

The Effect of Blended Learning Approach Using Facebook and Learning Experiences Outside the Classroom on an Inquiring Mind of Freshmen in Teacher Education Program at Institute of Physical Education, Chumphon Campus

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Abstract - The purposes of this research were: 1) to develop a blended learning model using Facebook and learning experiences outside the classroom; 2) to study the effect of the developed blended learning approach on students' inquiring mind; and 3) to study students' opinion towards the developed model. Samplings were 30 freshmen in Teacher Education Program at Institute of Physical Education, Chumphon Campus from Innovation and Information Technology for Education course in the second semester of the academic year 2014. Research instruments were: (1) a blended learning model using Facebook and learning experiences outside the classroom; (2) activities plans on Innovation and Information Technology for Education; (3) Facebook Group; (4) an inquiring minds Test; and (5) After Action Review (AAR) for Self-Reflection. Data were analyzed using mean, standard deviation, content analysis, and t-test. The results showed that:

1) The developed blended learning model was a combinations of learning in classroom and outside the classroom which had Facebook Group for sharing of activities, contents, refection and discussion. The blended learning approach consisted of 4 phases were these: (1) Preparation,

(2) Action, (3) Presentation, and (4) Assessment, which in each phase had 6 steps of the cycle of learning: (1) Setting Problem, (2) Planning and Searching, (3) Doing, (4) Reflection, (5) Conclusion, and (6) Evaluation and Applying.

2) The average scores of the students' inquiring mind after learning through the developed model were significantly higher than before learning at .05 level.

3) Most students agreed that their learning to develop not only their knowledge in higher levels but this made them able to learn more. They felt that the activities for promoting experiences outside the classroom were challenging that made them enjoy to solve the problems.

Keywords - Blended Learning, Experience Learning, Outside the Classroom, Facebook, Inquiring Mind

I. INTRODUCTION

Faculty of Education, Institute of Physical Education, Chumphon Campus, produces graduates in a bachelor's degree in education with a focus on physical education, who have good knowledge, attitude, and skills as required to be used academically and

professionally for developing oneself and the society to be better. The curriculum program emphasizes on promoting the students to have an inquiring mind, critical thinking, analytical skill, solving problem skill, and collaborative working [1]. According to the aims, it is found that “an inquiring mind” is an important factor that the Faculty wants to generate from the education arrangement.

An inquiry is a habit of mind features with characteristics of person who have curious, consciousness, initiatives, reasoning, perseverance, and learning preference. This is one of the demands of human development in the 21st century.

According to a survey investigating the inquiring mind of the students of the Physical Education Program during the first semester of 2014, it was found that most students had a medium level of inquiring mind. This is in agreement with the study of Pattaraporn Uoonahaseth [2], which found that the students who were about to graduate had a medium level of inquiring mind. When considering the overall image, most Thai undergrad students seem to lack an inquiring mind as well as skills for lifelong learning. Therefore, it is necessary that the Faculty will be promote the student’s inquiring mind through the teaching and learning management.

As technology is being integrated into educational processes, teachers are searching for new ways to enhance student motivation and learning. Through shared experiences and the results of empirical research, educators can ease social networking sites into instructional usage.

Facebook was launched in 2004 and it is a social network that can be used to connect students with other students, indirectly creating a learning community [3], Facebook was used in formal and informal settings in higher education, integrating Facebook use in education have highlighting uses of social interaction tools as learning tools [4]. Many educator and researchers agree that it is

essential to integrate social networking tools and sites with education.

In 2013 year, most students of Institute of Physical Education used Facebook in everyday for lifestyle activities such as chatting with their friends, following their learning activities in class and receiving and sending their personal message. They agreed that their use to Facebook were gaining more general knowledge. Nevertheless, they had less time for exam preparation, and had no time to review their lessons [5]. Therefore Facebook should be become a tool applied for education to enhance learning efficiency.

