COVID-19 and First Year Saint Mary's University Students' Perception and Satisfaction of Online Learning: A Phenomenological FGD Study

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Abstract

COVID-19 collapsed the entire education system of the world. Ethiopia was no exception. Ethiopian universities, which are hubs of social gatherings and interactions, are fertile grounds for the spread of the virus; so they were closed like other institutions. The virus affected and continues to affect every part of human life in an unprecedented manner. Thus, university students, instructors and administrators became frustrated during the state of emergency at national level. In the midst of such frustration and fear, Saint Mary's university changed its teaching learning process to online system by introducing Learning Management System (LMS). It gave face to face and video assisted training to instructors and students, respectively on how to use the platform. It was not an easy task. Ethiopia does not have well developed IT, and the quality of internet connection is poor. It is costly for students to pursue their study online. Besides, both instructors and students were not familiar to online platform. Despite the above problems, Saint Mary's succeeded in handling the online teaching learning process for a semester. However, online learning has its own negative impact on the quality of education, mode of assessment, students' achievement, level of understanding and feelings. Hence, this study was conducted to know the perception and satisfaction of Saint Mary's students' online learning. The focus of the study was to know the shared understanding of the group of students who learnt for a semester online, so the researcher used phenomenology design. The study used Focus Group Discussion (FGD) to gather data, organizing four groups of Accounting and Management students. In a group there were ten individuals. The discussion for each group took one and half hours. The discussion guide had thirteen open ended questions, focusing on students' technology access and competency, satisfaction and quality of online courses and the impact of online learning on students' emotional reactions and CGPA. Data were gathered through audio-tape and note taking methods. The findings were presented using narrative forms after identifying themes and categories. Respondents reported that they had access to smart phones and in few cases to laptops. And it was not difficult to learn through LMS. Students felt that the materials maintained by and large reasonable quality. Of course, some of the modules were bulky and the PPP slides were simply read from the modules. Despite these gaps, they were satisfied by the support of instructors and IT technicians. As expected, the unstable internet connection was an obstacle in uploading and down loading digital sources. Besides, video recording and audio recording teaching materials were costly to download for students. Participants also pointed out that learning through LMS was frustrating, and it affected their grade negatively. Pertinent suggestions were given in the form of implications.

Keywords: Learning Management System, online courses, quality of online courses, students' satisfaction

Background of Study

The first COVID-19 case was identified and reported at Wuhan city in China on December 31, 2019 (Srivastava et.al, 2019). At that time, the world did not give to it serious attention. Since then, it has spread across almost all countries exponentially, and people in some countries could not bury their loved ones due to fear of contracting the disease. The World Health Organization (WHO) announced on March 11, 2020 that the virus was pandemic. After the announcement, many countries declared strict lockdown to protect their citizens from the contagious disease. The disease, however, has been spreading like wildfire. It has been the cause for the deaths of 4.4 million people across the world till this month.

The first case was introduced to Ethiopia by a Japanese educationalist that came to help Ethiopian schools. It was known on March 7, 2019, and some Ethiopians, in televised news, made known that they quarantined themselves since they contracted the virus. Ethiopia, after five months, declared the state of emergency as of August 2020. All educational institutions were closed.

Across the world, UNESCO (2020a) pointed out that close to 429 universities were shut down and started to teach online. Developed countries easily shifted the teaching learning system to electronic technology since they have the infrastructure and culture of e-learning. Unfortunately, most developing countries do not have the required technology for online education, so they could not continue the teaching learning system. All private and public universities in Ethiopia were closed, but they did not transform themselves into e-learning. In Sub-Saharan countries, there are, of course, exceptions in few cases such as Uganda, Tanzania and Kenya which made use of ICT to offer online teaching. In Ethiopia, online learning is not used for teaching purpose. Due to COVID-19, Saint Mary's university shifted the teaching learning process into online system for a semester.

Online education has its own distinct features. E-learning requires student- centered approach (Debattista, 2018). Course contents should be organized in a dynamic and engaging manner, having varied types of assignments, quizzes, and projects (Oh et al., 2019; Ashwin & McVitty, 2015). The course design should be appealing taking into account students' competence and comprehension level (Oh et al., 2019; Ricart et al., 2020). Instructors should communicate with their students to address their queries using discussion board. They are also expected to give immediate feedback (Ellis and Goodyear, 2010). Students should be skilled at using digital tools, interacting in a collaborative manner with both instructors and other students, and they should get appropriate training on how to use the online system (Adams Becker et al., 2017; Goh et al., 2017). Online learning should be user friendly. Installation and operation of online learning applications should be simple to use, and the role of technicians is paramount in making so (Goh et al., 2017; Ching-Ter et al., 2017; Kimathi & Zhang, 2019).

