THE STUDY REVIEWS AND SATISFACTION WITH THE INNOVATIVE GOOGLE DRIVE AND GOOGLE FORMS APPLICATION IN TEACHING DIGITAL LITERACY COURSES GEN0304 DIGITAL LITERACY

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ABSTRACT

The study on opinions and level of satisfaction in the adoption of Google Drive and Google Forms in teaching of the GEN0304 "Digital Literacy" course aims to:

1. to study the opinions and level of satisfaction of students in Suan Sunandha Rajabhat University regarding the adoption of Google Drive and Google Forms in the teaching of the GEN0304 Digital Literacy course

2. to design and standardize Google Drive and Google Forms implementations to suit the students' preference.

The population in this study consisted of undergraduate students registered for the GEN0304 Digital Literacy course offered by Suan Sunandha Rajabhat University, in the second semester of the academic year 2019. 327 samples were selected from the popultion of 2,200 students, using simple sampling and Krejcie & Morgan table. Data were collected using questionnaires, and statistics used to analyze the data included mean values and standard deviations.

Keywords: Opinion, Satisfaction, Google Drive, Google Forms

INTRODUCTION AND OBJECTIVE

The Office of General Education and Innovative Electronic Learning has a support role in organizing courses using appropriate information and communication technology, in accordance with the intention of the National Education Act B.E. 2542 (1999). It is responsible for organizing general education courses for Suan Sunandha Rajabhat University, as well as organizing an online learning platform. The University has found a project aiming to develop and organize the general education courses with the following policies.

1. Focus on encouraging uses of a variety of learning innovations to fulfill the needs of students and society

2. Focus on networking and education partners, in accordance with the principle of participations of society, public, and private organizations

3. Connect and integrate education with academic services and student development activities, using society's collaboration

4. Focus the teaching on students' development towards desirable characteristics. This is crucial for graduates because it instills overall desirable characteristics in the graduates.

Therefore, it is important to use technology to address the aforementioned limitations. It is expected that adoption of Google Drive and Google Forms as teaching media could create interactions between students and teachers. Moreover, the use of technological innovation would modernize the teaching process, engage students, reduce working time, create a new system for submission and collection of students' works in a way that is durable and long-lasting using information technology, and allow students to learn from a variety of information technology. Another important factor in the use of innovation and technology is to fulfill the policies on the organization of the general education courses of Suan Sunandha Rajabhat University.

LITERATURE REVIEW

Google Drive is a cloud-based storage service and a secure data backup service by Google. The stored files can be accessed from anywhere, shared with specified others, and simultaneously edited by different kinds of devices, such as cell phones, tablet computers, and computers. Google offers an unlimited storage space as part of the Google for Education program. There are several advantages Google Drive offers: it can store files in every format; stored documents can be viewed and edited at anytime from anywhere, and files and folders can be shared, allowing collaboration between different users.
Source: Wikipedia, the free encyclopedia, Google Drive. From: https://th.wikipedia.org/wiki/

Forms in Google Drive is a function that allows fillable forms to be created. Created forms can be sent to responders, who fill the forms and return them. The creator can then see which answers are selected or filled by the responders, but the responders would not know whether the answers are correct or not. This can be used for creating online questionnaires. One drawback of Google Forms is the requirement of internet connection. Adapted for teaching, Google Forms is a free and easy-to-use tool. Questionnaires or forms can be created and sent to responders through various means. For example, links to the forms can be shared via emails or the forms can be embedded in a blog or on a web page. Adapted for professional uses, Google Forms's forms can be embedded in a blog or on a web page.
Source: Using GOOGLE DRIVE, Google Apps for Education: The Suranaree University of Technology. From:http://web.sut.ac.th/g/index.php/documentation/google-drive

METHODOLOGY

4.1 Study Approach

The population in this study consisted of undergraduate students registered for the GEN0304 Digital Literacy course offered by Suan Sunandha Rajabhat University in the second semester of the academic year 2019. The sample was selected using simple sampling and Krejcie & Morgan table. A sample of 327 students was selected from the population of 2,200 students.

4.2 Method

The research tools consisted of Google Drive and Google Forms. Questionnaires were used to survey opinions and satisfaction levels. Each questionnaire was divided into 2 parts, as follows.

Part 1 surveyed general information of students registered for the GEN0304 Digital Literacy course at Suan Sunandha Rajabhat University

Part 2 surveyed opinions and satisfaction levels of students on the adoption of Google Drive and Google Forms innovations in the course's teaching

Descriptors for the 5 satisfaction levels were assigned as follows.

Mean score 4.51-5.00   Highly satisfied
Mean score 3.51-4.50   Satisfied
Mean score 2.51-3.50   Neutral
Mean score 1.51-2.50   Unsatisfied
Mean score 1.00-1.50   Highly unsatisfied

RESULT AND DISCUSSION

The study on opinions and levels of satisfaction in the adoption of Google Drive and Google Forms in the teaching of the GEN0304 Digital Literacy course yielded the following results.

1. Information collected in the study on opinions and satisfaction in the use of Google Drive and Google Forms innovation in teaching of the GEN0304 Digital Literacy course was divided into 2 parts, as follows.

