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## **THE SATISFACTION OF E-LEARNING MANAGEMENT FOR GES0101 COURSE, INFORMATION TECHNOLOGY FOR COMMUNICATION AND LEARNING**

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*The purposes of the development of GES 1102 Course Management for Science and Quality of Life, General Education Course, Suan Sunandha Rajabhat University, include to develop the GES 1102 Course Management for Science and Quality of Life, which can be used with various devices, such as smart phones, and tablets, and to enable the students to gain information, do homework, and access documents and video for convenient, speedy, up-to-date and efficient revision.*

*Research methodologies include the use of GES 1102 Course Management for Science and Quality of Life developed by using Moodle v. 2.5, and a questionnaire to find out users' satisfaction of the GES 1102 Course Management. Samples include 2,000 students registering to study the course GES 1102, Science and Quality of Life.*

*The research findings point out that the development of the Learning Management System can be used with variety of devices, and better support the learning management, lesson revision, information retrieval, and unit activities including a developed course website with the increase in efficiency in learning management and learning support.*

**Keywords:** E-Learning Management, General Education, Satisfaction

### **Introduction**

Office of General Education and Electronic Learning Innovation is an educational unit in the general education course. The objective of the course is to focus on the development of global citizenship and Thai citizenship according to the national higher education

qualifications framework (The Higher Education Committee, 2005). Educational management of the general education course is an integrated learning management between classes, using electronic learning innovation and using project-based. Learning management focuses on providing students with self-responsibility and self-directed learning. General education is an integral part of the undergraduate degree program which focus on producing graduates who are knowledgeable in both theory and practice, can be applied appropriately with the ability to think, analyze, synthesize systematically, always seek knowledge by yourself and be able to communicate with others as well. General education is a subject that is considered important for being a graduate because it helps to enhance the characteristics of desirable graduates in general. In accordance with the policy of the Office of General Education and Electronic Learning Innovation, Suan Sunandha Rajabhat University has determined that teaching and learning management is conducted both inside and outside the classroom by applying innovation and technology in the teaching and learning process of general education courses in order to make teaching and learning more effective and achieve the course of both the instructor and student.

At present, the use of online teaching and learning systems for students to review lessons, search for study information and do unit activities for each course also found that there was a problem with the display of the system on communication tools such as mobile phones (Smart phones) and tablet devices are not as good as they should be. In addition, there is a problem with logging in to use systems, doing unit activities, studying textbooks and electronic documents on the system are not easy. As well as, the display of press releases and course information with a large image format or video (VDO) have not yet supported on small communication devices, causing some images or videos (VDO) to disappear from the screen, delay in receiving information, adjusting the display view, and communication errors.

According to the introduction of the Learning Management System developed by Moodle Version 1.9 (Moodle v.1.9), the system provided services to large groups of students enrolled in general education courses. This research determined a sample group from a population of 2,000 students to study the use of online teaching and learning systems for students to review lessons and search unit activity of each course. Moreover, the display of the system on communication tools such as mobile phones (smart phones), tablet devices are not as good as they should be. From the problem, it is found that logging into the system is difficult, unit activity or studying textbooks and electronic documents on the system is not easy and the display of press releases of course information in large format images and videos does not yet support to display on small communication devices causing some images or videos disappear from the screen, delays in receiving information, adjusting the display view, and communication errors.

Therefore, the research team considers the importance of improving and developing the Learning Management System to be applied in general teaching and learning courses and support self-study through communication tools such as mobile phones (smart phones) and tablet devices to make it convenient, fast, modern and more efficient.

## **Literature review**

### ***Study guidelines***

LMS (Learning Management System) is an online teaching and learning system via the Internet that provides important tools for instructors, learners and administrators, including course management systems, lesson information management system, course content management system, and learner information management system (Intaraphu & Srifah, 2015). The learning assessment tool include the system tools to help manage communication, interaction and organize learning processes such as Chat communication, E-mail, Web-board, secondary storage and reporting results, etc. The main elements of the LMS are 4 important systems: 1) Course Management System is a tool to create courses, create and import the contents of the course, create sources, research information in courses, and do extra activities in courses. 2) User Management System is a system for managing students in the course. The system can create student groups based on multiple levels of access, check the members of the user, and keep the details of the learners. 3) Test & Tracking Management System is a tool to create activities, test activities, homework And evaluation system for learning. 4) Communication and interaction management system is a component that helps to promote learning to communicate among teachers - instructors, instructors - learners, and learners - learners with both online and offline formats, including Web- board, E-mail, Chat room, News, Calendar. The good LMS system must support SCORM standard to be able to support the content. The good LMS system must support the SCORM standard to be able to support the content that has been developed in different platforms to be compatible (Chiwaphanich & Varee, 2015).

