Challenges of E-learning during COVID-19 Epidemic: A Case Study in One Cambodian High School

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Abstract:

This case study was to explore the challenges of e-learning during COVID-19 pandemic in one Cambodian high school. A qualitative method was employed in the study. There were 6 high school students participating in the interview process. Findings indicated that students encountered lots of problems of e-learning such as lack of motivation, internet bandwidth, noise distraction, technical issue, feeling of isolation, financial concern, less concentration, teamwork reduction, relationship difficulty, accessibility and students were passive during online classes. This study also suggested that online learning during the COVID-19 provided both positive and negative experience. However, it was a lot more challenges than opportunities. Further study should investigate the opportunities gained by students and teachers from the COVID-19 pandemic.

Keywords: Challenges, E-learning, COVID-19 Epidemic, Cambodian High School

1. Introduction:

The rapid advancements in technology necessitate the necessity for today's education (Wolfinger, 2016). An alternative to traditional educational institutions during the epidemic is online learning (Basilaia & Kvavadze, 2020). As a result, schools and institutions with little to no experience with e-learning or e-learning materials must have run into problems, particularly when instructors or lecturers are unfamiliar with using online tools (Zaharah & Kirilova, 2020). With more people using the internet every day, e-learning is growing in popularity as a learning method (Goyal, 2012). The usage of e-learning, which is steadily gaining popularity around the globe, is widespread in higher education. Nguyen and Duong (2021) discovered that e-learning refers to the process by which students use technological items to learn.

Additionally, e-learning is defined as a technological conveyed means to support learning (Clark & Mayer, 2016). In today's world learning cannot be confined into traditional classroom and it may not require any physical presence (Ali et al., 2018). Kumar et al., (2020) claimed that e-learning had been increased in recent years. Moreover, Weems-Landingham (2021) added that at least students chose one course for their online class. To keep e-learning moving forward, Pham and Vo (2021) pointed out that e-learning is the best tool for learning during COVID-19 epidemic. E-learning is more affordable, which benefits students during the epidemic. Electronic learning is

becoming more important for modern education as technology advances. Technology ought to be employed as a learning partner, and attention ought to be paid to the ways in which people might learn as a result of technological innovation (Jonassen & Rohrer-Murphy (1999).

On the other side, e-learning also has a drawback that presents a number of difficulties on its own, such as internet connectivity (Priyanka, 2020), technological troubleshooting (Bagata, 2020), and communication misunderstandings (Mohammad, 2020). In order to learn or work from home, students, educators, parents, and institutions of all levels were compelled to adopt e-learning tools worldwide because to the COVID-19 pandemic (Hidayat et al., 2020). Hence, students around the world are studying from home even though learning from home caused the lack of learning resources. For example, students cannot get access to internet and parents do not have time to help support their children' learning (Putra et al., 2020). Not only students faced learning technology problems but also teachers, parents and stakeholders around the world especially developing countries (Bagata, 2020).

Schools and colleges in Cambodia have been adopting ICT technologies including Google Classroom, Seesaw, Kahoot, Zoom, and Google Meet to cope with the issues that students and teachers have faced during school lockdown (Purwanto & Tannady, 2020). utilizing their cellphones and personal computers, teachers and students may now collaborate, manage, and direct their class utilizing these ICT resources (Salehi, 2012).

The use of technology in English classroom instruction is one technique to enhance English language training in Cambodia. The use of technology in the classroom has a favorable impact on student attitudes regarding language classroom learning, the quality of instruction, and the exchange of knowledge between teachers and students. In order to strengthen students' comprehension and teachers' view of employing technologies in language instruction, MoEYS claimed that the quality of education in Cambodia needs to be improved. Sey (2021) also pointed out that students were not fully ready to use Google classroom. It was one of the e-learning challenging. According to Sey and Em (2023), most students have negative views in using the platform such as a Zoom during the school lockdown. This clearly addressed that students were difficult and encountered plenty of challenges. However, Sey (2023) also explored some solutions of educational institution and organization to handle the challenges.

As a result, some students at universities in Cambodia chose to temporarily pause their studies while others in remote areas of the country stopped attending school. Online learning has therefore made the educational disparity that Cambodia is currently facing worse due to the socioeconomic status divide among students and their inadequate digital competency (Karamba et al., 2021). Regarding Cambodia, the teachers, particularly those who are currently employed, find it difficult to implement the most modern language teaching techniques and methodologies. In their language classrooms, Cambodian teachers continue to

use conventional teaching techniques (Igawa, 2008). Their teaching strategies and methodology continue to be grounded in the grammar-translation technique. This indicates that pupils are less active than teachers. Observing lectures and taking notes are standard classroom activities (Richards & Rodgers, 2014).

