Student Readiness for Online Learning: A Case Study of COVID-19 Outbreak in Thailand

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Abstract

After the World Health Organization's designation of the Coronavirus or COVID-19 as a pandemic in early March 2020, many countries have been aware of the rapid spread of the disease. One of most serious concerns is about instructional management in their countries. Likewise, Thai government has launched an official announcement in relation to this crisis affecting universities across Thailand to cancel all in-person classes. Since teaching and learning process has been rapidly changed, student readiness for distance learning has been focused and concerned. Consequently, this study examined student readiness for online learning during the COVID-19 pandemic. The participants were 53 English-major students from a university in Bangkok, Thailand. An online questionnaire was used to examine the participants' background information about the uses of electronic devices and applications in learning, their perceptions of online learning as well as factors that most worried them in an online learning environment. Overall, this case study reveals the participants' lifestyles in utilizing digital technology and educational applications. A majority of the participants reported that accessibility of Wi-Fi and fewer opportunities to have a two-way communication between lecturers and students were their most concerns. The findings suggested that university administrators should look at making Wi-Fi available and accessible at all times.

Keywords: Online learning, COVID-19, Teaching and learning

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1. Introduction

Millions of learners worldwide have been affected by the spread of Coronavirus or COVID-19 pandemic, and educators are striving to ensure that teaching and learning continues in such massive disruption. Both educators and learners, experienced or non-experienced in an online or distance learning environment, are adapting to new challenges to carry out remote classroom teaching during the outbreak.

Like every country in the world, Thailand has faced the fast-spreading outbreak during the second semester of 2019 academic year. Thai government has announced policies for universities and schools across the country to immediately react to the shift into online classes. This is the culmination of the efforts to prevent COVID-19 from spreading to student population and entering local communities. A sudden change to online teaching and learning has been urged to start in less than a month. Undeniably, these are a challenge and a disruption in Thai education.

Normally, teaching and learning in most Thai universities are still in process in March and April. However, early in April, some universities are ready to start a summer semester. In a state of emergency, there are many things that faculties and students will do and get well prepared before the semester started. One of most concerns is student readiness to online learning. By focusing on student readiness, there are many factors that are considered to be taken into account and put them as priorities in conducting online education.

2. The Purposes of the Study

The current study has three purposes as follows:

- 1) to investigate students' uses of electronic devices in response to online learning environment,
- 2) to examine the students' perceptions of using online learning, and
- 3) to give formative feedback to educators to prepare and improve their practice.

3. Literature Review

Online learning programs are often referred to online learning, e-learning, virtual learning, or in some cases distance learning, are thriving massively in various areas like education across all levels: high school and university education, adult education and lifelong learning programs.

Online learning has contributed to a significant growth of its uses for several reasons like a reducing cost of education or promoting students' learning opportunities (O'Donoghue, 2004). Online learning gives educational opportunities to individuals who are unable to attend conventional classrooms (McNaughton, 2001). With the fact that many students attending universities or colleges today have work and family commitments (Raymond, 2000), individuals including the disabled and those who live in rural communities where attending daily to university could be difficult or even impossible (McNaughton, 2001).

Online Learning Community

In the realm of an interactive online learning community, students can develop bonding relationships with their peers. By providing them opportunities to meet and collaboratively construct and improve of knowledge, the online learning then offers a great deal of literature suggesting that online learning communities can be an effective way to enhance students' learning (Ke & Hoadley, 2009). To enhance overall learning online education could be an alternative to strengthen students' active learning, and to develop students' positive learning attitudes (Gazi, 2009). In particular, mobile-assisted learning offers the benefits and learning possibilities and affordances that have the potential to modernize the way to work and learn with distinctive features such as mobility, accessibility, and spontaneity (Peters, 2007).

3.1 Online Learning and Applications

Recently, there is a significant increase of mobile applications used especially in Asia such as LINE, WhatsApp, or WeChat. Those applications are mainly in the roles of sending instant and text messages. In education, it has been revealed that the uses of applications have positive effects on providing platforms for socializing, sharing information, and communicating (Sweeny, 2010). One of mobile applications that has been used in studies was LINE which is a mobile application that features instant communications among electronic devices such as mobile phones, tablet computers, or personal computers. LINE was used to form an online learning community for distance education and has been reportedly fit well in online learning environment (Chen, Wang, Kinshuk, & Chen, 2014).