In this research, the Learning Management System was implemented and evaluated the results of system usage from learners. The system can be applied to the general education course that supports self-study through communication tools such as mobile phones (smart phones) and tablet devices, which result in teaching and learning management to be convenient, fast, modern and more efficient.

### ***Processes and procedures in study***

Adopting a Learning Management System by E-Learning provide services to a large group of students enrolled in general education courses. The study procedure can be divided into 7 steps as follows: 1) studying the problems and related research 2) analyzing and designing the format of the course website 3) developing and testing the course website 4) installing the website to be used in teaching and learning. 5) Assess the effectiveness of the course website. 6) Analyze and summarize results 7) Prepare the performance report.

## **Methodology**

### ***Study guidelines***

The population used in this study was undergraduate students who enrolled in the course GES0101 Information Technology for Communication and Learning at Suan Sunandha Rajabhat University in Semester 2/2018. The samples were undergraduate students who registered for the course GES0101 Information and Communication Technology and Learning at Suan Sunandha Rajabhat University in the term 2/2018. The samples were

determined by Simple Sampling by using the finished table of Krejcie & Morgan, received a sample of 341 people from a population of 3,000 people.

### ***Educational processes and procedures***

The research instruments were electronic lessons. Learning and teaching management by e-Learning and questionnaire, opinions and satisfaction with the teaching and learning management of e-Learning in GES0101 Information Technology for Communication. Data collection was done by distributing the questionnaires to the respondents. The questionnaire is divided into 3 parts which are as following.

Part 1 General information of students in GES0101 class

Part 2 Information characteristics of students' opinions towards e-Learning

Part 3 Characteristics of student satisfaction towards the characteristics of electronic lesson design.

The average assessment criteria for satisfaction rating are defined in 5 levels as follows, the average level of 4.51-5.00 is the most satisfied, 3.51-4.50 is very satisfied, 2.51-3.50 is moderate satisfied, 1.51-2.50 is less satisfied, and 1.00-1.50 is not satisfied.

### **Conclusions**

Table 1 The satisfaction of e-learning management for GES0101 course, information technology for communication and learning in aspect of electronic lesson

<b>Satisfaction assessment topic of electronic lesson</b>	<b>Mean</b>	<b>S.D.</b>	<b>Satisfaction level</b>
1. e-Learning helps achieve learning goals	4.36	0.48	High
2. e-Learning helps to understand the lesson	4.51	0.50	Highest
3. e-Learning helps to enhance self-study skills	4.29	0.53	High
4. e-Learning helps to remember the content	4.31	0.46	High
5. Study suggestions are useful for study.	4.23	0.52	High
6. Announcement of news to learners is useful for learning.	4.24	0.50	High
7. Assessment of learning is important to learning.	4.37	0.48	High
8. Doing activities at the end of every lesson helps to understand the lesson.	4.31	0.46	High
9. E-learning can save time in studying.	4.35	0.48	High
10. Able to apply knowledge and understanding to use in daily life	3.48	0.96	Moderate

### ***Result and Discussion***

The study of satisfaction of e-learning management for GES0101 course, information technology for communication and learning has the following results.

1. Information regarding opinions in e-learning management consists of 3 parts which are

Part 2 The satisfaction of e-learning management

Information about the opinions of e-Learning in teaching and learning from the sample satisfaction survey. The criteria for satisfaction rating are divided into 5 levels according to

the opinions of the respondents. The information about the opinions in the teaching and learning style of e-Learning can be summarized as in Table 1 as follows.

From Table 1, the opinions of the sample groups in the e-Learning management in the lesson can be summarized as follows.

- Teaching and learning style e-Learning helps achieve learning goals. Most of the samples have high level of opinions which has an average of 4.36, standard deviation 0.48.

- Teaching and learning through e-Learning helps to understand the lesson. Most of the samples have the highest level of opinions which has an average value of 4.51, standard deviation 0.50.

- Teaching and learning style e-Learning enhances self-study skills. Most of the samples have high level of opinions which has an average value of 4.29 with standard deviation 0.53.

- e-Learning teaching and learning helps to remember the content. Most of the samples have a high level of opinion which has an average value of 4.31 with a standard deviation of 0.46.

