

Conceptual Paper

Challenges of Implementing Online Teaching in Universities during Covid-19 Global Pandemic: A Developing Country's Perspective

Bhagyavi Sandareka Habaragoda¹

Department of Industrial Management, Faculty of Applied Sciences,
Wayamba University of Sri Lanka, Sri Lanka

Abstract

Educational institutions in Sri Lanka like schools and universities were primarily based on traditional face-to-face mode of teaching until the beginning of year 2020. The sudden outbreak of Covid-19 shook the entire world while challenging the education system across the globe. The situation led universities and other educational institutions to shift their teaching/learning activities to online mode from on campus, almost overnight. Online education was not popular in Sri Lanka by the time of this rapid transition and there were very fewer number of online courses offered by limited number of universities. Online teaching/learning that emerged with the pandemic, has been challenging in Sri Lankan university system as students, teachers and administrators were not either prepared or trained for it. This paper attempts to explore key challenges confronted with the implementation of online pedagogical approach, so that this understanding may help universities to enhance the experiences in online teaching/learning in future endurances. Amongst several, lack of training in pedagogy for online teaching is the severest challenge faced by many institutions. Most of the instructors were new to online teaching and had shifted with little or no training or preparation specific to this mode of delivery. Instructors must receive proper professional training and development to have higher expectations and to adapt their teaching to appropriate online teaching strategies.

Keywords: Covid-19, challenges, education, online teaching, online learning

¹ Corresponding author's email: shabaragoda@yahoo.com

Introduction

Covid-19 pandemic which was started spreading across the globe in the first quarter of 2020, has been dramatically impacted on almost everything and every aspects in our lives. The education sector has no exceptions either. Education institutions which were primarily based on face-to-face traditional learning environments had to change their mode of teaching to online within a short time period. In comparison with developed countries, online education is not popular in developing countries, where the situation is same in Sri Lanka which is one of the developing countries in the South Asian region. Complete online degree programs or courses are not common or popular in Sri Lankan universities especially in state universities, however, all these universities provide some basic course information such as the syllabus, assessment criteria, list of references, time tables online. The pandemic rushed across the globe, forced all most all educational institutions including the universities to suspend their class room based academic activities and moved to online teaching/learning almost overnight (Dhawan, 2020). With the aim of continuing academic activities while adhering to Covid-19 safety measures, all Sri Lankan universities shifted their mode of teaching to online platforms mainly via Learning Management Systems (LMS). An important consideration here is that, this shifting was taken place rapidly and without having adequate preparation or professional trainings for those who involve in teaching, learning or administrating activities in the online platform. This paper attempts to explore the key challenges confronted with the implementation of online teaching in universities that may help providing satisfactory experiences for the stakeholders in the education system.

Online Education, Advantages and Challenges

Online education is mainly driven by technology and offers many advantages. The biggest advantage is the flexibility of online courses where learners can learn on their own schedules which are convenient for them, without interfering with their other commitments (Gillett-Swan, 2017). Learners can work through the lesson plan at their own speed so that they are really mastering the material before moving on to the next section. Online education help improving time management skill by keeping learners on a regular schedule of making and meeting deadlines, allowing them to practice managing their time and staying productive. In online space, the learners are responsible of their own learning where they should tackle multiple tasks, set priorities and adapt to changing conditions in the learning environment, ultimately leads producing a self-motivated and self-directed individual. Flexibility inherent within the online environment provides wide range of opportunities that can incorporate a range of technologies that are usually not available in traditional face-to-face environment. With the use of these opportunities, online instructors can provide learners with experiences that challenge their higher-order cognitive skills and intellectual stimuli (Broadbent & Poon, 2015; Crawford-Ferre & Wiest, 2012). Prevailing literature has proven that online education is a feasible method providing quality education at a reasonably reduced cost (Garbett, 2011). Amongst these and many more other advantages, primarily due to its technology driven nature, online teaching presents significant challenges and issues for the instructors as well as for the learners.

Regardless of whether the country is a developed or developing country, online education has its own challenges (Gillett-Swan, 2017). However, universities in developing countries confronts unique set of challenges compared to their counterparts in developed countries (Aung & Khaing, 2016). These differences are mainly driven by the fact that the developing countries are lagging behind developed countries in various aspects, including the education sector (Aung & Khaing, 2016). Among plentiful challenges, lack of technological devices required for online education such as computers, smart phones, tabs or other similar devices, limited and unreliable internet access, fairly high internet charges, unreliable power supply and the attitudes of the learners and instructors are quite common in many developing countries. Instructors who rely on traditional, face-to-face mode of delivery, are more likely to find that shifting to online teaching is both problematic and challenging. In the face of limited IT infrastructure, lack of awareness and proper professional training, moving to online teaching especially within a short time period may be premature decision for a developing country. As per the experts' arguments, online education in the context of developing countries is against the right of equitable access to education since such educational reforms may deprive the rights of economically marginalized people in these countries. Apart from that, online classes are not considered as equivalent to on campus class as per the learners' perspectives in general.