3.2 Perceptions Toward Online Education

Among the studies in the field of online education, perceptions of using online learning in education are commonly shown in the two different sides: benefits and drawbacks. A study carried out by Kimiloglu et al. (2017) listed benefits and drawbacks commonly cited in the literature:

Benefits:

- Flexibility to learn anytime, anywhere
- Self-directed and personalized learning
- Consistency of training and delivery
- Permanent availability of cumulative archive of course content and timely updates
- Saving of time and minimization of time away from work
- Cost effective delivery and travel cost minimization
- Increase in productivity, improved value chain activities, ROI
- Globalization
- Improvement of workforce

Drawbacks:

- Technical problems (bandwidth limitations, Internet problems, incompatible technology, etc.)
- Lack of sociability, lack of interactivity and feedback
- Lack of computer and Internet skills, fear of technology
- Educational problems (academic quality, assessment, methodology)
- High development and maintenance costs
- Organizational problems (lack of support, lack of trained staff, cultural resistance)

In summary, most commonly mentioned benefits of using online education in the literature mentioned above are the flexibility of online learning programs, the opportunities to work and study, and their efficiency, especially in terms of cost minimization and time saving. Nevertheless, issues such as the performances of learning, technical problems and technology resistance prevail, questions about the lack of sociability, quality considerations appear as their disadvantages (Kimiloglu, Ozturan, Kutlu, 2017). The next section presents literature and related studies about student readiness in online learning environment.

3.3 Student Readiness

For years, many surveys have been designed and developed to assess student readiness as it is considered one of success predictors in online learning programs (Dray et al., 2011). Individual readiness is also a vital element in using new technology such as mobile applications in online education.

Student readiness for online applications and mobile devices has shed a great deal of light in online education. Online applications featured in mobile devices are commonly used among higher education students and becoming a daily culture for almost every student. A mobile application is one of the applications used in teaching and learning through mobile devices. In order to use in teaching and learning, it is important that students should have positive attitudes toward utilizing mobile devices in learning.

Several studies investigated student self-assess readiness for online learning by using a questionnaire as a research tool. Most of them were designed to investigate learner characteristics, digital divide, and information and communications technology (ICT) engagement in online learning environment (Dray, Lowenthal, Miszkiewicz, Ruiz-Primo & Marczynski, 2011, Ayub, Zaini, Luan, & Jaafar, 2017).

Along this line, Ayub et al. (2017) examined students' attitudes toward integrating mobile applications in a teaching and learning process and factors associated with their attitudes. Over 200 undergraduate students participated in the study examining three factors that impacted students' attitudes like mobile self-efficacy, personal innovativeness, and readiness. The results showed that students had positive attitudes toward online teaching and learning and were positively correlated with students' mobile self-efficacy.

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Rasouli, Rahbania, and Attaran (2016) investigated the readiness of Art students in utilizing E-learning through the use of a survey research design. Their 347 participants were at a tertiary level from three different universities in Iran. The participants' readiness for E-learning application was assessed by a questionnaire. The results show that Art students were in a moderate level of readiness for applying E-learning. Students with lower level of skills on computer and the Internet tended to have inadequacy of information technology courses or electronic courses at schools with fewer experiences in facilities and computers and the Internet usage.

4. Methodology

This research followed an explanatory research method with a quantitative data collection and analysis. This paper presented data collected which took place in March-April 2020 at the targeted university.

4.1 Participants of the Study

Fifty three pre-service teachers majoring in English voluntarily participated in the present study. They were students from the Faculty of Education at a university in Bangkok, Thailand.

4.2 Research Tool and Data Collection

The data were collected through an online questionnaire and the respondents were kept anonymous. An online survey was administered using Google Forms, beginning on March 17th, 2020, and concluding on April 17th, 2020. The call to participate was initially posted to Facebook page of the English Major Division under the Department of Curriculum and Instruction at a university in Bangkok. Interested participants were directed to the consent form and the online survey. The consent form was the first segment of the survey and only people who agreed to participate were directed to the survey questions. Participants were asked to answer both close-ended questions and open-ended questions about demographic information, their experiences in using online applications, electronic devices, and their concerns about participating in an online learning environment. There was participant attrition, with 56 beginning the survey, and 53 completing it.