Blended learning is implemented in a variety of ways, ranging from online with face-to-face interaction to models in which face-to-face classroom instruction is integrated with online components that extend learning beyond the classroom which requires a high performance communication tools [6]. To maximize efficiency of the learning process, it is important to design a good approach of teaching and learning. This approach blends the learning in classroom condition and learning experience outside the classroom (LEOTC) with using Facebook-based activities that requires a high performance communication tools which support learning in anytime and anywhere. With this approach that can respond well to differences of individual learners, learning time of the students will be extended and their learning will be more efficient.

Teaching and learning with blended formats provides a learning environment that enhances real time interaction with learning materials, discussions with instructors and among colleagues, and the facility of providing actionable feedback without having to wait until the “Next class meeting”, as is the case with the traditional learning environment alone. A driving factor for the increased use of blended learning environments is that majority of students currently attending college consist of a generation who are accustomed to experiencing real time results from interacting with technological tools [7].

Such learners have therefore come to expect the similar experiences of “convenience and flexibility” from their learning process [8].

We believe that every children and youth should get experience the world beyond the classroom as an essential part of learning and personal development, whatever their age, ability or circumstances. Therefore, the researcher is interested in applying a blended learning approach that utilizes Facebook as a fundamental together with the learning experience outside the classroom program that is expected to have a beneficial effect on the students’ inquiring mind at Institute of Physical Education, Chumphon Campus.

II. THE PURPOSES OF RESEARCH

1. to develop a blended learning model using Facebook and learning experiences outside the classroom,
2. to study the effect of the blended learning approach using Facebook and learning experiences outside the classroom on students’ inquiring mind.
3. to study students’ opinion towards the developed model.

III. CONCEPT FRAMEWORK

Conceptual framework of this study, as shown in Fig. 1.

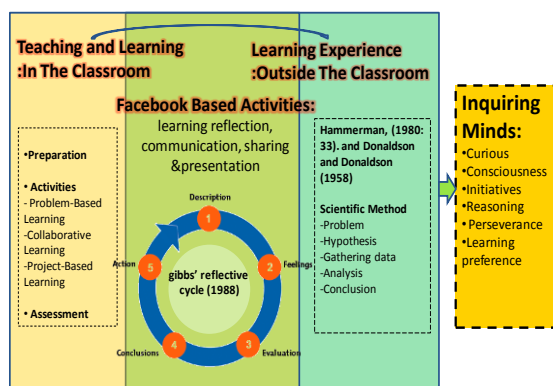


Fig 1. A Concept Framework of a Blended Learning (BL) Model using Facebook and Learning Experiences Outside the Classroom (LEOTC)

Blended learning (BL) is the flexibility teaching and learning by combines traditional face-to-face in the classroom and learning experiences outside the classroom with Facebook-based activities for enhancing efficiency learning.

Facebook is a social media which is applied as Learning Management System (LMS) for the delivery, support and monitoring and assessment of learning.

Learning Experience Outside the Classroom (LEOTC) is organized as a learning process to allow students to receive direct experience and enhance their inquiring mind, which the students will learn through solving problem so that they are developed in all aspects including physical, social, emotional, and intellectual aspects.

Inquiring mind is a habit of mind which is very important for lifelong learning of everyone in the 21st century. The essential features for inquiring minds are curious, consciousness, initiatives, reasoning, perseverance learning preference.