In a country where there is poor internet connection, where there is no experience on the part of instructors in preparing online courses, where there is no first hand experience in pursuing one's

study online on the part of students, where there is no well-prepared ICT technicians to support students and instructors, it is difficult to offer quality online learning which can satisfy students. Hence, lack of readiness and experience of students and instructors to use LMS to learn and teach along the unstable internet connection are the driving factors to conduct this qualitative study.

Statement of the Problem

Universities which are hubs of social gatherings and interactions are fertile grounds for the spread of the virus, so they were closed like other institutions. Students and academic staff at first assumed that universities would resume classes soon. As time went on, everybody was horrified due to the highly infectious nature of the virus. It affected and continues to affect every part of human life in an unprecedented manner. Thus, university students, instructors and administrators became helpless at national level.

In the midst of such frustration and fear, Saint Mary's university changed its teaching learning process to online system by introducing Learning Management System (LMS). It gave face to face and video assisted training to instructors and students, respectively on how to use the platform. It was not an easy task. Ethiopia does not have well developed IT, and the quality of internet connection is poor. Besides, both instructors and students were not familiar to online platform. In fact, Wondwosen (2021, p.2) assessed the magnitude of the problems as follows: "Poor internet access, cost, availability of computers and related technology, little previous preparation, and students' and teachers' twin problems of limited technical knowhow and negative attitudes towards the use of information and communication technology stood out as the most prevalent problems both for public and private HEIs."

Despite the above problems, Saint Mary's succeeded in handling the online teaching learning process for a semester. However, online learning has its own negative impact on the quality of education, mode of assessment, students' achievement, level of understanding and feelings. Hence, the following research questions guided this study:

1. Did students have access to smart phones, the Internet and computer at home? If they did not have, how did they manage their study?
2. Which forms of online LMS lectures were dominant (slides, video recording, audio recording, modules, written communication)?
3. Were students satisfied by the quality of online audio recording, video recording, PPP slides and attached modules or materials?
4. Were students satisfied with the support of instructors, technical or IT services, quality of Internet connection and websites?
5. Was the online teaching learning process given during the first semester easy or difficult, compared to the face to face method?
6. How did the online teaching learning process affect students' CGPA?

7. What kind of emotional reactions did students have to LMS classes (joyful, frustrated or hopeful)?

General Objective

The purpose of the study is to understand students' perception about the quality and satisfaction of LMS learning.

Specific Objectives

The specific objectives of the study are:

1. To know whether students had access to technology while attending e-learning;
2. To know the type of online lectures they received from their instructors;
3. To know if they were satisfied with the online courses;
4. To know if they were satisfied with the support of instructors and technicians;
5. To know if online courses were difficult or simple compared to conventional learning;
6. To know if the online teaching affected their CGPA either positively or negatively, and
7. To know their emotional reactions that they had to LMS classes.

Significance of the Study

Learning and teaching through LMS is a new experience to Saint Mary's university. It helped both the university and its students greatly in continuing 2019 classes without interruption. Studying using the online system of 2019 could help to transfer the strengths and weaknesses of the portal system to other new entrants. The University can also learn lessons on how to use online system effectively in the future. It can also shade light to new entrants on how to study under challenging circumstances.

Ethiopian education system has severe quality problem. LMS system which is a new experience to Saint Mary's can supplement the face to face teaching learning education and fill the gaps of poor quality education by uploading different teaching materials.

It can also initiate Ethiopian higher learning institutions to work in collaboration with Ethiopian Telecommunication Authority in order to make private higher institutions technology friendly. For instance, Ethiopian Telecommunication Authority can let private universities to use the Internet freely for online teaching learning purpose. Doing so can boost the quality of Ethiopian private higher education system.

Scope of the Study

The study was delimited to Saint Mary's university Business Faculty first year students. The students learnt online for a semester. Through FGD, attempt was made to understand the

dedications, aspirations, frustrations, helplessness, expectations and group dynamics of the participants during the online learning, focusing on Accounting and Management students.