In Cambodia by its nature, online learning depends entirely on technological devices and the internet, so it is undeniable that technology is the most pressing challenge to online learning if those involved in the process of teaching and learning are not digitally competent due to inexperience or insufficient training. Some typical technological issues include lack of knowledge of how to use applications, unstable/slow internet connection, outdated communication devices, and incompatible browsers (Heng, 2020). This study aimed to answer the research question "What are the challenges of e-learning for selected public high school in Cambodia during the COVID-19 pandemic as perceived by students"?

2. Literature Review:

Health of the populace inevitably took precedence over economic and educational components of social life as a result of the extensive and dangerous spread of the COVID-19 epidemic. The epidemic caused schools and colleges to close, which had an enormous impact on the educational process quickly and resulted in a substantial loss of time for students, professors, and students (Corlatean, 2020). When their pupils utilized even the most basic hand tools at home, many teachers worried about their students' safety (Ralph et al., 2020). Because most tools were not readily available in most homes, teachers had little opportunities to help pupils become

competent in practical skills and the safe use of hand tools and machines (Code et al., 2020).

In Sri Langka, lack of student support, flexibility, activities of teaching and learning, internet access, student academic confidence, localization of content to fit a particular culture, and attitudes toward e-learning (Andersson, 2008). Moreover, the challenges in e-learning in Africa is that internet accessibility, knowledge gap of stakeholders, ICT illiteracy, undefined strategies, inadequate selection of LMSs, and inefficient user support (Ssekakubo et al., 2011). Furthermore, the challenges in e-learning in Libya is that Internet access, low internet connectivity, lack of encouragement, English proficiency, training programs, cost of internet, technical skills, disinterest, and social restrictions (Elzawi & Wade, 2012). Interestingly, in Kenya, ICTs and e-learning infrastructure, financial support, low internet bandwidth, inadequate policies, technical skills, teacher attitude, and time cost to prepare e-resources (Tarus et al., 2022).

Asserts that the COVID-19 pandemic caused the adoption of strict measures to stop the infection's spread. Social distancing and lockout interventions transformed people's habits, and online collaboration, gaming, streaming video, and other activities all benefited greatly from the Internet (Favale et al., 2020). The internet is under a tremendous amount of stress as a result of all these sudden developments. Additionally, Lee et al., (2014) found that factors impacting reported intention to employ e-learning include human traits like machine and internet self-efficacy. Device attributes like learning content and technological usability have a big impact on how learners accept new technologies. According to the study's findings, perceived

utility and simplicity of use were both significant predictors of perceived intention to use. Additionally, it was discovered that perceived utility had a stronger predictive impact on behavioral intention to use than perceived ease of use.

The systematic approach, awareness, and stakeholder attitudes, administrative support, technical assistance, staff development, the transformation of higher education, a lack of funding, and ownership are the problems in e-learning in Tanzania (Sife etal., 2007). For instance, in Jordan, the difficulty with e-learning is due to a lack of institutional support and encouragement as well as inadequate training (Al-Shboul, 2013). In Saudi Arabia, the challenges with e-learning are the rate of internet penetration, bandwidth and cost of the internet, and low public regard for web-based learning. The study's participants all learned online using their mobile devices. When discussing their online learning experiences, some participants indicated that the equipment they were using caused them issues. They clarified that this makes it challenging for them to install and access particular apps and websites necessary for online learning. Participants also said that some of their coworkers do not engage in online learning because they lack gadgets (Henaku, 2020).

Finally, a study conducted in Pakistan during Covid-19 shown that there is a strong correlation between eLearning and technology uptake. The acceptability of eLearning during the lockdown and its consequences on students' academic achievement were generally seen favorably by respondents. The Pakistani Education Ministry is having trouble putting its policies into practice, nevertheless, as a result of a shortage of infrastructure (Alhumaid et al., 2020).

Method:
This study's research approach was qualitative. In qualitative research, a broad question is put forth, verbal data is collected through in-person and online interviews, which is then evaluated to seek for common patterns. This study seeks to provide an answer to a question without attempting to quantify variables or investigate potential quantitative correlations between variables.

There were 6 respondents that took part in the study. Based on the interviews' ability to exchange information and generate output that is information-rich, a purposeful sampling technique is employed to choose the results for the study. Six interviewees for this case were picked from two different Cambodian public and private schools.

There were 6 respondents participating in this study. The researcher took notes throughout the interview and documented the responses. In order to help readers to understand the analysis and interpretation of the data, the researcher used visualization.

3. Result and Discussion
4.1. Demographic Data

a. Interviewee Profile
   A thorough profile of each of the six participants in the critical informant interview is provided in Table 1 below. There are two female and four males, respectively. 4 participants are 17 years old, two are 18 years old. They are currently studying in one Cambodian public high school.