Challenges Faced in Sri Lankan Context

None of the Sri Lankan state universities offers complete online degree programs or online courses by the time of initial outbreak of Covid-19 that took place in the first quarter of 2020. However, these universities have been maintaining LMSs to which lecture materials, time tables and other important information were uploaded on regular basis. Sudden global pandemic situation urged schools, universities and other educational institutions to abandon their academic activities which were basically conducted in traditional face-to-face mode, as precautions for controlling further spreading virus. With the realization of the fact that they would not be able to open their institutions in the foreseeable future, universities and other educational institutions shifted to online mode of teaching/learning. Within a short time period this transition took place while the universities were closed and without having adequate preparation and training for all the involving parties. During this changeover, the highly offended group was the learners.

Adopting to the online environment can be a challenging task for both instructors and learners alike (Jaques & Salmon, 2007; Kirkwood & Price, 2014). This challenge was intensified by several factors. Until early 2020, online teaching/learning is not popular in Sri Lankan universities, where almost all teaching/learning is conducted via traditional class room based mode. Given this is the situation, shifting to online platform took place within a short time period and both groups were expected to be adopted to the online environment rapidly. Above all, no group received adequate awareness or training in online teaching/learning methods. Online teaching differs from its counterpart in several ways (Beck, 2010). In online setting, instructors and learners are separated by distance or sometimes by time where teaching/learning takes place with the use of technology (Rosenberg, 2001; Rovai, 2003). Teaching is not a one size fits all approach especially in online context (Gillett-Swan, 2017; Orlando & Attard, 2016). Learners are different and these differences must be taken into consideration when designing courses and delivering

lectures (Lee et al., 2011). The world is increasingly digitalizing, thus new types of learners emerge who are more digitally competent than the previous generations due to their digital native status (Orlando & Attard, 2016). However, assuming that all learners are technologically capable and proficient to the same level, is misleading. Growing up around technology and having greater access to technology would make one more digitally capable may be incorrect since still there are individuals who may prefer non-technological modes of teaching (Gillett-Swan, 2017). Learners are different in terms of preference for technological mediums, varying levels of competence, proficiency and capacity with digital platforms. Technologically less competent and less proficient learners should not be at a disadvantageous place in the online space. Addressing these individual differences in their online courses is what the teaching staff is relatively unfamiliar with especially due to lack of prior online teaching experiences and training. Thus, adaptation and differentiation of individual courses that are deemed suitable for all learners as well as for different contexts of teaching via online was absolutely a challenging task. Moreover, the task becomes harder, since adaptation and differentiation largely depends on the types of technology in use at the time and also the course content being taught (Gillett-Swan, 2017). Teaching with technology requires additional factors to be considered in terms of teaching pedagogy and construction of learning experiences. Technological incorporation, learning enhancement and student engagement which are mutually and inextricable linked, are among the top of many such factors. Successful online education requires new methods of course designs and selection of technologies, compatible with varied student needs (Crawford-Ferre & Wiest, 2012; Osman, 2005). Being familiar with constantly changing technologies and incorporating appropriate technologies to create individually tailored teaching/learning approaches for each online learner with varied needs, no doubt, placed additional workload pressures on the teaching staff. Beyond training and development in online teaching, instructors need support such as access to adequate technologies (Crawford-Ferre & Wiest, 2012). It is reported that online courses take considerably more time than that of traditional courses, particularly the preparation time (Gabriel & Kaufield, 2008). This situation challenged the university authorities since instructors may demand additional support in the form of reduced workloads or provision of teaching assistants.

According to the majority's perspective, online classes are less interactive where interactivity is one of the key determinant of student satisfaction and performances in online settings (Bolliger & Martindale, 2004). For any learning environment, whether it is offline or online, collaboration among learners does have learning benefits (Tee & Karney, 2010). Interactivity with the teaching staff and interactivity among the peers are equally important. Encouragement of social interaction and collaborations with peers play an important role in any learning environment (Lee et al., 2011). In online environments, especially, interactions with peers is fundamental, as online students may feel isolated easily due to lack of social interactions among the students (Muilenburg & Berge, 2005). Further, students seem to be more dependent on each other as they may not be able to ask instructors questions and receive immediate feedback in asynchronous online classes, thus resulting greater need for interaction and collaboration (Beck, 2010). Lack of interactivity was mainly arisen not because of the unavailability of techniques or tools that help making interactions and collaborations with the participants of an online course, but because of the lack of knowledge of the availability of such tools and how to make use them. Instructors must be trained on how to build a new identity as well as

relationships with students, how to structure and facilitate high-quality discussions and use of right balance of both synchronous and asynchronous methods in these remote environments (Major, 2010). Students must also be trained on how to use the tools and technologies such as chat rooms, discussion forums, web cameras and microphones for effective collaborations (Balkin et al., 2005). Using plenty of collaborative learning tasks and supporting and facilitating interactions and group work within the online course help feeling a sense of learning community (Lee et al., 2011). To this end, the importance of facilitating and supporting social interaction and relationship development is important (Jaques & Salmon, 2007).