Limitations

This FGD showed a range of views and opinions of selected participants who took part in the discussion. The findings could not be generalized to all Saint Mary's freshman students. Fellow group members also affected participants' views and opinions which the moderator observed during discussion. Some participants did not express their own views and opinions independently. They simply listened to their friends' views and opinions and expressed as their own; therefore, the findings should be read with cautions.

The researcher used only qualitative method while collecting and analyzing data. It would have been interesting to use mixed method, but due to the new nature of the topic, valid and reliable tools which are suitable to measure Ethiopian context have not yet been well developed. Hence, the researcher was forced to be confined to the use of qualitative method.

Literature review

History and Definition of LMS

Learning Management System (LMS) came into existence in 1960 at the University of Illinois. It has been used for online education for the last 14 years. Higher education students' benefit from the information era greatly since the web helps them to construct knowledge by themselves. LMS refers to a web-based software program which enables to carry out the teaching learning process either synchronously (happening at the same time) or asynchronously. It allows higher learning institutions to plan, implement and deliver the teaching learning process without restricting students and instructors in time and space. According to Ellis and Ryan (2009) "A Learning Management System is a software application for the administration, documentation, tracking, reporting and delivering by e-learning education courses or training programs."

Students' Satisfaction and Quality of LMS

Scholars argue that student satisfaction is a critical factor in determining the success or failure of online learning (Edwards and Waters 1982). Student satisfaction is a complex factor which requires quality educational environment in the areas of course design and structure, instructors and technicians support, student interaction and collaboration, technology competency, internet access and student autonomy (Macnish et al. 2003; Bolliger 2004; Moore 1989).

Parks, et al. (2013, p.103) explains student satisfaction in an elaborated manner as follows:

> Student Satisfaction is a form that someone acquires performance experience (or results) that meets his expectations, which includes; 1) service wait time, 2) service speed and accuracy, 3) accuracy in keeping appointments, 4) hospitality and courtesy of leaders, lecturers, and staff in behaving and speaking, 5) knowledge of lecturers and employees in giving service, 6) procedures in service and adjustment of services, 7) ease of contact of leaders, lecturers, and staff, 8) comfortable, clean service place for students, 9) creating smooth service, 10) service hospitality influencing student satisfaction.

In relation to online learning, Kumar, Saxena and Baber (2021, p.4) summarized the essential features, identified by different scholars which are assumed to bring about student satisfaction as follows:

> The key factors of enhancing e-learning are Multimedia (Liaw, 2008; Liaw & Huang, 2013), learning content and website content (Uppal, Ali, & Gulliver, 2018), interaction (Bolliger, 2004) along with the variables of SERVQUAL model viz., assurance, responsiveness, tangibility (Saxena, Baber, & Kumar, 2020; Udo et al., 2011; Uppal et al., 2018). Also, to ensure a successful e-learning student experience, the learning content should be well designed, offering compatible technology with a range of learning management systems (Gudanescu, 2010; Koller, Harvey, & Magnotta, 2008). The primary focus of such efforts is to develop a sense of engagement among the learners by interacting with the course content in a meaningful way to understand the course structure.

Research Design and Methodology

Research Design and Approach

Since the focus of the study was to know the shared understanding of the group of students who learnt for a semester online, the study used phenomenology design. According to Creswell and Creswell (2018), the purpose of qualitative research is to understand meanings that groups and individuals have regarding an issue. Therefore, qualitative method helped me to understand the problem from students' perspectives because the method is appropriate to gain understanding regarding students' attitudes and motivation to learn through LMS, concerns and emotional reactions that they had towards LMS learning. Hence, phenomenology which is one of the components of qualitative designs was used. Phenomenological research examines directly at an individual's or group's interpretation of his/her or their experiences. Phenomenological research is the "study of everyday lived experiences and the meanings that people construct from them" (McClelland, 1997, p. 108). Since the focus of the study is to understand the shared understanding of a semester's online learning experiences of students, I made use of Phenomenological design.

