# Designing Social Media into Higher Education Courses

Thapanee Seechaliao

Abstract—This research paper presents guiding on how to design social media into higher education courses. The research methodology used a survey approach. The research instrument was a questionnaire about guiding on how to design social media into higher education courses. Thirty-one lecturers completed the questionnaire. The data were scored by frequency and percentage. The research results were the lecturers' opinions concerning the designing social media into higher education courses as follows: 1) Lecturers deem that the most suitable learning theory is Collaborative Learning. 2) Lecturers consider that the most important learning and innovation Skill in the 21st century is communication and collaboration skills. 3) Lecturers think that the most suitable evaluation technique is authentic assessment. 4) Lecturers consider that the most appropriate portion used as blended learning should be 70% in the classroom setting and 30% online.

Keywords—Instructional design, social media, courses, higher education

# I. Introduction

THE Thai university launched the project "Microsoft Surface for Lecturers and Learners" to support online learning and encourage lecturers and learners using technology in education. The Faculty of Education, Mahasarakham University also specified in the Strategic Plan 2011- 2020 that aims to develop an e-learning system. It will provide students access to online courses easily [1]. Therefore, lecturers need to be familiar with technology and design their courses to support online learning effectively.

An overwhelming majority report that the potential's social media becomes a valuable tool to support communications and collaborative learning. Especially, social media in trend such as Facebook, Youtube, Blogs, Wikis, Tweeter, Myspace, LinkedIn, Flickr, Slideshare, and Podcasts can promote online learning. [8]. Lecturers believe that social media sites such as video, podcasts, and wikis are valuable tools for teaching and collaborative learning. Youtube and Facebook were also the most frequently cited to support professional careers [6]. Facebook was the most popular platform for online social networking among university students. Facebook could be utilized as an online environment to facilitate the learning of English [4]. Moreover, the potential of Facebook can support students to communicate and collaborate with lecturers effectively. Therefore, students have been adopted Facebook widely [8].

Thapanee Seechaliao is with the Educational Technology and Communications Department, Faculty of Education, Mahasarakham University, Thailand. 44000 (e-mail: thapanee.see@msu.ac.th).

Social media can facilitate learning activities at university. Facebook was developed for four university courses and provided information relevant to the courses and allow student to have more interaction [3]. Almost lecturers were using social media both in during class and outside class. They have posted content for students to view or read outside class, required students to read or view social media as part of a course assignment, and assigned students to comment on or post to social media sites [6].

Instructional Design (ID) is popular for depicting the systematic process of developing education and training. Various forms of models exist that can be best applied in different settings [2]. ID is a process that can help improve the design and development of courses and course content. Often associated with training in business and industry, ID has been widely used by educators in revising and modifying existing courses and to plan and implement new instruction [7]. The instructional planning process they actually describe the concept of course design, as well as what has been indicated as instructional design on the operational level. In fact, their guide helps teachers to plan instruction that gears toward intended learning outcomes on the operational level [5]. Additional, the systematic instructional design process can be used to create effective instruction which will be meaningful for instructors and students [7]. The term instructional design will be used to describe the complete process of: (a) analyzing what is to be taught and learned; (b) determining how it is to be taught and learned; (c) conducting tryout and revision; and (d) assessing whether learners do learn [2]. The systematic instructional design process can help instructors can become more efficient in developing their courses and approaches to different learning situations [7].

Although lecturers in faculty of education, Mahasarakham University deem that social media can benefit for online learning. Most lecturers still use traditional teaching methods and focus on knowledge as usual. Finally, they may reject and or hesitate to use such technology as part of their course [10]. Therefore, researcher would like to investigate these guiding on how to design social media into higher education courses. The crucial components of course design including; (1) what Learning and Innovation Skills should be emphasized on 21st Century skills, (2) what Learning Theory, and (3) Evaluation are appropriate designed in 21st Century learning. The results would guide lecturers design social media into their courses more appropriately and encourage lecturers using social media into their courses widely. The efficient course design will help students achieve their learning objectives as expected in 21st Century learning.

### II. LITERATURE REVIEW

## A. Social Media in Higher Education

The potential's social media becomes a valuable tool to support communications and collaborative learning. Especially, social media in trend such as Facebook, Youtube, Blogs, Wikis, Tweeter, Myspace, LinkedIn, Flickr, Slideshare, and Podcasts can promote online learning. [8].