- Study suggestions are useful for study. Most of the samples have a high level of opinion which has an average value of 4.23 with a standard deviation of 0.52.

- Announcement of news to learners is useful for learning. Most of the samples have a high level of opinion which has an average value of 4.24 and a standard deviation of 0.50.

- Assessment of learning is important to learning. Most of the samples have a high level of opinion which has an average value of 4.37 with a standard deviation of 0.48.

- Doing activities at the end of every lesson helps to understand the lesson. Most of the samples have a high level of opinion which has an average value of 4.31 with a standard deviation of 0.46.

- Teaching by e-Learning can save time in learning. Most of the samples have a high level of opinion which has an average value of 4.35 and a standard deviation of 0.48.

- Teaching by e-Learning can apply knowledge and understanding in everyday life. Most of the samples had a medium level of opinion which had an average of 4.48 standard deviation 0.96.

In summary, the e-learning of teaching and learning management in the sample group had a high level of mean score of 4.25, standard deviation 0.15.

Part 3 Characteristics of student satisfaction towards the characteristics of electronic lesson design Data collection was used by distributing the questionnaires to the respondents.

The satisfaction with the electronic lesson design from the survey of the satisfaction level of the sample according to the opinions of the respondents can be summarized in Table 2 as follows.

Table 2 The satisfaction of e-learning management for GES0101 course, information technology for communication and learning in aspect of designing electronic lessons

Satisfaction assessment topics of designing electronic lessons	Mean	S.D.	Satisfaction level
1. Menu easy to understand and easy to access information	4.21	0.44	High
2. Creative e-Learning screen design helps you understand the lesson.	4.25	0.43	High
3. The proportion of the screen is suitable and beautiful	3.47	0.96	Moderate
4. Size, quality and color of characters Is suitable	4.32	0.49	High
5. The size and quality of still images / movements are appropriate.	4.42	0.49	High
6. The size and quality of the graphic work is beautiful and attractive.	4.37	0.51	High
7. The interaction with users is convenient and easy to use.	4.30	0.46	High
8. Retrieving and saving data can be done correctly.	3.46	0.97	Moderate

From Table 2, the opinions of the sample groups in e-Learning in terms of satisfaction with the electronic lesson design can be summarized as follows:

- The main menu is easy to understand and easy to access information. Most of the samples have a high level of satisfaction. G, which has an average of 4.21, standard deviation 0.44.

- Creative e-Learning screen design helps to understand the lesson. The majority of the sample group had a high level of satisfaction with a mean of 4.25, standard deviation 0.43.

- The proportion of the screen is suitable and beautiful. Most of the sample groups had a moderate level of satisfaction with a mean of 3.47 and a standard deviation of 0.96.

- Size, quality and color of characters is suitable. The majority of the sample group had a high level of satisfaction, with an average of 4.32 with a standard deviation of 0.49.

- The size and quality of still images / movements are appropriate. Most of the sample groups had a high level of satisfaction with a mean of 4.42. The standard deviation was 0.49.

- The size and quality of the graphic work is beautiful and attractive. Most of the sample group had a high level of satisfaction, with an average of 4.37 standard deviation 0.51.

- The interaction with users is convenient and easy to use. The majority of the sample group has a high level of satisfaction, which has an average value of 4.30 with a standard deviation of 0.46.

Retrieving and saving data can be done correctly. The majority of the sample group had a high level of satisfaction, with an average of 3.46, standard deviation 0.97.

In summary, learning management by e-Learning in electronic lesson design. The sample group has a high level of satisfaction with an average of 4.10 and a standard deviation of 0.26.



### **Conclusion**

From the results of research can be concluded as follow.

1. This research can bring the e-Learning Teaching Management System to support teaching and learning in large group courses. It is very useful for staff in general course management with 200-1,000 students per group.
2. The e-Learning teaching and learning system can be used to support the teaching of courses in large groups and online groups such as flexibility in changing content and convenient learning, easy access, updated information and easy to do, save time and travel expenses.
3. The e-Learning teaching and learning system allows for fast communication without limitation of time and location.
4. The e-Learning teaching and learning system responds to the needs of learners and teachers who are not well-prepared for the time and distance in learning.
5. The e-Learning teaching and learning system encourages students who are not confident, afraid to answer questions, ask questions, set learning issues in the classroom with more courage. Since it is not necessary to present yourself in front of the instructor and classmates using tools such as e-mail, web board, chat, and newsgroup.

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### **References:**

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