CHALLENGES AND OPPORTUNITIES OF E-LEARNING VIA ZOOM

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Abstract

UNESCO has recently suggested the implementation of online teaching and learning via new technology for the higher education sector due to the seriousness of the Covid-19 pandemic. The Open University of Sri Lanka (OUSL) which promotes ODL mode of teaching has also transferred the teaching and learning to the online mode. The lectures-day schools, oral presentations, supervision, consultations, counseling etc. are conducted via zoom. Therefore, the main purpose of this study is to investigate the challenges and opportunities of the e- learning via zoom faced by both students and teachers at OUSL. The Focus Group Discussions were conducted via zoom with thirty students covering all the streams such as Communication, Society and Culture, Politics and IR and Economics and all three levels (Level 3-5) of the BA in Social Sciences degree program (10 students from each level). Two students from each Study or Regional Center were also selected. Personal interviews were conducted with five teachers. The qualitative data were analyzed thematically. It was found that the common challenges for both these parties were: technical issues, unstable coverage, background noises, less face-to-face interactions, high charges of internet data etc. Non-availability of laptop or mobile phone or internet connection and less IT knowledge are specific issues of the students from outside Colombo and adult students. It was reported that delivering lectures etc. via zoom is time saving, user friendly and convenient for everyone during this crisis. It was also found that the university teachers are practicing innovative teaching and learning practices such as combing and using other social media and advance platforms like WhatsApp groups, Facebook groups, emails, and e-learn platform to share the zoom links and ppt presentations etc. and conduct Q and A sessions, classroom discussions etc. It was reported that, students were encouraged to be active in the e-classrooms by conducting group and individual activities/ exercise on problem-based learning, Q and A sessions etc. It was suggested that more affordable, convenient and data saving system, app and tools can be introduced to practice innovative teaching and learning via zoom.

1. INTRODUCTION

The Covid-19 outbreak has made a serious impact on socio-economic, cultural, political and educational sectors, locally and globally. This has a negative impact on the whole education system from primary education to higher education. In this context, UNESCO has suggested to implement online teaching and learning via new technology for the higher education sector due to the seriousness of the Covid-19 pandemic (UNESCO report on COVID-19 and higher education: Today and tomorrow, 2020).

According to UNICEF report in 2021, the Covid-19 pandemic has also made a serious negative impact on socio-economic, cultural, political, educational sectors in Sri Lanka. In this context, the government and private schools, universities and other education institutions also face some challenges with the traditional mode of education. Therefore, The Ministry of Education has introduced some alternative teaching and learning mechanisms through new technology. As a result, the circular no PS/GPA/33/2020 was issued by the ministry on the 29th of October 2020 to facilitate the students with alternative learning opportunities though online solutions. Therefore, the learn zoom facility has been given to the academics who are attached to the state universities to conduct the academic activities. The Telecommunications Regulatory Commission and University Grants Commission reached an agreement with all internet service providers in Sri Lanka to provide free access for university learning management systems and remote learning facilities through the Lanka Education and Research Network (LEARN).

In this context, The Open university of Sri Lanka (OUSL) which promotes ODL has also transferred teaching and learning to the fully online mode. The lectures-day schools, oral presentations, supervision, consultations, counselling etc. are conducted via zoom**.** Therefore, the Department of Social Studies which is under the Faculty of Humanities and Social Sciences at the OUSL has given the opportunity to all the students including the undergraduate students to submit their CAs and final assessments etc. to the e learn platform. Apart from that, other online platforms, zoom, emails etc. are used to interact with the student. All the day schools, oral presentations etc. were mainly conducted via zoom during the first and second waves of COVID-19. The Department of Social Studies has facilitated the students with online learning during the Covid-19 pandemic to do the academic activities without postponing. The department has introduced the guidelines for conducting the alternative assessments as well as for conducting zoom lectures in order to maintain the quality of teaching, learning and assessments. Due to these changes that have taken place in the mode of study, students have communicated to the respective teachers about their positive and negative concerns on online day school delivery.

In this context, the main issue investigated in this study is what are the challenges and opportunities in the e-learning via zoom faced by both students and teachers at the OUSL. In this context, the main purpose of this study was to investigate the challenges and opportunities of the e- learning via zoom faced by both students and teachers. The specific objectives are to identify the innovative teaching and learning practices in e-learning via zoom, and find out the alternative and optional online solutions for an effective e- learning and teaching.

