in education for development in the face of COVID-19. *International Journal of Technology in Education and Science*, 4(4), 310-321.
- V. Anderson, J., Bushey, H., Devlin, M. E., & Gould, A. J. (2020). Cultivating student engagement in a personalized online learning environment. In *Handbook of research on fostering student engagement with instructional technology in higher education* (pp. 267-287). Hershey, PA: IGI Global.
- VI. Baliga, R. (2020). Challenges confronting higher education: Prospects for and obstacles to innovation. In *Handbook of research on enhancing innovation in higher education institutions* (pp. 26-48). Hershey, PA: IGI Global.
- VII. Bozkurt, A., & Sharma, R. C. (2020). Emergency remote teaching in a time of global crisis due to Corona Virus pandemic. *Asian Journal of Distance Education*, 15(1), i-iv.
- VIII. Callo, E. C., & Yazon, A. D. (2020). Exploring the factors influencing the readiness of faculty and students on online teaching and learning as an alternative delivery mode for the new normal. *Universal Journal of Educational Research*, 8(8), 3509-3518.
- IX. Cleveland-Innes, M. (2020). Student demographic change and pedagogical

issues in higher education. In *Inequality, innovation and reform in higher education* (pp. 159-173). Cham, Switzerland: Springer.

- X. Daniela, L., Strods, R., & Kalniņa, D. (2019). Technology-Enhanced Learning (TEL) in higher education: Where are we now? In *Knowledge-intensive economies and opportunities for social, organizational, and technological growth* (pp. 12-24). Hershey, PA: IGI Global.
- XI. Dennis, M. J. (2018). The impact of technology on US and worldwide higher education. *Enrollment Management Report*, 21(10), 1-3.
- XII. Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems*, 49(1), 5-22.
- XIII. Dunn, T. J., & Kennedy, M. (2019). Technology enhanced learning in higher education: Motivations, engagement and academic achievement. *Computers & Education*, 137, 104-113.
- XIV. Gupta, S. B., & Gupta, M. (2020). Technology and e-learning in higher education. *Technology*, 29(4), 1320-1325.
- XV. He, W., Xu, G., & Kruck, S. E. (2019). Online IS education for the 21st century. *Journal of Information Systems Education*, 25(2), 1.
- XVI. Houlden, S., & Veletsianos, G. (2020, March 12). Coronavirus pushes universities to switch to online classes – but are they ready? The Conversation, <https://theconversation.com/coronaviruspushes-universities-to-switch-to-online-classes-but-arethey-ready-132728>.
- XVII. Johnson, N., Veletsianos, G., & Seaman, J. (2020). US faculty and administrators' experiences and approaches in the early weeks of the COVID-19 pandemic. *Online Learning*, 24(2), 6-21.
- XVIII. Karalis, T. (2020). Planning and evaluation during educational disruption: Lessons learned from COVID-19 pandemic for treatment of emergencies in education. *European Journal of Education Studies*, 7(4), 125-142.
- XIX. Karalis, T., & Raikou, N. (2020). Teaching at the times of COVID-19: Inferences and implications for higher education pedagogy. *International Journal of Academic Research in Business and Social Sciences*, 10(5), 479-493.
- XX. Kumar, S. (2020). Impact of e-learning technologies in higher education. *Ideal Research Review*, 2(21), 12-18.
- XXI. Lemoine, P. A., Waller, R. E., Garretson, C. J., & Richardson, M. D. (2020). Examining technology for teaching and learning. *Journal of Education and Development*, 4(2), 80-89.
- XXIII. Lemoine, P. A., Waller, R. E., Garretson, C. J., & Richardson, M. D. (2020). Analyzing uncertainty and change in the advancement of global higher education. *International Journal of Education Humanities and Social Sciences*, 3(4), 208-223.