Lecturers believe that social media sites such as video, podcasts, and wikis are valuable tools for teaching and collaborative learning. Youtube and Facebook were also the most frequently cited to support professional careers [6]. Facebook was the most popular platform for online social networking among university students. Facebook could be utilized as an online environment to facilitate the learning of English [4]. Moreover, the potential of Facebook can support students to communicate and collaborate with lecturers effectively. Therefore, students have been adopted Facebook widely [8].

Social media can facilitate learning activities at university. Facebook was developed for four university courses and provided information relevant to the courses and allow student to have more interaction [3]. Almost lecturers were using social media both in during class and outside class. They have posted content for students to view or read outside class, required students to read or view social media as part of a course assignment, and assigned students to comment on or post to social media sites [6].

Lecturers need to know and learn how to design social media in their courses to help learners learn more and achieve learning objectives as expected.

### B. Instructional Design

Instructional Design models are popular for depicting the systematic process of developing education and training. Various forms of models exist that can be best applied in different settings [2]. The systematic instructional design process can be used to create effective instruction which will be meaningful for instructors and students. Following the basic processes and procedures that constitute instructional design, instructors can become more efficient in developing their courses and approaches to different learning situations [7].

However, the instructional planning process they actually describe the concept of course design, as well as what has been indicated as instructional design on the operational level. In fact, their guide helps teachers to plan instruction that gears toward intended learning outcomes on the operational level. These examples show the variety of terms used and how the various authors attribute different meanings to these terms. Differences in opinion about how the learning process takes place in the individual can be reflected in the approaches to curriculum development, course design, and instructional planning. As a course is an educational solution to a problem, or an educational answer to a question, it is of great interest how the designer perceives the learning process that makes part of that solution or answer. In the following sections a

variety of these perceptions and their related approaches are discussed [5].

The term instructional design will be used to describe the complete process of: (a) analyzing what is to be taught and learned; (b) determining how it is to be taught and learned; (c) conducting tryout and revision; and (d) assessing whether learners do learn. In some situations a fifth step is added involving implementing the resulting product or system in the intended setting or marketing it commercially depending on their distribution plan. [2].

Instructional Design (ID) is a process that can help improve the design and development of courses and course content. Often associated with training in business and industry, ID has been widely used by educators in revising and modifying existing courses and to plan and implement new instruction. The process is systematic and systemic; steps are taken in the design (planning) phase of the course that are dependent upon each other to generate a successful product (course). One of the more tried and true ID models is ADDIE (Analyze, Design, Develop, Implement, and Evaluate) although many others exist and are used in different learning situations [7].

Following the steps of a widely accepted Instructional Design (ID) model can assist instructors in preparing and delivering meaningful and effective instruction. The term instructional design refers to the systematic and reflective process of translating the principles of learning and instruction into plans for instructional materials, activities, information resources, and evaluation [9]. It is during this systematic process that you should consider the audience for whom the instruction is designed, what goals drive the instruction, and which objectives will students follow to ensure they do what you want them to do [7].

## C. Course Design

Instructional Design (ID) is a process that can help improve the design and development of courses and course content [7]. In this entry, "course design" is the term used for the tactical planning process that is positioned between the large-scale strategic level of curriculum development and the small- scale operational level of instruction design. On this tactical level, the main goals from the overall curriculum development outcomes are organized in courses, that is, in comprehensive entities of objectives, assessment instruments, instructional strategies and materials. This planning process involves analysis of the specific needs, the analysis of favorable and inhibiting conditions for implementation, and the selection and application of instructional theories. The aim of this entry is to review the concepts and approaches to course design as well as their application in formal and corporate education [5].

This research investigates how to design social media into higher education courses appropriately in 21<sup>st</sup> Century learning. The crucial components of course design including; (1) what Learning and Innovation Skills should be emphasized on 21<sup>st</sup> Century skills, (2) what Learning Theory, and (3) Evaluation are appropriate designed in 21<sup>st</sup> Century learning. The results would guide lecturers design social media into

their courses more appropriately and encourage lecturers using social media into their courses widely. The efficient instructional design will help students achieve their learning objectives as expected.