Learners as well as the instructors face numerous connectivity related challenges and issues. Learners need access to uninterrupted internet connections to get connected with the online course, with the instructors and among themselves. Recent statistics indicates that, internet penetration in Sri Lanka nearly stood at 47% by 2020 (World Bank, 2020). Extent to which the success or failure of an online course is largely driven by the fact that to what extent those who are participating the course has access to high speed and reliable supply of internet. Global internet speed statistics indicate that the internet speed of most of the South Asian countries including Sri Lanka, is at the lower end of the spectrum having an average of 5.4 Mbps (ICT Development Index, 2019). Apart from relatively low speed and low internet penetration rate, poor internet connectivity throughout the country made it difficult for both the learners and the instructors to continue their teaching/learning responsibilities in an effective manner. Especially, those who are living in rural areas of the country, were less likely to have access to high speed and reliable internet connection that is increasingly necessary for online courses. Some of the learners found it difficult to attend online classes regularly and to post assignments/tutorials on due dates due to connectivity issues. There are plenty of internet service providers in the country, however the cost of Sri Lankan internet is not affordable for majority people, comparing to the rest of the world (ICT Development Index, 2019). Due to high data consumption activities in the online space such as participation in live online sessions, watching and downloading videos and other lecture materials, it might be hard to continue their studies for the economically deprived students. Service providers lowered their charges by a considerable amount at the beginning of the outbreak, but only for a short time period.

Learners need to have access to reliable technological devices that make their presence in the online environment (Bolliger & Martindale, 2004). Universities confronted a significant challenge due to unavailability of internet enabled devices such as computers, tabs or smartphones among some of the university students. According to the latest statistics, one in five households owns either a desktop or a laptop computer (Census_and_Statistics_Report, 2019). That is, at least one computer is available in 22.3% of households in the country. In urban areas this percentage is high as 37.5% and low as 20% and 4.2% in rural areas and the estate sector respectively. Ensuring that all the university students have equal access to needed devices for continuing their education on online space is one of the biggest challenge faced by the Sri Lankan university system. Well before Covid-19 outbreak, taking hands with the state banks, Sri Lankan government introduced a loan scheme that provides financial support for the university students to purchase laptop computers. The government will be continuing this program with the aim of providing facilities for the university students in the face of Covid-19

pandemic. At individual level, some universities have donated smart phones to a group of economically marginalized students. Besides all these attempts, yet more works to be done in this regard for assuring that all university students equally equipped with the necessary resources.

Lack of access to electricity and unreliable electricity supply are another two significant challenges mainly faced by the learners. Although, Sri Lanka has achieved a national electrification rate of 99.6% by 2018, however this rate is relatively low in rural areas from where a significant number of university students are coming (World Bank, 2020). The country is currently struggling with an unreliable electricity supply over the years and a permanent solution is yet to be found. Frequent power cuts (with and without prior notifications), frequent power failures due to numerous reasons, sometimes island wide power breakdowns are quite common within the country. Unreliable power supply significantly threatens continuing education on online platforms. Students may miss live participating online classes conducted via zoom, Microsoft team or google meetings.

Conclusion

Entire world is on quarantine due to Covid-19 global pandemic and its effects can be seen in everywhere including the education system. The outbreak has made academic institutions across the globe to go from offline to online mode of teaching/learning. Online education is not popular in Sri Lankan context, where all most all universities were based on traditional face-to-face pedagogical approaches. The crisis made the universities to changeover their normal classroom based teaching to online teaching overnight. According to the World Health Organization and other medical experts, Covid-19 will stay with us for another two-three years' time. This means that, the academic institutions will have to continue their academic activities in the online space at least until the world would be back to normal. Therefore, investigating the challenges confronts with the implementation of online education in Sri Lankan universities is crucial at this moment for the quality enhancement of online teaching/learning in future endurances. The findings of the study revealed that the stakeholders such as the instructors and learners found difficulties in adopting to this technology driven pedagogical approach mainly due to lack of proper professional training. To enhance the quality of online teaching/learning in Sri Lankan universities, the responsible authorities should focus more on training the instructors, learners and the administrators. Further, the learners must be made aware and convinced that online classes could be as effective as offline classes once they are planned well. Secondly, a special attention should be given to improve the IT infrastructure, particularly in remote areas of the country. Ensuring that all university students have equal access to internet enabled devices like computers or smartphones is another crucial challenge to deal with. Online education should no longer be treated as an alternative to face-to-face classroom based teaching, but as a complementary.