Part 1 General information of students registered for the GEN0304 Digital Literacy course at Suan Sunandha Rajabhat University

Part 2 Opinions and satisfaction levels of students on the adoption of Google Drive and Google Forms innovations in the course's teaching

Questionnaires were distributed to the sample group to survey their satisfaction levels. The satisfaction levels were divided into 5 levels. The satisfaction levels of the responders on the adoption of Google Drive and Google Forms for teaching were as follows.
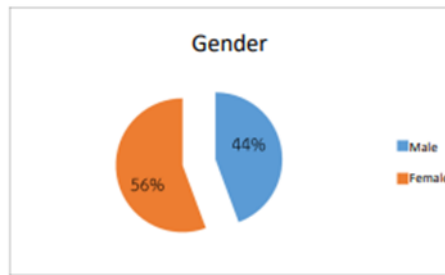
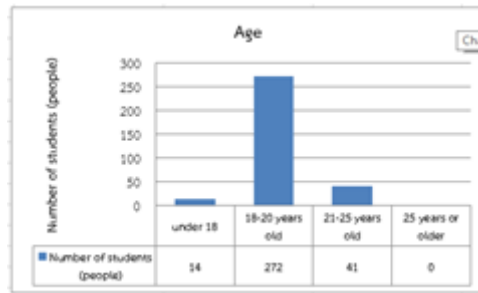**Figure 1** Genders of students registered for the GEN0304 Digital Literacy course

Figure 2 Age groups of students registered for the GEN0304 Digital Literacy course
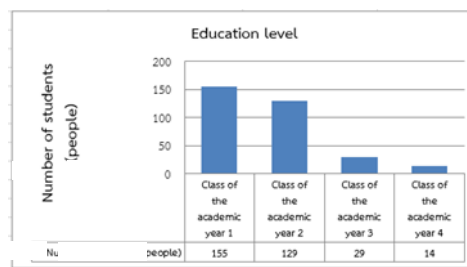

Figure 3 College years of students registered for the GEN0304 Digital Literacy course

Part 2 Opinions and satisfaction levels of students on the adoption of Google Drive and Google Forms innovations in the course's teaching

The responders' satisfaction was divided into 5 levels, summarized in Table 2 below.

Table 2 Opinions and satisfaction levels of students in the adoption of Google Drive and Google Forms innovations in the course's teaching

Areas being assessed	Mean value	S.D.	Satisfac-tion level
1. Convenience of logging into Google Drive and Google Forms	4.84	0.37	highly satisfied
2. Ease-of-use of the menus in Google Drive and Google Forms	4.60	0.49	highly satisfied
3. Convenience of accessing information in Google Drive and Google Forms	4.31	0.48	satisfied
4. Problems during uses of Google Drive and Google Forms	1.52	0.73	low
5. Benefits of the uses of Google Drive and Google Forms	4.73	0.45	highly satisfied

Areas being assessed	Mean value	S.D.	Satisfac-tion level
6. Desire to continue using Google Drive and Google Forms	4.26	0.44	satisfied
7. Appropriateness of the adoption of Google Drive and Google Forms in the course's teaching	4.36	0.48	satisfied
Overall satisfaction level	**4.00**	**0.11**	**satisfied**

Table 2 shows the opinions and satisfaction levels of the students in the adoption of Google Drive and Google Forms in the course's teaching. The summary is as follows.

1. Most responders were highly satisfied with the convenience of logging into Google Drive and Google Forms, giving it an average score of 4.84. The standard deviation was 0.37.

2. Most responders were highly satisfied with the ease-of-use of the menus in Google Drive and Google Forms, giving it an average score of 4.60. The standard deviation was 0.49.

3. Most responders were satisfied with the convenience of accessing information in Google Drive and Google Forms, giving it an average score of 4.31. The standard deviation was 0.48.

4. Most responders gave a low rating on problems during uses of Google Drive and Google Forms, giving it an average score of 1.52. The standard deviation was 0.73.

5. Most responders were highly satisfied with the benefits of the uses of Google Drive and Google Forms, giving it an average score of 4.73. The standard deviation was 0.45.

6. Most responders gave the satisfied rating when asked about the desire to continue using Google Drive and Google Forms, giving it an average score of 4.26. The standard deviation was 0.44.

7. Most responders were satisfied with the appropriateness of the adoption of Google Drive and Google Forms in the course's teaching, giving it an average score of 4.09. The standard deviation was 0.11.

Overall, sample group was satisfied with the adoption of Google Drive and Google Forms innovation in the teaching of the GEN0304 Digital Literacy course. The mean score was 4.09, and the standard deviation was 0.11.

Conception or Discussion

1. This study uses Google Drive and Google Forms innovations to support the teaching process in Suan Sunandha Large Group Instructional System, to the benefit of the members of staff that managed the general education courses, where there were 2,000-10,000 students per study group.

2. This study demonstrated the uses of Google Drive and Google Forms for the purpose of supporting the teaching of the general education courses, for example, to allow more flexibility in changing course contents and provide a better degree of convenience for the students, by providing an easy-to-access portal with updated information, saving both time and travel expenses.

3. The use of Google Drive and Google Forms in the courses' teaching allowed convenient and fast communications, not limited by time and locations.

4. The use of Google Drive and Google Forms in the teaching fulfilled the needs of the students and the instructors who had limited available time and who face long commutes.

5. One of the benefits of Google Drive and Google Forms innovations in teaching was the ease of setting up. The instructors could add new students directly or share a password for students to access Google Drive and Google Forms. Only a short amount of time was required for organizing this.

6. The use of Google Drive and Google Forms innovations in the teaching shortened the time required for assigning assignments and reduced the use of paper, as well as allowed the instructors to mark and summarize the students' scores in a single platform.

ACKNOWLEDGMENTS

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