

Students' Perceptions of Online Learning and Teaching during COVID-19 pandemic: An Empirical Study in Selected University in Sri Lanka

ABSTRACT

The dramatic transition to online pedagogy in education, as a consequence of COVID19 has shown several inequalities and challenges, as well as advantages in education. Evidently, the global higher education system in 2020 was profoundly changed by the epidemic of COVID-19 and the crisis has accelerated innovation in the education sector. Anyhow, whatever the situation, high academic standards are required for a university to produce high-quality teaching outputs and graduates, and it should be ensured all the time. With this intention, this study was conducted to assess the efficacy of online teaching and learning during the COVID-19 pandemic, focusing on the perceptions of undergraduate students from the Selected university.

A validated inline questionnaire was used among the 171 students from the selected university. The primary goal of this paper is to analyse how education system adopt to the online teaching and learning, identify the preferred mode of study by the students in between face to face interaction and online learning, and identify the advantages and challenges faced by the students in online learning. The paper also aims to make recommendations for improving online teaching and learning through the use of online. The findings of the study shows that, even though the students are satisfied with the existing online teaching and learning in selected university, they prefer face to face learning than the online learning. The study strongly recommends that, improving the quality of online education system as well as strive to solve the issues of students in terms of online learning is required to maintain the standard in education. The findings of the study shed light to government and non-government educational institutions, academics, and policymakers to enhance online education and maintain the education standard .

Keywords: online learning, students, university, perception, Sri Lanka

1. INTRODUCTION

The Coronavirus pandemic has catalyzed dramatic change, presenting numerous challenges to the global higher education. Universities throughout the world have either cancelled all campus events, such as conferences, seminars, sports, and other activities, or have quickly transitioned numerous courses and programmes from a physical to an online delivery method ^[1]. Meanwhile, this crisis can be viewed as an opportunity to rebuild long-standing educational structures and develop better and more up-to-date academic practices which are appropriate and adequate for today's learning young generation ^[2]. Due to the COVID-19 number of educators have been emphasized the educational institutions to move towards online mode. Online learning and teaching is made available by governments, education institutions, and schools with the less training and planning ^{[3][4]}. Instead of lecturing to the whole class in the face to face mode, teachers may make videos of their lectures or find videos made by others and share among their students through the online mode which is highly fruitful in improving the competencies of students. Despite all, the COVID-19 pandemic has affected students at all levels of education. Around the world, there were 1.7 billion students affected due to the closeout of schools and higher education institutions ^[5]. Many higher educational institutions across the world have either rescheduled or cancelled their educational events in order to mitigate the spread of the virus. On the other hand, these interventions have create greater economic, medical, and social and psychological consequences for both undergraduate and postgraduate students ^[6]. Hence, globally, educational institutions have been decided to create and implement the online learning environment as an innovative and more effective methods to resume the students' education activities.

Meantime, Sri Lanka has been critically challenged in several standpoints due to the COVID-19 outbreak. The health issues are eminent but the worst hit might be the already ailing economy of the country. Almost, all the sectors in Sri Lanka severely affected by Covid

19 pandemic situation. Particularly, in Sri Lanka, roles of university become more vital than the countries in the world since free education is a privilege to the students. In order to respond to the Covid 19 pandemic situation, fourteen state universities in Sri Lanka have been decided to introduce the online learning mode instead of face to face learning mode. Even if online education may be useful during Covid-19, it will not be able to substitute face-to-face instruction for developing country like Sri Lanka ^[7]. As, online learning mode is novel concept for Sri Lankan university students as their first time experiencing it. In Sri Lanka, both lecturers and students, especially students from rural areas are severely affected by poor internet connectivity and other facilities which are required for online learning. Further, it is possible to argue that, online learning mode highly contributes create the various mental health problems including fear, anxiety, nervousness, boredom, distress, depression, anger compared to face to face mode ^[8].

In considering above reasons, there is necessity to understand the students' perception about online learning mode. Therefore, researchers conducted this study to understand the students' perception on online education in selected university, which is operating in Sri Lanka. Hopefully understand the students' perceptions regarding online learning contributes to accelerate the quality of online education in Sri Lankan context as well as other countries.

2. Objectives of Paper

Specifically this paper attempts to achieve the following four objectives:

1. To analyses how selected university education system adapt to the online teaching and learning.
2. To identify the preferred mode of study by the students in between face to face interaction and online learning.
3. To identify the advantages and challenges faced by the students in online learning.