IV. METHODOLOGY

The Research&Development approach were used into two phases:

A. Creating a Blended Learning Model and Examining its Quality

In this phase, researcher analyzed and synthesized the concepts, principles, theories, and research study concerning existing a blended learning, an inquiring mind, learning experiences outside the classroom, Facebook: social classroom, to set concept framework and construct for the blended learning model using Facebook and learning experiences outside the classroom. The new model was adjusted the learning process from outdoor experiences learning by Hammerman (1980) xand Donaldson and Donaldson(1958)and gibbs’ reflective cycle (1988) . It is focused on learning by doing real tasks that have real consequences and then reflecting on these experiences over time. Then, it was reviewed and evaluated by 3 experts, whom were chosen

by selected sampling. Gathering data by using questionnaire. Furthermore, it tried out by 30 students who enrolled in the Information and technology course during the first semester of the academic year 2014, Institute of Physical Education Chumphon Campus. The researcher gathered data byself from observing, interviewing, tracking from the Facebook, and summary of after-action review (AAR) report. After that, data was analyzed by mean (\bar{X}) and standard deviation (S.D.) for analyze the quantitative, and content analysis was used for analyze the qualitative. Then the researcher take summary and comment for improving the new model.

B. The Implementation of the Developed a Blended Learning Model

In this phase, The sampling group was 30 students who enrolled in the Innovation and Information Technology for Education course during the second semester of the academic year 2014, the Faculty of Education, Institute of Physical Education, Chumphon. They were chosen by cluster sampling method. Research design is One Group Pretest – Posttest Design [9] for determined efficiency of the new model. The inquiring minds Test was developed by the researcher. It was a five-point, Likert - type rating scale questionnaire, which has reliability of 0.81, and it were used for pretest and posttest. Students studied through the developed model for 14 weeks, which F2F learning in the classroom and outside the classroom learning experiences, which was combined two environment learning by Facebook at <https://www.facebook.com/groups/849026641836319/>. As shown in Fig2. After finished, the researcher asked for students’ opinions. The quantitative data were analyzed by using dependent sample t-test, the qualitative data were analyzed by using content analysis.



Fig 2. A Learning Activities via Facebook of Blended Outside Classroom Learning Experience Model

V. RESULTS

Based of the research, the results can be seen as follows:

1. A developed blended learning model using Facebook and learning experiences outside the classroom on inquiring minds as shown in Fig. 3.

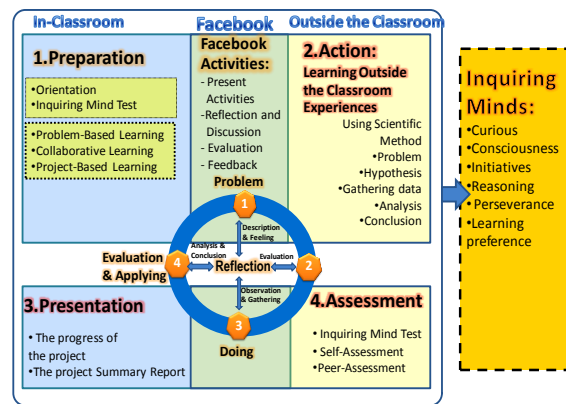


Fig 3. A Blended Learning Model using Facebook and Learning Experience Outside the Classroom

Blended learning model using Facebook and learning experiences outside the classroom consists of 4 phases as follow.

Phase 1 Preparation: This phase emphasizes on preparing for the purpose of blended learning in normal classroom. Students will be prepared to have their background ready for learning. Programs in this phase include an orientation for introducing methods of learning, a preparation for readiness in using

Facebook for the blended learning approach, a test to measure an inquiring mind prior to the learning, and a practice to perform each activity. There will be various methods of teaching including Problem-Based Learning, Collaborative Learning, Peer Learning and Project-Based Learning in order to prepare students' learning skills before they leave for real practices outside the classroom.

Phase 2 Action: This phase involves with practical actions for gaining experience outside the classroom. Students will get chances to utilize knowledge and skills learned in the classroom for conducting the planned activities in real situations. Meanwhile, students will use scientific methods for solving problem such as asking, observing and acquiring knowledge. In this phase, students can report learning and communicate with instructor and friends via the Facebook group.

Phase 3 Presentation: This is the phase for presenting outcomes from activities. The presentations will cover progress and results of the project. In addition, all steps of the operational process from the start until getting the project's final result will need to be reviewed in order to apply the knowledge for future learning.