2. LITERATURE REVIEW

2.1 E- learning

The term "e- learning" has been defined by various researchers and scholars in different ways. The Commonwealth of Learning has defined e-learning in 2015 highlighting the fact that e learning is basically based on the digital technology. Accordingly, "eLearning is an umbrella term that refers to the use of any digital device for teaching and learning, especially for delivery or accessing of content. Thus e-learning can take place without any reference to a network or connectivity. The digital device used by the learner to access materials needs to be connected to a digital network, either a local area network or to the Internet (or even to a cell phone network if a Tablet is used as a terminal or access device)."

Therefore, it is clear that e -learning is always facilitated by ICTs and digital technologies. Fernández et al (2011) note that there are four basic and essential characteristics of e-learning platforms: interactivity, flexibility, scalability and standardization or the capacity to use courses carried out by a third party. It's important to maintain these essential and important factors in the online platforms to facilitate both teachers and students in e- learning. According to Moore and Kearsley (2004), e-learning is a different from regular school or university education that requires a different course design, teaching, special forms of instructions as well as organizational and administrative arrangements and support.

E-learning has become more popular specially during COVID -19 pandemic as it is essential to identify alternative mechanisms to conduct the teaching and learning during this pandemic. In this context, both teaching and learning, assessments, tests etc. are conducted on different LMS platforms. Oliveira et al (2020) note that the e- learning has been identified as one of the best alternative methods of learning during a crisis like Covid-19 pandemic. Moreover, it was stated that different forms of free platforms such as Google Classroom, Edmodo, Zoom, FB messenger, Google meet, We Chat, Schoology, and Moodle have been used for e- learning purposes.

However, e- learning is also conducted as an alternative method of education at schools and universities in Sri Lanka. Karunarathne et al (2020) note that since the lectures and exams cannot be physically conducted due to the COVID-19 pandemic, some alternative methods are used to conduct the lectures and assessments on online platforms. Moreover, zoom, Microsoft Teams, Google meet are mainly used to conduct the online classes in many of the government and private higher educational institutions in Sri Lanka.

2.2 Challenges and opportunities in e- learning

It was reported that there are some challenges and opportunities in e-learning at the local and international levels. Naresh and Reddy (2015) note that e- learning provides more opportunities for teaching and learning in India. But there are some challenges such as lack of infrastructure, less trained instructors, lack of financial support, government policies and less student readiness. Oliveira et al (2020) also note that it is evident that both teachers and students in Philippine have positive attitudes in using the e-learning classrooms. Both these parties were benefited by e- learning during the COVID 19 pandemic, but one major problem is the lack of training of both teachers and students. The second major issue is the lack of resources like unstable internet connection, technical issues and lack of internet access.

Their knowledge regarding e-learning activities are above the average level. Further, they are willing to use e-learning to assist their learning activities. This indicates that the overall confidence level of the students regarding their abilities to some challenges and opportunities of e-learning in Sri Lanka are also investigated. Karunarathne et al (2020) note that the students and teachers have a positive perception of e-learning during COVID-19 and it's believed that e-learning provides them more benefits and alternative opportunities for learning. In other words, the majority agreed that e-learning is an effective and a flexible alternative learning and teaching method during COVID-19 pandemic. It was also found that the most of the students have some challenges in e-learning such as technical issues, lack of internet connectivity, higher changers, IT literacy, health issues like eye issues that limit the e-learning.

Rameez (2020) also notes that a lack of online teaching and learning skills among staff and students is a critical factor that affected the smooth functioning of teaching and learning process in many of the state universities in Sri Lanka during the Covid-19 pandemic. Based on the literature review, it's found that no research has been conducted specializing e-learning via zoom and its implications etc. in Sri Lanka though several researches have been conducted on e-learning. This study was conducted to fill in the gap in this research area.

2.3 Theoretical framework

The Technology Acceptance Theory (TAM) is the main theoretical framework for this study since this study investigates the challenges and opportunities of e-learning via zoom (Figure 1). This explains that how as Perceived Usefulness (PU) and Perceived Ease of Use (PEOU), assistance to adopt the innovation process and changing user's Attitude (A), Behavioral Intentions (BI) and Actual Computer Usage Behavior. The TAM also suggests that perceptions of usefulness and ease of use are mediated by some external variables including individual differences, system characteristics, social influences, and facilitating conditions (Malhotra and Gallwtta 2009).
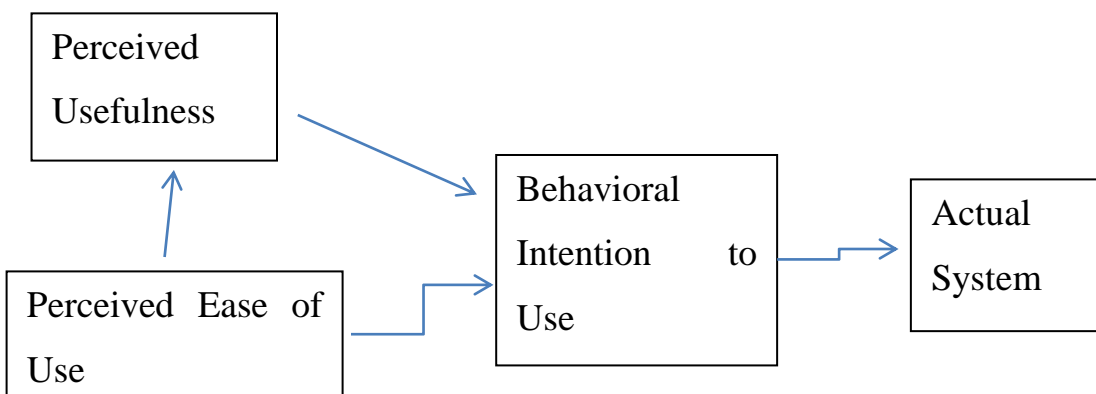
Figure 1: Technological Acceptation Model (TAM) (*Source: Davis et al. 1985*)

