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E-readiness of Cambodian undergraduate students in using Google Classroom

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Abstract

This article reports key findings of a study that investigated Cambodian undergraduate students' e-readiness in using Google Classroom. The study employed a closed-ended questionnaire as a data collection instrument to explore different dimensions of e-readiness. The results revealed that most of the Cambodian undergraduate students who participated in the survey (n = 110) were moderately ready for Google Classroom; however, some of them were concerned about whether their qualifications obtained from online learning via Google Classroom would be recognized. The study suggested that Cambodian undergraduate students need more exposure to Google Classroom to take advantage of its various features. Future studies should extend the scope of the current study and examine the technology acceptance of Cambodian students from different universities to understand how they navigate the challenges and opportunities of online learning.

Keywords: E-readiness; Google Classroom; undergraduate students; Cambodia

Introduction

This short article presents an investigation of e-readiness of Cambodian undergraduate students in using Google Classroom to pursue online learning. A summary of key findings presented in this article is based on the author's master's research paper exploring Cambodian university students' e-readiness in using Google Classroom (Kassy, 2019).

What is Google Classroom?

Google Classroom is a Google application with an e-learning system based on a blended learning concept that combines traditional classroom instruction with online learning (Alqahtani, 2019). On May 6, 2014, Google Classroom was announced with a limited preview available to some G Suite for Education members (Magid, 2014). It was then released publicly on August 12, 2014, and many people began to use Google Classroom for their academic purposes (Kahn, 2014). In 2015, Google integrated Google Calendar into Google Classroom for assignment due dates, field trips, and class speakers (Madhavi et al., 2018). Later in 2017, Google allowed personal Google users to join Google Classroom without the requirement of having a G Suite for Education account (Ressler, 2017). Moreover, it became possible for any personal Google user to create and teach a class on Google Classroom (Etherington, 2017). Google Classroom has both free and premium versions. The free Google Classroom is available for schools using Google Apps for Education. The premium version costs US$4 per user per month and includes additional features such as advanced videoconferencing, advanced security, and premium support (Pardo-Bunte, 2021). Google Classroom is a powerful teaching and learning platform that has been modernized for today's digital world, an offer from Google to teachers worldwide (Zhang, 2016). It provides a central location for teachers to keep in touch with their students, pose questions, and create homework or assignments.

Studies on the use of Google Classroom

Many studies showed that using online technology in the classroom could help students collaborate and achieve better learning outcomes (Chou & Chen, 2008; Raman et al., 2005; Power & Vaughan, 2010). Some studies indicated that students regarded Google Docs and Google Classroom as good group work tools (Brodahl et al., 2011; Zhou et al., 2012). Many students were convinced that a document prepared collaboratively would be of higher quality than the one written alone (Blau et al., 2020). However, online collaboration may result in unpleasant learning experiences. Students and instructors, for example, might be hesitant or even reluctant to share their information (Rick & Guzdial, 2006). In addition, some students felt that changing other students' written

work was somewhat inappropriate, and they might not contribute equally to the work (Suwantarathip & Wichadee, 2014).

Because Google Classroom is primarily designed to support the education process, it offers many benefits for educational institutions (Almishiki, 2017; Fang & Holsapple, 2007). The homework function, which allows teachers to give homework/assignments to students, evaluate their work, and provide immediate feedback, is one of the strengths of Google Classroom (Alqahtani, 2019). Previous research also highlighted the necessity of addressing students' requirements and maximizing the benefits of cloud applications such as Google Classroom, which offers positive interactions that boost students' interests in learning and exploration (Fang & Holsapple, 2007).

Methodology

This quantitative study employed a closed-ended questionnaire as a data collection instrument with a primary objective to investigate the e-readiness of Cambodian undergraduate students in using Google Classroom. The questionnaire was randomly distributed to undergraduate students at a Cambodian university where different information and communication technology (ICT) tools, including Google Classroom, were integrated into the learning and teaching process. A total of 110 responses were received. The questionnaire used for this study comprises six sections. They included: (1) e-readiness in Google classes, (2) content readiness, (3) technical readiness, (4) environmental readiness, (5) cultural readiness, and (6) financial readiness. Data were analyzed using Statistical Package for Social Sciences (SPSS) version 21. Cronbach's Alpha was 0.95, suggesting the reliability of the questionnaire items.