### III. RESEARCH METHODOLOGY

The research methodology uses a survey approach as follow:

#### A. Objective

The objective is to investigate the guiding on how to design social media into higher education courses.

## B. Samples

The samples consist of 31 lecturers in the Faculty of Education at Mahasarakham University.

## C. Research Instrument

The research instrument is a questionnaire about guiding on how to design social media into higher education courses. It consists 12 statements rated on a five-point Likert scale (1= strongly disagree, 2= disagree, 3=undecided, 4= agree, and 5=strongly agree). This instrument was validated by 3 experts in diffusion of innovations, 5 experts in online learning, and 3 experts in educational research and evaluation using the index of item-objective congruence (IOC). The IOC values were ranging from 0.79 to 1.00. This instrument was applied to pilot participants of 125 lecturers from Chulalongkorn University, Srinakharinwirot University, Kasetsart University, Silpakorn University, and Khonkhean University. The reliability coefficient was calculated by using Cronbach's equation and it was 0.62 which is suitable for conducting the study.

# D.Procedure

The data were collected through the questionnaire of guiding on how to design social media into higher education courses. Thirty one lecturers completed the study.

# E. Data Analysis

The data were scored by using frequency and percent.

## IV. RESULTS

The research results as follows; a majority of the lecturers who completed the study were male. The largest age group was 30-35 years old. The most commonly held highest degree was a Master's. The most common academic position they held was "lecturer." The largest group was in the Department of Educational Technology and Communications. They had monthly incomes of 30,000 THB and over. They had experience of using social media, namely, Facebook, mostly through internet use on devices such as notebooks and desktops.

Fig. 1 presents the findings of this research were the Learning Theory that is suitable for guiding on how to design social media into higher education courses as follow; the first suitable Learning Theory is Collaborative Learning (frequency=25, percent=37.31) 2) The second proper theory is Problem-Based Learning (frequency=24, percent=35.29),

followed by Project-Based Learning (frequency=18, percent=26.47).

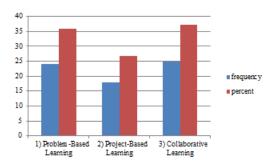


Fig. 1 Learning Theory that is suitable for guiding on how to design social media into higher education courses

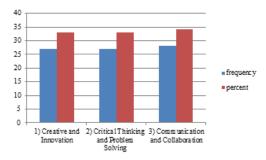


Fig. 2 Learning and Innovation Skills that is suitable for guiding on how to design social media into higher education courses

Fig. 2 presents the findings of this research were the Learning and Innovation Skills that is suitable for guiding on how to design social media into higher education courses as follow; Instructional techniques should help students develop the learning and innovation skills in the 21st century, in which the most important skill is communication and collaboration skills (frequency=28, percent=34.14), followed by creativity and innovation skills (frequency= 27, percent=32.93) and then critical thinking and problem solving (frequency=27, percent=32.93).

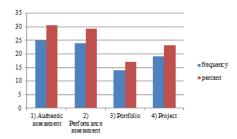


Fig. 3 Evaluation that is suitable for guiding on how to design social media into higher education courses

Fig. 3 presents the findings of this research were the Evaluation that is suitable for guiding on how to design social media into higher education courses as follow; Regarding evaluation techniques, authentic assessment should be firstly taken into account (frequency= 25, percent=30.12), followed

by performance assessment (frequency= 24, percent=28.92) and then project (frequency=19, percent=22.89).

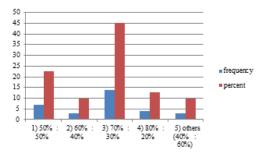


Fig. 4 Appropriate portion used as blended learning that is suitable for guideline on designing social media into higher education courses

Fig. 4 presents the findings of this research were the appropriate portion used as blended learning that is suitable for guideline on designing social media into higher education courses as follow; The most appropriate portion of integrated social media in higher education used as blended learning should be 70% in the classroom setting and 30% online (frequency=14, percent=45.16), followed by 50% in the classroom and 50% online (frequency=7, percent=22.58) and then 80% in the classroom and 20% online (frequency=4, percent=12.90).

### V.CONCLUSION

The results of this research revealed the guiding on how to design social media into higher education courses. It found that lecturers gave their opinions concerning the guiding on how to design social media into higher education courses. It can be guideline to design instruction that is more suitable for 21st Century Learning.