In this context, e- learning via learn zoom was introduced as an innovation in early March 2020 to both students and teachers in the higher education in Sri Lanka. Therefore, both students and teachers have adopted to this e-learning via zoom understanding the benefits and ease of use of this alternative learning solution during Covid-19 pandemic. Then the behavioral and attitudinal changes have occurred to use the learn zoom in order to conduct the online teaching and learning as explained in the TAM theory. After adopting this innovation by both teachers and students, it's found that there are challenges and opportunities in e- learning based on the socio-economic, cultural and educational characteristics of different individuals, system characteristics, facilitating conditions such as institutional support and ICT infrastructure etc.

3. RESEARCH METHOD

The samples were selected from the Department of Social Studies (SSD) of the Open University of Sri Lanka which is one of the state universities that promotes ODL to empower the heterogenous communities throughout the country. The Department of Social Studies is a multi-disciplinary department integrating disciplines of Economics, Politics and International Relations, Communication studies, Sociology and Youth Studies. Due to the COVID 19 pandemic situation, SSD also has to fully transfer the teaching and learning process from hybrid mode (traditional face to face and online interaction on e- learn LMS) to fully online mode (teaching and learning via zoom and assessments via e- learn LMS). Based on the comments and feedback given by both students and teachers, it's found that there are some opportunities and challenges in fully online learning.

The samples were selected from the Bachelor Degree in Arts in Social Sciences which is offered by the SSD. This programme has the highest number of students compared to the other programmes offered by SSD. This is a three-year multi-disciplinary degree programme which has four stream specializations such as Economics and Development studies, Society and Culture, Communication studies and Politics and International Studies offered by SSD since 1995. This programme which is offered in English medium has currently more than 2000 students.

This study used a qualitative approach to obtain data using Focused Group Discussion (FGD) and Interview method. FGD is a structured discussion which is used to obtain in-depth information (qualitative data-insight) from a group of people about a particular topic (Omar, 2018). Therefore, the Focus Group Discussions were conducted via zoom with thirty students covering all the streams: Communication, Society and Culture, Politics and IR and Economics and all three levels (level 3-5) in the BA degree programme (10 students from each level) to investigate the challenges and opportunities in e- learning. The purposive sampling was used to select the students. Two students from each study or regional center were randomly selected for these FGDs since the students have registered for the BA Degree in Social Sciences in 15 different centers though out the country: Colombo, Kandy, Batticaloa, Matara, Kurunegala, Jaffna, Anuradhapura, Rathnapura, Badulla, Vavuniya, Puttalam, Hatton, Kalutara, Manner and Ampara.

The personal interviews were conducted with five teachers representing all the streams to investigate the challenges and opportunities in e- learning via zoom. These teachers were selected not only from Colombo regional center, but also from some other regional centers (purposive sampling). The qualitative data were analyzed thematically.

4. RESULTS AND DISCUSSION

The Technology Acceptance Theory (TAM) as the main theoretical framework of this study helps to investigate the challenges and opportunities of e- learning via zoom as discussed in 2.3. It was found that delivering lectures etc. via zoom is time saving, user friendly and convenient during this pandemic. It was also found that the common challenges for both these parties were technical issues, ethical issues, unstable coverage, background noises, less face-to-face interactions, high charges of internet etc. irrespective of the stream specialization. Non-availability of laptop or mobile phone or internet connection and less IT knowledge, English language barrier were specific issues to the students in outside Colombo and adult students. The students in level 3 have lack of technical and IT knowledge compared to level 4 and 5 students. Some regional/ study centers arranged NAC centers to facilitate students to participate in zoom sessions when there was no lockdown during COVID-19 or any other unavoidable circumstances. It was also reported that the students who are having families and children are struggling to attend the zoom sessions from their homes with the internal issues/disturbances. Some teachers have also highlighted the same issue. Karunarathne et al (2020) also highlight that both students and teachers have positive attitudes towards the e- learning even though there are some issues connected to the e- learning and teaching due to the individual factors, technical issues, infrastructure issues etc.