2. REVIEW OF LITERATURE

In response to the COVID-19 crisis, educational institutions have swiftly converted all academic activities online. As a result, educational institutions are using emergency remote teaching and virtual learning platforms as response to the COVID-19 issues^[9]. A study conducted by Sia and Adamu (2020) revealed that, COVID-19 also gives higher education institutions the chance to rebuild their educational systems and implement new programmes and assessments. Ratten (2020) revealed that, Universities have had to rethink social distancing and develop new learning, teaching, and engagement approaches^[10]. Similarly, another revealed that, in the methods of teaching, online learning should be used as an engaged, interactive, and communicative platform for rapid learning^[11]. Further Raja and Kallarakal (2020) suggested that various stakeholders such as the government and higher education institutions providers must play a critical role in creating intellectual human assets for the nation's development by offering flexible and cost-effective online learning facilities^[12]. It was also found that the students struggled with online learning due to issues such as adopting to the online environment, a lack of contact and motivation, and a lack of internet connections.^[13] Further, the success of the online form of teaching and learning has a substantial and positive interrelationship with technological assistance, infrastructure availability, faculty and students' perceptions^[14].

A study conducted by Joosten and Rachel Cusatis (2020) stated that students' satisfaction with online learning is influenced by online learning efficacy, online work skills, and socializing^[15]. Meantime, another study stated that universities must take more serious steps to make their courses more fascinating and creative for students who do want to complete their education online^[16].

Online learning adds significantly to increasing academic workloads, due to a lack of training in the use of the LMS and a lack of professional development associated with the pedagogy and practice of online teaching and learning at the tertiary level^[17]. Therefore, it is possible to increase the success of online learning by understanding the perception of students and effectively utilizing the technology availability.

3. THE SCENARIO OF SELECTED UNIVERSITY

Universities in Sri Lanka being asked to transfer their teaching to online. Educators were required to find solutions to continue the teaching including, using Moodle and other platforms, due to the fact that the instructions and guidelines required moving teaching online by Government. Within a limited days of receiving the instructions, the selected university began to explore all possible videoconferencing applications and channels such as google class room, WhatsApp, Skype, emails, Microsoft teams, and Zoom were used, in addition to the university's Moodle site.

COVID19 emerged unexpectedly, with little to no planning in place therefore, various challenges faced by the institution including, since there is no internet connection in many of the villages in the countryside areas where some students live, digital gaps among students and staff were unexpectedly exposed. The particular university also faced lots of challenges when it moves to the online teaching and delivery mode including; unavailability of computers, smartphones, and tablets for students to use in connecting to the online mode. Inadequate prior training for both students and lecturers on the online teaching and learning. Many students, especially first-year students, struggled with how to work efficiently with new technology, slower internet speed and inconsistent power supply as a result occasions of power-cuts during the attending the lectures, affecting both students and lecturers.

Even though, the selected university faced lots of challenges in shifting to the online teaching learning, it is accepted by all the staff and students, as it is a general problem to the whole state university in developing country. Nevertheless, staff and students at the university were ready to move to the online mode, which resulted in a variety of benefits. Increase the use of available resources. Moodle and other platforms that had been underutilised prior to COVID19 were highly and extensively used during this timeframe, which were at the university but had given less importance prior to COVID19 by both lecturers and students, proved to be incredibly valuable resources during this period. The university organised numerous training and workshop sessions for lecturers on different form of digital learning and teaching to familiarize the online teaching. Later on, the university teaching highly depend on the Zoom

platform, as it received reasonably positive experience of many educators as well as students. At present, university has completed more than three semesters, and there is no question that the online mode has proved to be a backbone for completing the semester in tough times. Further, understanding the effectiveness of online teaching and learning would help to understand the perception of students to and ensure the stranded of the education.

3. METHODOLOGY

This study depends on primary data. The data of this study were collected from the 171 students through online questionnaire. The questionnaire contained questions relating to demographic factors (e.g., gender, department and academic year), and online learning and teaching. The data collection took place between 16th March to 27th May, 2021. SPSS version 27.0 was used to export and analyse the data. Tables and charts were used to summarize the collected data which is analyzed through univariate analyze. Time horizon of the study was cross sectional as data collection was done at one point in time to answer the research questions.

4. RESULTS AND DISCUSSION

The data presentation and analysis are presented with frequency distribution and descriptive statistics.

4.1 Sample Profile

Descriptive statistical analysis was used to analyze the demographic factors of the study. The results are shown in Table1.

Table1 reflects the demographic characteristics of respondents. A total of 173 responses were received, from that two respondents were removed from the study due to incomplete responses. Among the total 171 respondents, the majority of respondents were female and majority of the participants belongs to first year.