Instrument of the Study

The study used Focus Group Discussion (FGD) to gather data. FGD functions on the assumption that "the whole is greater than the sum of its parts" (Kleiber, 2004, p.91). According to Kleiber, it moves beyond the individual since "the method depends on the interaction of the group to stimulate participants to think beyond their own private thoughts to articulate their opinions." (2004, p.91) FGD brings together 7 to 12 people for discussion, taking an hour to one and half-hours time for discussion. As to the number of FGD group, there is no agreed upon figure. A researcher can form groups until information saturation occurs (n.a.,2012). Besides, to decide the number of FGD group, other factors such as time, talent, money, complexity of the study and complexity of analysis should be taken into account (Ibid). After considering the above factors, this study organized four groups of Accounting and Management students. In a group there were ten individuals. The discussion for each group took one and half hours.

I was the moderator for the discussion. After establishing rapport with discussants, I informed the following ground rules of the discussion: every member should forward his/her opinions freely, and everyone's voice was equally important, so participants should be neither passive nor dominant during discussion.

The discussion guide had thirteen open ended questions, focusing **on general reaction towards the state of emergency and LMS learning** (1. How did you feel when the government declared the state of emergency for COVID-19 as of Aug. 2020? 2. How did you react at the beginning to the online LMS program of Saint Mary's? 3. Did you expect such kind of a solution?), **access to technology and skills of using technology** (4. At that time, did you have access to smart phones, the Internet and computer at home? If you did not have, how did you manage your study? 5. During the lockdown, did you have the skills of using LMS and communication platforms? If you did not have, how did you overcome the problems?), **type of online lecture and their qualities** (6. Which forms of online LMS lectures were dominant (video recording, audio recording, slides, modules, written communication …)? 7. Did they have the required quality? 8. Were you satisfied by the online recoding, video recording, slides and attached modules or materials? Why?), **students' satisfaction** (9. Were you satisfied with the support of instructors, technical or IT services, Internet connection quality and websites?), **impact of LMS on CGDP and emotional reactions of students to LMS platform** (10. Was the online teaching learning process easy or difficult, compared to the face-to-face method? Why? 11. How did it affect your CGPA? 12. While you were attending LMS classes, were you joyful, frustrated or hopeful?), **and positive outcomes of COVID-19** (13. What were the positive sides of the shut down if there were positive outcomes, at all?).

Sampling Technique

First year students from Accounting and Management departments were recruited using purposive sampling technique. Two groups from each department were taken, making the total discussants

four groups of ten participants. During selection, both males and females and two departments were incorporated in the study proportionally with the assumption that both males and females and different departments' voices should be represented to increase the transferability of the data to both sexes and departments.

Participants

Participants selected for FGD should have common characteristics (Kleiber, 2004). Unfortunately, the virus got widespread after the freshman students attended classes for few weeks. The students did not know one another very well. They had not developed the culture of university learning. The online platform was totally a new experience for them, shifting their study from teacher dominated classroom to online learning where they could not ask explanation on unclear and vague concepts like that of conventional learning. Thus, the burden was too serious and the situation was frustrating for them.

Method of Data Analysis

Data were gathered through audio-tape and note taking methods. The audio-taped information was transcribed by me. Then, I read the transcribed data over and over to categorize and extract common concepts. The theme-based note taken during FGD helped me to identify categories.

When I read the transcribed information, it enabled me to understand the dedications, aspirations, frustrations, helplessness, expectations and group dynamics of the participants. I also realized that respondents were repeating ideas which allowed me to create themes in line with my research questions.

I used number code for group identification saying FGDG1, FGDG2, FGDG3 and FGDG4. I used letters A1, B1, C1…G1; A2, B2, C2…G2; A3, B3, C3…G3; A4, B4, C4…G4 for the four group participants to identify common responses. After making data reduction, analysis and synthesis were organized according to the sequence of raised questions which helped me to understand recurrent responses and identify categories and sub-categories within and across groups. Finally, shared ideas of each group were presented for discussion in the form of summary.

Findings of the Study

The findings of the study are presented here under with six identified major headings. These are reaction to state of emergency and LMS learning, technology access and competency, type of online materials and their quality, students' satisfaction of IT services and online sources, MLS versus face-to-face learning and achievement, students' emotional reactions and positive outcomes of COVID-19.