References

- Aung, T. N., & Khaing, S. S. (2016). Challenges of implementing e-learning in developing countries: A review. *Advances in Intelligent Systems and Computing*, 405–411.

- Balkin, R. S., Buckner, D., Swartz, J., & Rao, S. (2005). Issues in classroom management in an interactive distance education course. *International Journal of Instructional Media*, 32(4), 363–372.
- Beck, V. . (2010). Comparing online and face-toface teaching and learning. *Journal on Excellence in College Teaching*, 21(3), 95–108.
- Bolliger, D. U., & Martindale, T. (2004). Key factors for determining student satisfaction in online courses. *International Journal on E-Learning*, 3(1), 61–67.
- Broadbent, J., & Poon, W. L. (2015). Self-regulated learning strategies & academic achievement in online higher education learning environments: A systematic review. *Internet and Higher Education*, 27, 1–13.
- Census_and_Statistics_Report. (2019). *Economics Statistics of Sri Lanka-2019*. Department of Census and Statistics, Ministry of Finance, Sri Lanka. [Retrieved from <http://www.statistics.gov.lk/Publication/Economic-Statistic-2020>]
- Crawford-Ferre, H. G., & Wiest, L. R. (2012). Effective Online Instruction in Higher Education. *Quarterly Review of Distance Education*, 13(1), 11–14.
- Dhawan, S. (2020). Online Learning: A Panacea in the Time of COVID-19 Crisis. *Journal of Educational Technology Systems*, 49(1), 5–22.
- Gabriel, M. A., & Kaufield, K. J. (2008). Reciprocal mentorship: An effective support for online instructors. *Mentoring and Tutoring: Partnership in Learning*, 16(3), 311–327.
- Garbett, C. (2011). Activity-based costing models for alternative modes of delivering on-line courses. *European Journal of Open, Distance and E-Learning*, 1, 1–14.
- Gillett-Swan, J. (2017). The Challenges of Online Learning: Supporting and Engaging the Isolated Learner. *Journal of Learning Design*, 10(1), 20–30.
- ICT Development Index. (2019). *The ICT Development Index- IDI*. International Telecommunication Union. [Retrieved from https://www.itu.int/en/ITU-D/Statistics/Documents/statistics/ITU_ICT_Development_Index.pdf]
- Jaques, D., & Salmon, G. (2007). *Learning in groups: A handbook for face-to-face and online environments*. Abingdon, UK: Routledge.
- Kirkwood, A., & Price, L. (2014). Technology-enhanced learning and teaching in higher education: what is “enhanced” and how do we know? A critical literature review. *Learning, Media and Technology*, 39(1), 6–36.
- Lee, S. J., Srinivasan, S., Trail, T., Lewis, D., & Lopez, S. (2011). Examining the relationship among student perception of support, course satisfaction, and learning outcomes in online learning. *Internet and Higher Education*, 14(3), 158–163.

- Major, C. H. (2010). Do virtual professors dream of electric students? University faculty experiences with online distance education. *Teacher College Record*, 112(8), 2154–2208.
- Muilenburg, L. Y., & Berge, Z. L. (2005). Students Barriers to Online Learning: A factor analytic study. *Distance Education*, 26(1), 29–48.
- Orlando, J., & Attard, C. (2016). Digital natives come of age: the reality of today's early career teachers using mobile devices to teach mathematics. *Mathematics Education Research Journal*, 28(1), 107–121.
- Osman, M. E. (2005). Students' reaction to WebCT: Implications for designing online learning environments. *International Journal of Instructional Media*, 32(4), 353–362.
- Rosenberg, M. J. (2001). *E-learning: Strategies for delivering knowledge in the digital age*. Taiwan: McGraw-Hill Int, Enterprises Inc.
- Rovai, A. P. (2003). A practical framework for evaluating online distance education programs. *The Internet and Higher Education*, 6(2), 109–124.
- Tee, M. Y., & Karney, D. (2010). Sharing and cultivating tacit knowledge in an online learning environment. *International Journal of Computer-Supported Collaborative Learning*, 5, 385–413.
- World Bank. (2020). *Access to internet/electricity (%population)-Sri Lanka*. [Retrieved from <https://data.worldbank.org/indicator/EG.ELC.ACCS.ZS?locations=LK>]

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