Table 1. Interviewees Profile

Participants	1	2	3	4	5	6
Gender	Female	Female	Male	Male	Male	Male
Age	17	17	17	17	18	18
Education	10th Grade Student	11th Grade Student	11th Grade Student	11th Grade Student	12th Grade Student	12th Grade Student
Designation	Public School	Public School	Public School	Public School	Public School	Public School
Years of Online Experience	1	1	2	2	2	1

4.2. Research Findings According to the Question

a. What are the challenges of e-learning for selected public high school in Cambodia during the COVID-19 pandemic as perceived by students?

Interview Results:
This research question was answered by 6 respondents including 1 student from grade 10, 3 students from grade 11 and the last one was from grade 12.

The first respondent who is a 10th grade student said that COVID-19 ruined my life. I almost quitted school owing to some difficulties. First, I did not have enough money to buy smart phone and the use of internet was so expensive during that time. I studied online. However, it made me piss off and felt completely different from physical classroom. For instance, when my teachers explained me some lessons, I did not hear well because of bandwidth of internet. I was so annoyed and frustrated during my online class. Some teachers did not teach. Namely,

they just dropped the lessons into the Facebook messengers and asked students todo assignments and submit back to the group. Therefore, it is really hard for me. This can be fined that the first respondent did not like online learning because she encountered some challenges.

Additionally, the second respondent who was from the 11th grade mentioned in the interview that learning from home created numerous difficulties. While I was studying at home, a huge number of people who speak rather loudly bothered them. This was because they may hear a lot of noise from their surroundings. This activity caused them to be distracted from their online activities. Furthermore, people who were drinking and singing karaoke in the villages regularly distracted them from the online lessons. She continued to add that my internet connection was so slow. I did not have feeling to study

owing to this difficulty. When teachers asked me to join Zoom, the place where I lived was so noisy and could not make a good learning environment. This can be explained that the second interviewee also had problems during online class. The main problem was from the surrounding environments.

However, the third respondent replied to the question that I like online learning. It saved me the time to do something. I did not have to travel to school. Moreover, I save some money for not buying books and spending for gas. I just spent for WiFi at home. Anyways, I found a lot of challenges. First was myself, it was my new experience learning online. Hence, I did not get accustom doing things online before. I would rather learn in the classroom with my teachers because it is easy to listen and do some practical activities to improve my learning. Going online was easy, but studying online was so suck and I did not have a chance to enjoy speaking with my friends and they also kept silent during the class. Some of them might sleep and other students were probably on the way to somewhere. This could be inferred that the third interviewee found good things about online class. However, there were a lot of challenges raised in term of the students' inactive in learning and it was a new situation to Cambodia.

Interestingly, the fourth respondent said that he was in the feeling of isolation during online class. He added that humans are sociable creatures by nature. Most people enjoy talking to and getting to know others, particularly in social situations. Additionally, although students can communicate with their peers via Zoom or Google Meet, this is not the same as face-to-face connection.

Students can study, work, and pursue other interests simultaneously thanks to online learning. However, the lack of their classmates and professors in their immediate surroundings can make children feel alone. They begin to feel alienated from the class and might not participate as actively as they would in a physical environment. Therefore, it is not surprising that during online sessions, students turn off their webcams and fall asleep. In addition to encouraging indiscipline, this hinders kids' academic success because teachers are unable to individually attend to each student's needs.

The fifth respondent also added in his interview that I felt no motivation. The majority of students enter online courses fired up and eager to learn, but as the courses go on, they discover that they lose interest in even attending classes. Some students find it challenging to concentrate in online classes since there is less face-to-face interaction. Students lose the sense of urgency and drive they require to arrive to class on time, fulfil deadlines, and advance when teachers or classmates are physically absent. Gradually slipping grades and procrastination could result from this. Contrary to popular belief, lengthy texts, difficult homework assignments, and exams don't assist and may even make students less motivated to attend class. He finally addressed that I did not know how to use some modern tools. Students require a device with a reliable internet connection that they can type assignments on, such as a laptop, desktop computer, or tablet with a keyboard, in order to participate in online classes and excel at distance learning. These gadgets are pricey,

especially for students from low-income families.