Reactions to State of Emergency and Online Learning

The Ethiopian government declared the state of emergency on August 19, 2020 to contain the spread of the deadly disease. Students reacted to the state of emergency as follows:

> When the government declared the state of emergency, we were shocked and frustrated because during that time none of us believed in the existence of COVID-19. We were hearing a lot on how much seriously people were suffering from it, but we thought that it was simply exaggerated information, not a threat to us. In addition, many of us thought that we could not be affected by viruses such as Ebola which affected other countries but not Ethiopia. During the declaration, we were careless. Furthermore, we were disappointed when the government declared lockdown because at that time we were just starting school after long period of boring break time. (FGDG1)

The other two group discussants shared their views below:

> When the government announced the state of emergency, we were very shocked, confused and also didn't know what to do as it was sudden and unexpected. Knowing that there was no medicine to cure it and that it was transmissible made us very worried. Because of this, lots of worrying ideas crossed our minds such as what is going to happen to us, our family and friends? We just felt it was like the end of the world. (FGDG3)

> All of us were scared, especially after hearing and watching on TV what was going on in other countries like the US and Italy. Some of us even lost hope about our study, feeling that it would be closed for a year or two. In fact, most people used to tell us that there would not be any chance of resuming our study. (FGDG2)

The last group had slightly different views about the state of emergency: "Some of us felt happy when the state of emergency was declared for COVID- 19, assuming that the spread of the disease might be stopped, but the rest of us were disappointed, feeling that the shutdown could bring on us stress." (FGDG4)

With regards to LMS learning, almost all groups were happy, and they reported that they did not expect such kind of quick and practical solution. For instance, one of the groups said that, "We were happy. Actually, we didn't expect our university would come up with such a solution. The majority of us were expecting a modified telegram learning system since many schools were using telegram. We were also thinking of Google classroom, but none of us thought it would be LMS." (FGDG3). Other participants also expressed their appreciation: "When the LMS began, we were

very surprised and excited. We did not expect this because it was very soon, almost within weeks or months that the university brought the platform into reality which showed us how responsible and caring our institution was for its students." (FGDG1)

Students' Technology Access and Competency

Most students were assumed to come from middle class parents, so students had access to smart phones. FGDG2 members claimed that "All of us had access to smart phones if not computers. Some of us had access to WiFi network at homes; others used mobile data connection and the rest of us an internet cafe." The ones who used the internet cafe stated that it was terrifying to leave their homes during the pandemic. FGDG3 participants also shared their experience like this: "All of us had smart phones but only few of us had laptops. The internet connection was unstable for some of us. In some areas, it was difficult to get internet access. So, we tried to overcome this problem by going to places that had good internet connection."

Initially, all of the students did not have the skill of using LMS. After watching the video sent by Saint Mary's that explained how to use LMS, students reported that it was easy to upload and down load digital materials. For instance, according to a group, "The use of LMS technology was not difficult to us. We managed to use it quickly by watching the video of Saint Mary's and exchanging information with friends on how to use it." (FGDG2). FGDG1 members strengthened the above assertion saying that "LMS was a new experience for all of us, but there was a video that was sent by the university on how to use the LMS. The video was very helpful to us, and it gave us insights on how to use the LMS." They also added that they used to ask one another when they faced problems.

Type of Online Materials and their Quality

Scholars state that quality online materials can lead to learning effectiveness and satisfaction. Sun et al. (2008) said that online course quality is an essential factor in student satisfaction. Similarly, Zhao (2003) argued that course quality affects students' satisfaction. McGorry (2003) claimed that student satisfaction results from quality online education.

Accordingly, respondents were asked about the type and quality of teaching materials. Discussants made clear that the University used to upload video recording, audio recording, modules, PPP slides, etc. but students had their own choice due to cost and internet access. For instance, members of FGDG2 said that, "We used PPP slides, modules and written communication which were the most dominant materials for us to study. Instructors used to upload us video recording and audio recording, but they were expensive for us to down load. We restricted ourselves to the use of modules, written communication and slides." FGDG4 members said that, "Most of the LMS lectures were PPP slides. There were also video recording and audio recording which were

expensive for us to download. Most of the materials had the required quality and we were satisfied." Another group had mixed feelings regarding the quality of online materials and made the following assessment:

> The PPP slide lectures were dominant. Instructors provided us audio and video recording materials. Some of the recordings were not useful because the audio recordings were just read from the modules which we could have done at home. So, some of the recorded materials didn't meet the required quality. As to the modules, some of them were bulky. Others prepared attractive and precise notes that motivated us to read. (FGDG1)

All in all, most students used modules and PPP effectively. However, they disapproved the bulky nature of the modules. Online modules need care while organizing. The course structures should be motivating and engaging. Audio and video recordings were costly to most students. Thus, they refrained from using them despite their usefulness which shows that online learning would not be feasible in Ethiopia unless the Ethiopian government allows higher education students to use the internet freely.