Results

A total of 110 undergraduate students responded to the questionnaire. Of these, 48.2% were males, and 51.8% were females (see Table 1). The majority of the respondents were in the age group of 18-25, representing 81.8% of the total sample.

Table 1. *Participants' demographics*

Variables	Frequency (n=110)	Percentage (100%)
1. Gender		
Male	53	48.2
Female	57	51.8
2. Age		
18-25 years	90	81.8
26-30 years	13	11.8
31-35 years	5	4.5
36-40 years	2	1.8
Total	110	100.0

The data showed that Cambodian undergraduate students highly perceived that discussions via the internet could make learning meaningful. However, they believed that the most effective method of learning is still face-to-face (see Table 2). Therefore, they preferred traditional classroom instructions due to the ease of learning interactions. Furthermore, most students were highly ready to buy electronic devices and pay for the internet connection for Google Classroom purposes.

The data also showed that students were moderately willing to engage in Google Classroom. This can be understood that learning through Google Classroom is not something so familiar to them and may offer them a new and exciting learning experience. In addition, their institution provided appropriate learning materials on Google Classroom and offered practical training on how to use it. Therefore, when experiencing technical issues, they tended to be able to resolve them. However, they were moderately concerned about the recognition of qualifications obtained by learning online through Google Classroom. Moreover, it was found that few students believed government policies encouraged the use of Google Classroom in education.

Table 2. *Descriptive statistics of students' readiness in using Google Classroom*

No.	Descriptions	Mean	SD	Level
1	I am willing to make the time for Google Classroom.	3.24	.89	Moderate
2	I will grab the opportunity to engage in Google Classroom.	3.37	.95	Moderate
3	Content for Google Classroom is appropriate for my study needs.	3.19	.82	Moderate
4	The institution where I study provides hands-on training to students of flipped learning.	3.00	.91	Moderate
5	Government policy has made me interested in Google Classroom.	1.81	.65	Low
6	I am worried that qualifications obtained via Google Classroom will not be recognized.	2.80	.98	Moderate
7	The most effective method of learning is face-to-face.	3.42	.97	High
8	Discussions via the internet make learning more meaningful.	3.44	.86	High
9	I am willing to buy a computer/tablet/ mobile phone for Google Classroom purposes.	3.59	.91	High
10	I can afford to buy a computer and pay for internet access.	3.50	.83	High
	Overall	3.17	.94	Moderate

Note: Mean score of 1.00-1.80 = Lowest, 1.81-2.60 = Low, 2.61-3.40 = Moderate, 3.41-4.20 = High, and 4.21-5.00 = Highest

Overall, with a mean score of 3.17, it could be concluded that Cambodian undergraduate students had moderate e-readiness in using Google Classroom for their academic purposes.

Discussion

It appears that in this digital age, students are generally willing to take on technological challenges and be exposed to differentiated learning through digital devices and the internet. Cambodian undergraduate students who participated in this study were in the same loop of perceptions. Google Classroom as a fast-emerging teaching and learning platform is not familiar to many Cambodian students. However, as the results of this study show, students are generally ready to use it as part of their online learning.

Studies from different countries also found that students were ready to use Google Classroom in their learning process. For example, a study conducted by Chung et al. (2020) found that Malaysian university students were ready to use Google Classroom by accessing pre-recorded lectures or videos uploaded to the platform. Bayarmaa and Lee (2018) used Google Classroom to implement problem-based learning (PBL) for Mongolian students taking Korean courses. It was found that students who participated in the course perceived Google Classroom positively, as they could use it for collaborative learning effectively.

Conclusion

This study revealed that Cambodian undergraduate students have moderate e-readiness in using Google Classroom for academic purposes despite a significant concern over the recognition of qualifications earned through online learning using Google Classroom and the limited support from the government in the utilization of Google Classroom in education.

The main limitation of this study is that it was conducted with only 110 undergraduate students at one Cambodian private university in Phnom Penh. Therefore, the results cannot be generalizable to students in other universities both in the capital city and in the provinces. Future studies should extend the scope of the current study and examine the technology acceptance of Cambodian students from different universities to understand how they cope with the challenges and opportunities regarding e-learning. Such studies will provide concerned stakeholders with a solid understanding of the issues faced and perceived by students. This understanding is crucial, as it helps policymakers, particularly university leaders, to introduce appropriate

interventions or initiatives to improve students' online learning experiences and to enhance the quality of educational provision.

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