The quantitative survey data were analyzed using descriptive statistics to summarize experiences in using online applications and electronic devices. Of the surveyed participants (n = 53), 100% self-reported themselves as pre-service teachers.

5. Results and Discussion

Figure 1 summarizes the number of the participants' uses of electronic devices that they might use in online education. Figure 2 presents the participants' time spent online per day.

5.1 Uses of Electronic Devices in Online Learning

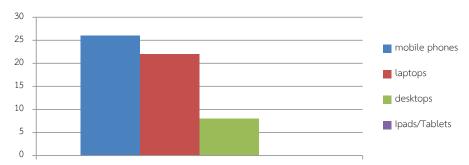


Figure 1. Number of Uses of Electronic Devices in Online Learning Education

A majority of the respondents reported that mobile phones (n = 26, 49%) and laptops (n = 22, 42%) might be used mainly in online classes (see Figure 1).

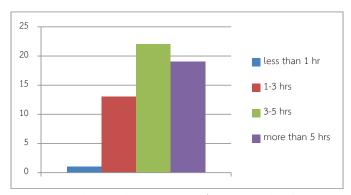


Figure 2. Time Spent in Using the Internet Per Day

About 40% of respondents (n = 22) reported that they spent approximately 3-5 hours per day and 35% (n = 19) spent more than five hours in using the Internet (see Figure 2).

In regards to the digital applications, the survey results showed that a majority of the respondents tend to use LINE application (n = 51, 96%), Google Drive (n = 49, 92%), and Facebook Live (n = 38, 72%) in online learning.

Since online learning was carried out during the COVID-19 outbreak, 83% of the surveyed participants (n = 45) reported that online education was their first thing that came to their mind as a way to protect themselves from COVID-19 infection, time saving (n = 14, 26%), and travel cost saving (n = 11, 20%) respectively.

5.2 Students' Perceptions of Using Online Learning

An online questionnaire with open-ended questions was used to explore the qualitative data with individual participants in order to understand their perceptions toward online teaching and learning.

Students' perceptions of online learning in the summer semester of 2019 academic year were expressed to the researcher regarding the main reasons they took the online courses during the Coronavirus outbreak. Of the 53 responses, a major showed the concerns about the shift into online classes within the short timeframe made most students worried about the Internet connection and accessibility (n = 28, 55%) as well as less opportunities to communicate with lecturers (n = 16, 31%). For example:

"The online records and the Internet signal at university are the big issues."

"I can't ask teacher about the lesson."

Nevertheless, many students reported that they were ready to take online courses. Besides, of the 32 responses, 63% perceived that online education could minimize the risks of the COVID-19 transmission and saved their costs of traveling and time to go to university (n = 6, 12%). For example:

"I agree with this idea because of taking the course online can decrease the risk of transmission epidemic. Everyone can learn from everywhere especially from their accommodations without worrying about Covid-19."

As supported by Kimiloglu et al. (2017), the online teaching and learning, viewable to all peers and instructors, may influence their flexibility to learn anytime, anywhere, self-directed and personalized learning, and saving of time and minimization of time away from work. As the number of digital applications that participants have experiences in using them, LINE has been in used and tends to be most familiar applications that most respondents ever used as confirmed by the findings from Chen et al.'s study (2014).

6. Conclusions and Implications

The present study presented several important insights made possible by using online teaching and learning. First, students perceived that online learning might have some technical problems and they might not have face-to-face communication when some questions arise during their study. Second, some students thought that online learning could be possible for communication to flow at a causal pace and replaced the need for two-way communication with email exchanges or other mobile applications. Likewise, online learning could allow members of the online community to study at their own pace. Last, learning was the result of carefully designed with connected accessibly learning opportunities that intersect with the learners' own agency.

Future research may focus on in-progress and after courses completed to understand obstacles along the way to the end of each course. Besides, students' attitudes toward online education, academic

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achievement, and self-learning regulation might be studied further with other possible learning factors to situate a framework for a future online learning design and management.

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