Moreover, the last interviewee said that I got technical issues during my online class. The so-called Gen Z and Millennial generations are often adept at using technology. However, this does not imply that they never experience technological difficulties. Students who learn on computers must be able to use a variety of programs, some of which have challenging learning curves. If a student was on a physical campus and experiencing technological difficulties, the IT department might be quickly contacted for assistance. When taking lessons online, the student is forced to work things out on their own. If they're lucky, they'll have someone around to assist them, but it's likely that person won't be on hand constantly. But technical problems are not just a problem for students. Low internet bandwidth, sporadic reception, and video hiccups are just a few of the issues teachers encounter. These problems cause learning to become tiresome and to flow poorly. Another thing is online distraction. The internet has a lot of distractions, despite how great it is for learning. Students' attention can be diverted from their lessons and homework by the constant updates from blogs, videos, and social media sites. And once these notifications have diverted their attention, it is very simple for them to begin aimlessly browsing through these platforms. Even without being a student, managing your regular day-to-day tasks can be challenging. It might be challenging to manage all of the obligations added by online learning to a student's to-do list. While online learning

gives students unmatched flexibility to engage in other activities, they still need to be good time managers to complete their tasks successfully and effectively. Due to learning challenges or other limitations, some students may experience difficulties in online courses. To achieve academically, students with disabilities such as dyslexia, autism, poor vision, hearing loss, and others require special support. They can only receive that in a physical education class.

4.3. Discussion:
The above findings are also supported Mahyoob (2020)'s study in Saudi Arabia. It is found that the main problems that influence and impact online EFL learning during COVID-19 are related to technical, academic, and communication challenges. Moreover, another study in Indonesia revealed that all lecturers affected by the pandemic use a Learning Management System (LMS) based website as a means of online learning (Irfan et al., 2020). Challenges during the pandemic: use of e-learning in mathematics learning in higher education. There are obstacles faced such as the limitations of writing mathematical symbols and the limited basic capabilities of the learning management system and multimedia software to support online learning.

Ironically, Sife et al., (2007), Tanzania Findings suggested some challenges toward e-learning such as Systematic approach, awareness, and attitudes of stakeholders, administrative support, technical support, staff development, transforming Higher Education, lack of funds, and ownership. Furthermore, Andersson (2008) found that Sri Lanka encountered some challenges such as student support, flexibility, activities of

teaching and learning, internet access, student academic confidence, localization of content to fit a particular culture, and attitudes toward e-learning.

Surprisingly, Khan et al., (2012) conducted one study in Bangladesh and the results found that ICT infrastructure, insufficient fund, unclear plan, political factors, cultural factors, corruption, teachers' attitudes, ICT skills, and lack of time. In addition to this, Elzawi & Wade (2012) did their study in Libya. They pointed that the challenges were Internet access, low internet connectivity, lack of encouragement, English proficiency, training programs, cost of internet, technical skills, disinterest, and social restrictions. Tarus, Gichoya, & Muumbo (2015) explored their research in Kenya. Findings suggested that ICTs and e-learning infrastructure, financial support, low internet bandwidth, inadequate policies, technical skills, teacher attitude, and time cost to prepare e-resources. One more thing, Naresh & Reddy (2015) investigated the challenges of e-learning in India. The results showed that students face problems in e-learning. Anyways, e-learning can provide both challenges and opportunities. Future studies focused on e-learning. This study and the above studied by different authors from different countries found similar challenges of e-learning during COVID-19 pandemic.

This study can be implied that the COVID-19 pandemic has changed how individuals learn across all subject areas. The spread of the coronavirus has caused disruptions in the educational institutions of several nations. Virtual meetings are currently employed in a number of online learning tools to replace face-to-face meetings that were once used for teaching and learning.

4. Conclusion:

The construction of online learning programs has been mandated for all Cambodian schools in order to give students more options for studying and to aid in their skill development. Those are the most important decisions we need to make. All grade levels of students deal with a variety of difficulties, such as limited internet access, disruptions while learning at home, a lack of teaching, communication issues, the ability to afford a smartphone, the ability to use a smartphone, technology ignorance, a lack of parental understanding, and school dropouts.

The internet is the most important component of online learning. The most difficult obstacle for all students in Cambodia is limited internet connection, particularly in rural areas where internet connectivity is limited, according to a recent survey that was published on the Cambodian Education Forum. It has been advised that Cambodians use the Zoom App, Microsoft Team, Google Meet, Group Messenger, Facebook Group, and Group Telegram as online learning tools. These online platforms can't work without the internet. But because of the restriction, a number of problems have arisen, making it more difficult for students to learn.

Dropping out of school is more of a result of learning than a challenge. Due to the many challenges, they encountered, several adult students have left school and are looking for suitable employment to support their families. This portends poorly for the future growth of the nation. If a nation's human resources are insufficient, it cannot develop. We all worry about dropping out since, following an abrupt dropout, students might

continue living their lives in the incorrect way because they wouldn't be able to find a respectable job and might end up associating with someone who wouldn't make a good role model in society. Social problems would result from that. In a nutshell, dropout is a result of the challenges associated with online education during the pandemic.

Finally, all things considered, the COVID-19 outbreak has had a devastating impact on every sphere of society, especially online educational institutions. Online learning has caused a number of issues for students. The Cambodian government must therefore act right away to address these problems. Continuous action is necessary; one action is insufficient.

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