Satisfaction of Students

Student satisfaction refers to feelings of happiness of students, as a result of meeting their expectations, when they evaluate their LMS educational experiences and outcomes.

> All of us were satisfied with the technical assistance and IT services that were given to us by technicians. We all believed that the IT technical assistance teams were helping us whenever we were challenged by the system. But there was no total agreement on the support of instructors. Some of us felt that the role of instructors was good enough in supporting us, but others argued that the support of instructors was not good enough.

> We were, however, dissatisfied by the internet connection quality and the University's website server capacity. Our country does not have the desired quality of internet connection, and it affected our online teaching learning system adversely. (FGDG1)

On the other hand, members of FGDG2 had contrasting views with FGDG1 respondents concerning technicians and instructors' support: "IT services given by technicians didn't help us that much because we used to submit assignments using email and telegram. But the support of the instructors was great. We all agreed that although the website was in most cases down, the instructors supported us extraordinarily."

Nevertheless, they held similar views regarding poor internet connection: "We all agreed that the internet connection was poor. Most of us were not happy with some features of the website. Submitting assignments on the website was difficult and sometimes even impossible." (FGDG2)

FGDG3 participants supported the above assertion: "Almost all students in our group agreed that we were satisfied by the support of the instructors and IT technicians although there were problems at first. The internet connection had problems. We faced lots of problems when we tried to use LMS because of poor internet connection."

Finally, FGDG4 participants reported that, "The technical services were good but because of unstable internet connection, it didn't allow us to use the service effectively. The poor internet connection had an adverse effect on our learning system. We weren't able to get the learning materials on time and we used to submit assignments late. Some instructors didn't understand this problem."

LMS versus Face-to-Face Learning and Achievement

All group participants answered unanimously that learning through LMS was challenging, compared to face-to-face learning. This was so partly because it was difficult to use the discussion board for interaction purposes such as chat and discussion forum due to cost and poor internet connection. The virtual system was used simply to distribute learning materials to students and receive assignments from them. Thus, the three group participants pointed out that it affected their CGPA negatively.

> Compared to face-to-face learning, the online teaching learning process was demanding. We all agreed on the difficulty of the online teaching learning process. It was tough because we could not get personalized guidance for our queries. The other thing was that we were demotivated to learn. Since COVID-19 is a transmittable disease, we were not motivated to learn. Due to the above problems the online platform affected our grades negatively. (FGDG4)

The other group members also had a similar assessment of online learning and achievement. "We all agreed that it was difficult because it lacked face to face interaction with our instructors, and it took us time to get used to it. It affected our CGPA badly because we achieved low grade." (FGDG2). FGDG3 participants said that, "For us the process of LMS learning was very difficult. We used to send assignments carelessly thinking that the results might not be counted. But all instructors marked the assignments. So, it affected our grades seriously."

FGDG1 participants explained about online learning and achievement differently which reflects the reality on the ground since the University used both face to face and online teaching during the first semester:

> LMS didn't make us understand the topics and concepts clearly, and it did not give us the chance to ask our lecturers when something was unclear. If it had been face to face, we could have asked our instructors for clarification. Thanks to our University, LMS didn't have any negative impact on our academic achievement because after we started face to face learning, our lecturers revised the whole chapters of the courses for a month before we sat for examinations. Instead of affecting our performance, LMS helped us to score better grades.

Students' Emotional Reactions and Positive Outcomes of COVID-19

Students reacted to the virus negatively. They said that they were frustrated. Participants put forward their feelings as follows:

> While attending LMS classes all of us were frustrated. The frustration was caused by so many factors. The whole situation was grim due to COVID-19. Secondly, we did not think that our University would reopen. The assignments were too many for us to do which had their own negative psychological impact on us. Besides, there was the need to submit the assignments on due date. The poor internet connection was another problem. Due to the above reasons, we were frustrated. (FGDG3)

Other group participants shared the above views: "For most of us it was frustrating. We had to submit assignments on due date. The server was highly congested due to the large number of users. When we tried to send assignments, it was difficult." The remaining participants remarked similarly.