- XXIV. Naciri, A., Baba, M. A., Achbani, A., & Kharbach, A. (2020). Mobile learning in higher education: Unavoidable alternative during COVID-19. *Aquademia*, 4(1), ep20016.
- XXV. Neuwirth, L. S., Jović, S., & Mukherji, B. R. (2020). Reimagining higher education during and post-COVID-19: Challenges and opportunities. *Journal of Adult and Continuing Education*, DOI: 1477971420947738.
- XXVI. Nguyen, Q. L. H. T. T., Nguyen, P., & Huynh, V. D. B. (2019). Roles of e-learning in higher education. *Journal of Critical Reviews*, 6(4), 7-13.
- XXVII. Noesgaard, S. S., & Ørngreen, R. (2015). The effectiveness of e-learning: An explorative and integrative review of the definitions, methodologies and factors that promote e-learning effectiveness. *Electronic Journal of E-learning*, 13(4), 278-290.
- XXVIII. Orakçı, Ş. (2020). The future of online learning and teaching in higher education. In *Global approaches to sustainability through learning and education* (pp. 28-45). Hershey, PA: IGI Global.
- XXIX. Orr, L., Weekley, L., & Reyes, B. (2020). Incorporating innovative instructional strategies to enhance learner engagement in online college courses. In *Theoretical and practical approaches to innovation in higher education* (pp. 57-79). Hershey, PA: IGI Global.
- XXX. Ossiannilsson, E. (2018). Promoting active and meaningful learning for digital learners. In *Handbook of research on mobile technology, constructivism, and meaningful learning* (pp. 294-315). Hershey, PA: IGI Global.
- XXXI. Palahicky, V. (2020). The impact of technology innovation on the undergraduate learner: A critical perspective. In *Enhancing learning design for innovative teaching in higher education* (pp. 266-280). Hershey, PA: IGI Global.
- XXXII. Rapanta, C., Botturi, L., Goodyear, P., Guàrdia, L., & Koole, M. (2020). Online university teaching during and after the Covid-19 crisis: Refocusing teacher presence and learning activity. *Postdigital Science and Education*, 1-23. <https://doi.org/10.1007/s42438-020-00155-y>.
- XXXIII. Richardson, M. D., Garretson, C. J., Waller, R. E., & Lemoine, P. A. (2019). Building capacity for quality in global higher education. *International Journal of Advanced Research and Publications*, 3(10), 28-34.
- XXXIV. Singh, Y., & Atwal, H. (2020). Changing the DNA of higher education through innovative approaches. In *Enhancing learning design for innovative teaching in higher education* (pp. 296-305). Hershey, PA: IGI Global.
- XXXV. Sithole, A., Mupinga, D. M., Kibirige, J. S., Manyanga, F., & Bucklein, B. K. (2019). Expectations, challenges and suggestions for faculty teaching online courses in higher education. *International Journal of Online Pedagogy and Course Design*, 9(1), 62-77.
- XXXVI. Vlachopoulos, D. (2020). COVID-19: Threat or Opportunity for Online Education? *Higher Learning Research Communications*, 10(1), 2.
- XXXVII. Waller, R. E., Garretson, C. J., Lemoine, P. A., & Richardson, M. D. (2020). Examining technology uncertainties in global higher education. *International*

Journal of Education Humanities and Social Sciences, 3(3), 24-32.

- XXXVIII. Waller, R. E., Lemoine, P. A., Garretson, C. J., & Richardson, M. D. (2020). Global higher education: Complexity and uncertainty. *International Education and Research Journal*, 6(4), 57-58.
- XXXIX. Waller, R. E., Lemoine, P. A., & Richardson, M. D. (2020). Exploring the relationships between technology and learning in global higher education. *International Journal of Education Humanities and Social Science*, 3(1), 182-189.
- XL. Zorn, A., Haywood, J., & Glachant, J.-M. (Eds.). (2018). *Higher education in the digital age: Moving academia online*. Cheltenham, UK: Edward Elgar Publishing Limited.