Apart from the main purpose of this study, the specific objectives were also achieved. Therefore, it was also found that the university teachers are practicing some innovative teaching techniques and methods to conduct the zoom sessions interactively and effectively for the students. It was reported that, teachers use some specific features and facilities which are available on zoom to maintain the interaction and effectiveness of the e-learning via zoom. These strategies are: allowing students to ask administrative or subject specific questions on chat, screening ppts, sharing lecture notes, categorizing students into different groups/ classrooms on zoom and asking students to prepare for the group activities during the lecture, asking questions from the students during the lecture and also asking students to read out the content of the ppt to maintain the interactivity with the students. It was reported that, students are encouraged to be active in the e-classrooms by doing group and individual activities/ exercises on problem- based learning, Q and A sessions etc. Karunarathne et al (2020) also note that it's important to apply innovative teaching and learning techniques and methods to maintain the liveliness and interactivity of the online learning.

It was also found that the university teachers combine and use some other social media and advance platforms like WhatsApp groups, Facebook groups, emails, and e-learn platform to share the zoom links and ppt presentations etc. and conduct Q and A sessions, classroom discussions etc. It was also found that specially teachers from regional centers use and combine the social media platforms to interact with the students for these purposes due to less student numbers and less department representation at the region. Oliveira et al (2020) also suggest that Facebook and other social media can

be combined with formal e- learning to maintain the interaction with the students. Therefore, creating WhatsApp groups, creating FB page for the department can be facilitated and motivated students for their formal e-learning process. In other words, necessary information, updates etc. can be given on these social media platforms to the students.

But some teachers and students mentioned that Zoom is not user friendly or convenient compared to some other online platforms like Microsoft Teams and Google hangouts. These platforms provide more flexible features and options like white board facility and unlimited participation etc. while zoom has inflexible white board facility and limited participation- 500. However, while Microsoft Teams facility was given to some schools without any charge, the

higher education institutions are not entitled for this facility.

It was reported that, the teachers get support from Center for Educational Technology and Media -CETMe to upload the recorded zoom lectures to the digital archive and opencast. The students highlighted that, this helps students who miss the lectures due to various reasons to listen or watch these recorded lectures. But it was also reported that some lecturers do not upload the recorded lectures due to some ethical concerns. Some teachers highlighted that there are some issues connected to the misbehavior of students during the online lectures on zoom. It was also highlighted that there are issues connected to the payments of zoom day schools for teachers as the system itself generates the reports of day schools with technical errors sometimes.

5. CONCLUSIONS

According to the findings of the study, some challenges and opportunities are identified in e- learning via zoom. Therefore, it's suggested that more affordable, convenient and data saving system, apps, tools, features and other online platforms can be introduced to practice innovative teaching and learning rather than only using zoom. More online and social media platforms can be used and combined to promote innovation in learning and teaching. The learners prefer online learning mode rather than other mode of learning during this pandemic. Therefore, more importantly the quality of learning process should be improved and interactivity should be maintained in the e- learning.

In this context, the government or responsible authorities or university should develop the social and IT infrastructure facilities in each part of Sri Lanka to avoid technical issues, network coverage issues etc. There should be a mechanism to facilitate students to buy educational supportive tools such as

laptops, PC etc. for the e- learning. Rameez (2020) notes that it is important to improve the infrastructure facilities to continue the online education offered by the state universities. It is also a very important fact that e- learning helps higher education institutions to conduct the lectures, assessments and other activities without delaying the academic schedule.

The university or department should develop a proper mechanism to support students who have lack of IT and computer literacy and knowledge. Therefore, NAC centers also can expand their facilities and services for this. The SSD has recently suggested to establish a help desk with a voluntary student participation. The purpose of establishing this is to help students who are having lack of IT literacy and affordability issues. It's also important to introduce a common policy including the guidelines and instructions for conducting zoom day schools by the university to avoid technical, and ethical issues as well as the issues connected

to the computer literacy and knowledge and payments of online day schools.

Conducting a workshop or a training programme for both students and teachers by the department or faculty or IT division in the university is another alternative solution. Some workshops were recently conducted on zoom to train university staff by the IT division. This should be conducted for the students as well by the university to empower them with zoom usage, technology, benefits etc. in order to create a better learning environment.

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