Nevertheless, the shutdown brought some positive outcomes. It helped them to read a lot and to have close contact with their family.

> Negative things sometimes bring to us unexpected positive outcomes. We all agreed that we experienced positive things during the shutdown. Some of the positive things that we got included the following: the opportunity to reflect about our future, the opportunity to read a lot, the opportunity to give the time that we wanted to our family, and the opportunity to practice additional skills. (FGDG4)

FGDG1 members had the following to say:

> Even though the shutdown had negative impact, it also had for us some positive sides. For example, it gave us ample time to read on academic issues. We also read non-academic books that we had wanted to read before. It developed our skills that we had before, and it helped us to know ourselves better. It assisted us to strengthen our family interaction. It allowed us to adapt technologies for learning purpose.

Further FGDG3 participants reported that, "The positive sides were that it gave us more time to spend with our families and work independently." The last group had listed its positive sides in a summarized manner as follows: "It gave us an opportunity to read additional books such as spiritual, historical, fictions, etc. It helped us to attend spiritual courses in the church. It helped us to make traditional handcrafts. It gave us free time to help our family by doing different home tasks." (FGDG2)

Conclusion

Based on the above findings, the following conclusions were made:

- Respondents were shocked when the government announced the state of emergency. On the other hand, students were excited when Saint Mary's inaugurated LMS learning.
- Participants made clear that they had access to smart phones. After watching the video of Saint Mary's which explained on how to use LMS, they pursued their study comfortably.
- The university used to upload different materials such as modules, PPP slides, video recording and audio recording. The last two were costly for students. Modules and PPP were used dominantly by students. Students felt that the materials maintained the desired quality. Of course, some of the modules were bulky and the PPP slides were simply read from the modules.
- Students were satisfied by the support of instructors and IT technicians. The unstable internet connection was an obstacle in uploading and down loading digital sources.
- Participants pointed out that learning through LMS was difficult and it affected their grade negatively.
- Almost all participants were frustrated due to COVID-19. It was however a blessing in disguise since it allowed them to read books, to be close to their family, to develop their passions, etc.

All in all, even if there were technical and attitudinal problems towards LMS learning, Saint Mary's bridged the gap created by COVID-19 which would have collapsed the teaching learning process completely. Students witnessed that they benefited from the platform greatly which made the University exceptional in overcoming the threat of COVID-19

Implications

It was unthinkable, in the Ethiopian context, to implement online teaching in a private university. The success story of Saint Mary's for a semester is a valuable lesson for other public and private universities to rethink about their mode of delivery. There is a need to apply blended learning. Both online and face to face learning should be used jointly to improve the quality of the teaching learning process. Online learning has become a requirement since it has its own many advantages: students can watch and hear uploaded video and audio recording materials repeatedly during their free time; it can shorten the span of learning; it can narrow the gap between the haves and have not students, and the platform can be an additional learning alternative to students.

The stumbling blocks to realize online teaching in Ethiopia are many. Of these, Ethiopian Telecommunication Authority can, for instance, do the following to solve the problems: it can subsidize the cost of internet access to private institutions, improve technical infrastructures and make the quality of internet connection stable.

Instructors should prepare their modules' design, format and content in line with the nature of virtual teaching and the courses should be peer reviewed. Online courses should be designed in an engaging, interactive, collaborative, meaningful, reflective and critical manner. Also, graphics should be relevant and sized appropriately so that they will not take too much time and frustrate students while down loading. Instructors should, thus, understand the above and other characteristics of the platform before they distribute digital materials.

References

Adams Becker, S., Cummins, M., Davis, A., Freeman, A., Hall Giesinger, C., & Ananthanarayanan, V. (2017). *NMC Horizon Report: 2017 Higher Education Edition*. New Media Consortium. https://www.sconul.ac.uk/sites/default/files/documents/2017-nmc-horizon-report-he-EN.pdf

Ashwin, P., & McVitty, D. (2015). The meanings of student engagement: implications for policies and practices. In A. Curaj, L. Matei, R. Pricopie, J. Salmi, & P. Scott (Eds.), *The European higher education area* (pp. 343–359). Springer https://doi.org/10.1007/978- 3-319-20877-0_23

Blank, D. S., Bourgin, D., Brown, A., Bussonnier, M., Frederic, J., Granger, B., ... & Willing, C. (2019).nbgrader: A tool for creating and grading assignments in the Jupyter Notebook. *The Journal of Open Source Education*, 2(11)32.