The first suitable learning theory is Collaborative Learning. The second proper theory is Problem-Based Learning, followed by Project-Based Learning. Therefore, it should be good to directly guide instructional designers and lecturers to design Collaborative Learning into their courses.

Instructional techniques should help students develop the learning and innovation skills in the 21st century, in which the most important skill is communication and collaboration skills, followed by creativity and innovation skills and then critical thinking and problem solving. Therefore, it should guide instructional designers and lecturers to emphasize enhancing communication and collaboration skills into their courses.

Regarding evaluation techniques, authentic assessment should be firstly taken into account, followed by performance assessment and then project. Therefore, it should guide instructional designers and lecturers to design authentic assessment into their courses. Moreover, according to the results, the most appropriate portion of designing social media into higher education courses used as blended learning should be 70% in the classroom setting and 30% online, followed by 50% in the classroom and 50% online and then 80% in the classroom and 20% online. Therefore, it should guide

instructional designers and lecturers to design appropriate portion used as blended learning into their courses. However, the most appropriate portion used as blended is up to course description and characteristic.

At last, this course design could help learners achieve learning outcomes as the 21<sup>st</sup> Century learners.

#### ACKNOWLEDGMENT

This work has been supported by the Mahasarakham University Development Fund, Mahasarakham University, Thailand under the international conference grant.

## REFERENCES

- [1] Executive Board of Education. (2010) the Strategic Plan 2011-2020. Mahasarakham: Faculty of Education, Mahasarakham University.
- [2] Gustafson, K.L. (1996). Instructional Design Models. In Plomp, Tj., and Donald P. Ely. (Eds.), *The International Encyclopedia of Educational Technology*, 2nd edition (pp. 27-32). Oxford: Pergamon Press/Elsevier Science Ltd.
- [3] Irwin, C., Ball, L., Desbrow, B., & Leveritt, M. (2012). Students' perceptions of using Facebook as an interactive learning resource at university. Australasian Journal of Educational Technology, 28(7), 1221-1232.
- [4] Kabilan, M.K., Ahmad, N, & Abidin, M. J. Z. (2010). Facebook: An online environment for learning of English in institutions of higher education? *Internet and Higher Education*, 13 (4), 179–187.
- [5] Kessels, J.W.M. & Plomp, Tj. (1996). Course Design. In Plomp, Tj., and Donald P. Ely. (Eds.), *The International Encyclopedia of Educational Technology*, 2nd edition (pp. 143-148). Oxford: Pergamon Press/Elsevier Science Ltd.
- [6] Moran, M., Seaman, J., & Tinti-Kane, H. (2011) Teaching, Learning, and Sharing: How Today's Higher Education Faculty Use Social Media. Boston, MA: Pearson Learning Solutions.
- [7] Northern Illinois University, Faculty Development and Instructional Design Center. (2015, January 12). Course Design: A Systematic Approach. Retrieved from http://www.facdev.niu.edu/facdev/resources/guide/prepare/course\_desig n a systematic approach.pdf
- [8] Roblyer, M.D., McDaniel, M., Webb, M., Herman, J., & Witty, J. V. (2010). Findings on Facebook in higher education: A comparison of college faculty and student uses and perceptions of social networking sites. *The Internet and Higher Education*, 13(3), 134-140.
- [9] Smith, P. L., & Ragan, T. J. (1999). Instructional design (2nd ed.). Upper Saddle River, NJ: Prentice Hall.
- [10] Whattananarong, K. (2011). Innovation and Technical Education Technology. Bangkok, Thailand: King Mongkut's University of Technology North Bangkok.

Thapanee Seechaliao received a Ph.D. in 2010 from Chulalongkorn University, Thailand, and a scholarship from the Commission on Higher Education, Thailand under the grant program Strategic Scholarships for Frontier Research Network for the Ph.D. Program Thai Doctoral degree. She received the Best Paper Award from the 2012 International Conference on Education and Management Innovation, Singapore and the Dissertation Award 2013 from the National Research Council of Thailand (NRCT). Dr. Seechaliao is currently a lecturer in the Educational Technology and Communications Department, Faculty of Education, Mahasarakham University, Thailand. Her fields of research include educational technology, instructional design, and diffusion of innovations. E-mail: thapanee.see@msu.ac.th or thapanee.see@hotmail.com