Table 1: Summary of demographic information

Demographic Profile		Frequencies	Percentages (%)
Gender	Female	139	81.3
	Male	32	18.7
Year	1st Year	62	36.2
	2nd Year	21	12.3
	3rd Year	50	29.2
	4th Year	37	21.6

4.2 Satisfaction of online learning

The Figure 1 shows the response regarding the question: Are you satisfied with the existing online teaching delivery platforms?

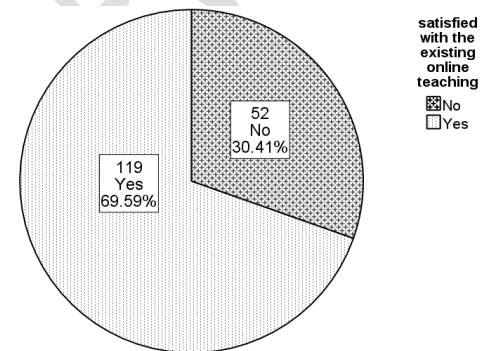


Figure1: Satisfaction of online learning

The given pie chart shows that around 69.59 percentage of the students were satisfied with the existing online teaching mode mean time it shows that around 30.41% of the students are not satisfied with the online teaching mode. The reason for the dissatisfaction of the students may be the unanticipated and sudden conversion of online teaching mode from face to face teaching mode.^[7]

4.3 Preferred teaching and learning method

Figure 2 reflects the students' perceptions towards the preferred teaching and learning method. Findings of the study shows that around 54.97% of the students prefer face to face teaching and the remaining 45.09% of the students prefer online learning. Hence, the findings clearly shows that more than half

percentage of the students in selected university still prefer face to face learning rather than online learning.

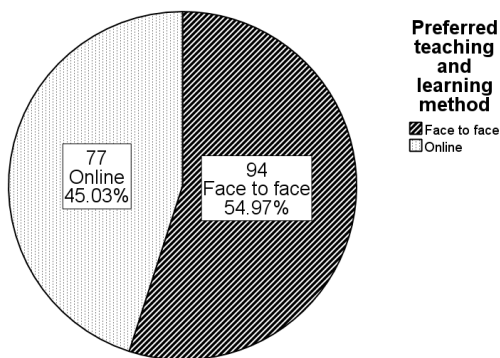


Figure2: Preferred teaching and learning method

The findings of the study suggest that, most of the students prefer face-to-face learning. The reason for that, students may compare their present experiences with prior face-to-face learning experiences. However, universities consider more on improving the students' satisfaction on online teaching by analyzing the root causes.

4.4 Perceived Advantages of online teaching and learning

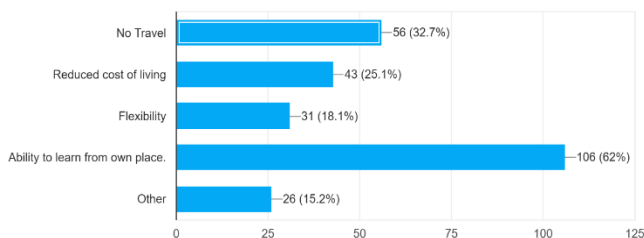


Figure3: Advantages of online teaching and learning

As per the student perception, online learning provides the opportunity to continue their education by staying in their homes which is contributes to reduce the cost of living as well as neglect the problem of home sick. It is noted that majority of the students of the selected university are from different parts of the country.

4.5 Challenges of online learning

Despite the advantages, students are confronting several problems due to the online learning and teaching such as poor internet connection, family distractions, lack of devices, poor internet connection and etc.

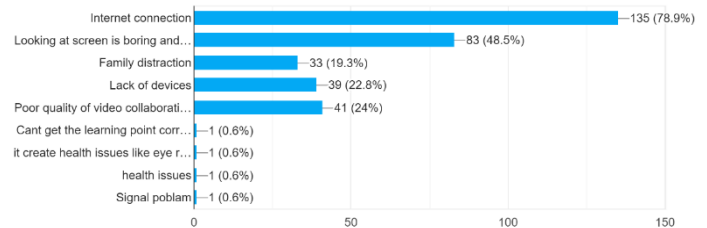


Figure4: Challenges of online teaching and learning

Poor internet connection and feel bore and stress due to looking at device screen continuously may be treated as the major problems in online learning and teaching for the selected university students Online learning and teaching may create the problem of family distraction for the students, especially for the students who are in large families ^[18]. The study of World Bank emphasize that most of the students are facing significant challenges in obtaining the online education due to the poor internet connection ^[19]. The same scenario is exist in selected university too, poor internet connection is a general problem faced by the majority of the students, especially students from the rural areas.