Ching-Ter, C., Hajiyev, J., & Su, C. R. (2017). Examining the students' behavioral intention to use e-learning in Azerbaijan? The general extended technology acceptance model for e-learning approach. *Computers and Education*, 111(1), 128–143. https://doi.org/10.1016/j.compedu.2017.04.010

Debattista, M. (2018). A comprehensive rubric for instructional design in e-learning. *International Journal of Information and Learning Technology*, 35(2), 93–104.

https://doi.org/10.1108/IJILT-09-2017-0092

Edwards, J. E., & Waters, L. K. (1982). Involvement, ability, performance, and satisfaction as predictors of college attrition. *Educational and Psychological Measurement*, 42, 1149–1152.

Ellis, R. A., & Goodyear, P. (2010). *Students' experiences of e-learning in higher education: The ecology of sustainable innovation*. Taylor Francis.

Goh, C. F., Leong, C. M., Kasmin, K., Hii, P. K., & Tan, O. K. (2017). Students' experiences, learning outcomes and satisfaction in e-learning. *Journal of E-Learning and Knowledge Society*, 13(2), 117–128. https://doi.org/10.20368/1971-8829/1298

Jordan Civil Society Program. (2012). *A Step by Step Guide for Focus Group Research for Non-Governmental Organizations.*

Kimathi, F. A., & Zhang, Y. (2019). Exploring the general extended technology acceptance model for e-learning approach on student's usage intention on e-learning system in University of Dares Salaam. *Creative Education*, 10(1), 208–223. https://doi.org/10.4236/ce.2019.101017

Macnish, J., Trinidad, S., Fisher, D., & Aldridge, J. (2003). The online learning environment of a technology rich secondary college. In: annual meeting of the American Educational Research Association, Chicago, IL, April.

McGorry, S. Y. (2003). Measuring quality in online programs. *Internet and Higher Education* (6), 159-177.

Moore, M. G. (1989). Editorial: Three types of interaction. *American Journal of Distance Education*, 3(2), 1–7. https://doi.org/10.1080/08923648909526659

Oh, E. G., Chang Y., & Park, S. W. (2019). Design review of MOOCs: Application of e-learning design principles. *Journal of Computing in Higher Education*. https://doi.org/10.1007/s12528-019-09243-w

Ricart, S., Villar- Navascués, R. A., Gil-Guirado, S., Hernández-Hernández, M., Rico-Amorós, A. M., & Olcina-Cantos. J. (2020). Could MOOC-takers' behavior discuss the meaning of success-dropout rate? Players, auditors, and spectators in a geographical analysis course about natural risks. *Sustainability*, 12(12), 4878.

Sun, P. C., Tsai, R. J., Finger, G., Chen, Y. Y., & Yeh, D. (2008). What drives a successful e-learning? An empirical investigation of the critical factors influencing learner satisfaction. *Computers & Education*, 50, 1183-1202.

Wondoson Tamrat. (2021). The impact of COVID-19 on private higher education: the Ethiopian experience. https://www.researchgate.net/publication/348663761

Zhao, F. (2003). Enhancing the quality of online higher education through measurement. *Quality Assurance in Education*, 11(4), 214-221.

UNESCO. (2020a). Education: From disruption to recovery. https://en.unesco.org/covid19/educationresponse

Appendix

Discussion Guide

1. How did you feel when the government declared the state of emergency for COVID-19 as of Aug. 2020?

2. How did you react at the beginning to the online LMS program of Saint Mary's?

3. Did you expect such kind of solution?

4. At that time, did you have access to smart phones, the Internet and computer at home? If you did not have, how did you manage your study?

5. During the lockdown, did you have the skills of using LMS and communication platforms? If you did not have, how did you overcome the problems?

6. Which forms of online LMS lectures were dominant (video recording, audio recording, modules, written communication …)?

7. Did they have the required quality?

8. Were you satisfied by the online recoding, video recording and attached modules or materials? Why?

9. Were you satisfied with the support of instructors, technical or IT services, Internet connection quality and websites?

10. Was the online teaching learning process easy or difficult, compared to the face-to-face method? Why?

11. How did it affect your CGPA?

12. While you were attending LMS classes, were you joyful, frustrated or hopeful?

13. What were the positive sides of the shut down if there were at all positive outcomes?