4.6 Accessing study material

As per Figure 5, majority of the students depend on study materials which is uploaded in form of Portable Document Format (PDF) and Power Point Slide (PPTs) by their respective lecturers. In addition to that, students use online classes and You Tube videos as the source getting notes for their study. Further, some students are utilized the e-books and educational web sites as the reference to improve their knowledge.

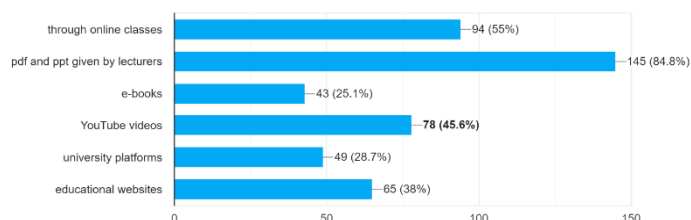


Figure 5: Way of getting study material

Notably, most of the students in selected university are rely on PDF and PPT given by the lecturers and online classes rather than e-books and e-books and educational sites. Hence, lecturers have the responsibility to ensure standard of study materials. Further, lecturers are in an immense necessity to adapt the innovative and interesting teaching methods to improve the quality of online teaching. Providing e-learning training to the lecturers will be contributed to increase the quality of online learning and teaching.

4.7 Perception of online teaching based on students' experiences.

Table 2: Statements

Statement	Mean	SD
I find it easy to engage in the online lesson	3.09	1.095
I feel able to ask the questions and doubts, I had	3.58	1.144
The teachers are well prepared for the teaching sessions	3.23	1.190
I feel online assessment methods are flexible and easy to access	3.16	1.042

Students provided high score (mean value 3.58) to the statement "they able to ask the questions and doubts during the lecture hours in online learning. Next to that, the perception of students regarding the teachers preparation for the teaching sessions also shows relatively high (mean value 3.23). The empirical of the study reveal that, students in selected university are with the online lectures conducted by the respective lecturers during Covid 19 pandemic situation.

6. CONCLUSIONS AND RECOMMENDATION

The emergence of the Covid-19 pandemic has placed the world of higher education under tremendous pressure. At the same time, this condition has exposed the number of opportunity to the existing higher education system. The results of this survey, in light of the perception of students online learning and teaching in students perspective and the findings reflects how the selected university education system has reacted to Covid-19 disruptions. As per the findings of the study, selected university managed the pandemic situation in a good manner. However, based on the certain findings of this phenomenon, the following recommendations may serve to better online education delivery of the university in future. Recommendations of the study are as follows:

- Universities need to equip and upgrade their technology infrastructure for online learning
- Universities focus more on shape and reshaping the attitudes and mindset of students toward online learning
- Lecturers need to use video and speak to increase the student engagement in online learning
- Lecturers need to pay great attention on developing the online teaching competencies and attitudes in order foster the effective online teaching behaviors.
- Universities need to provide the e-learning and teaching training to the students as well as lecturers.
- Lecturers need to enhance the reading habit of students rather than depending on the PPT and PDF notes.
- Lecturers need to get the feedback from the students regarding online teaching.
- Develop and implement innovative and interesting teaching methods to create more interactive sessions through online.
- Select the more appropriate lecture time as majority of the students facing the problem of poor interact connection to increase their

accessibility to the lectures (eg., do not conduct lecture at nights).

The findings shows that students in selected university prefer face to face learning mode than online, it is clear that shifting some of the programmed courses online is the most efficient and suitable short-term solution. However, in the long run, this method should rethink about better methods of assessing and grading to ensure the standard of education. Online learning can be effective^[20]. The concept of mixed learning or flipped classrooms has been promoted and researched as highly effective teaching models.^[10]

Indeed, It cannot ignore the fact that not all students have equal access to technology, both in terms of hardware and digital competency. The digital gap is still a significant problem all over the world, particularly in developing country like Sri Lanka. Despite the abruptness of the move, staff and students at the Trincomalee campus were able to adapt to the online mode. The findings shows that ability to learn from own pace and no travel requirement are some of the major advantages of this transition. It is recommended that, in order to enhance online education in general, to provide online learning tools, and to provide students with electronic technology to access the internet provide affordable or even free broadband packages, and increase internet speed are few ideal ways to ensure the effectiveness of online teaching and learning.

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