Phase 4 Assessment: This phase involves with assessing the overall results, with an emphasis on the inquiring mind aspect. The assessments include self-assessment and peer-assessment.

In all the 4 phases of the learning process, the instructor has flexibility in managing. As shown in Fig.4.

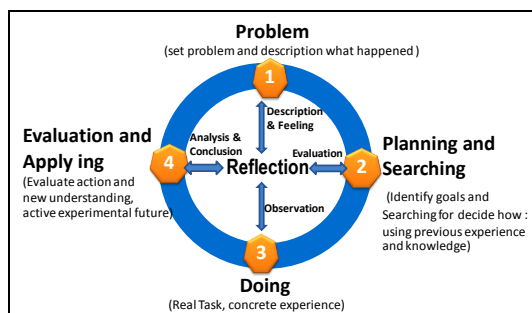


Fig 4. A Refection Cycle in BL Process using Facebook and Learning Experience Outside the Classroom

Each phase should include a cycle of learning and reflection as follow:

1. Problem: set problem and description what happened
2. Planning and Searching: Identify goals and Searching for decide how: using previous experience and knowledge
3. Doing: Real Task, concrete experience (taking action according to the plan)
4. Evaluation and Applying: Evaluate action and new understanding, active experimental future
5. Reflection: Reflect about how to learn and learning outcome

Reflect the learning with these procedures: (1) describing phenomena of the problem and the feelings, (2) assessing the operational plan, (3) observing and collecting data, and (4) analyzing and making a conclusion.

The experts agreed to the quality of the developed model in excellent level ($\bar{X} = 4.78$, $S = 0.26$), and the result of pilot study indicated that the developed model had feasibility for the implementation and it could be used to improve the students' inquiring mind.

2. The average scores of the students' inquiring mind after learning through the developed blended learning model were significantly higher than students' inquiring mind before learning on .05 level of significance. As shown in TABLE I.

TABLE I
THE COMPARISON OF PRETEST AND POSTTEST OF THE SCORE OF INQUIRING MIND

Score	N	\bar{X}	S.D.	t
pretest	30	3.3493	0.28193	3.905*
posttest	30	3.6347	0.29215	

Note: * $p < .05$

3. The students expressed similar opinions that the developed blended learning program allowed them to have more convenience in learning. By using Facebook to keep track of activities, they could exchange knowledge and

share experience with friends easier. This made them able to learn more. Regarding the learning experiences outside the classroom program, the students suggested that such this program should be organized for all years of education in order to apply the experiences continuously. They felt that the activities for promoting experiences outside the classroom were challenging. Learning something new and not able to obtain in the classroom made them enjoy to solve the problems. For example, in the activity that they had to train sports and recreations for kindergarten and primary school students after their classes, they learned practical techniques for teaching and controlling a classroom. It made them realize that teaching little kids was not as easy as they thought. However, this outside-the-classroom activity made them proud of themselves. They had a strong determination that they would finish the education and become good teachers. The students also thanked the instructor for encouraging them and giving good advice for their learning. The advice made the love to learn more by themselves. Although sometimes they would find a problem and wanted an answer from the instructor instantly, the instructor usually reminded them to think and try to solve the problem by themselves first. This approach made them believe that they can practice and gain more and more knowledge via self-learning. In addition, the project successfully, making him feel pride in themselves and their ability to get more.

VI. DISCUSSION

A developed Blended learning model using Facebook and learning experiences outside the classroom, it would be a quality learning model, because it was design for a learner-centered philosophy is essential to the success of any technology-based education program and using Facebook into the course to take advantage of students' familiarity with sharing and commenting on information [10]. The processing in order to help students more effectively develop their inquiring mind. Due to the blended learning function that offers both learning in-classroom and learning

experience outside the classroom, the student could have interaction both face to face and online learning which could improves the students' performance, and it's extend their learning experience. The F2F classroom should be as the preparing skill for learning outside the classroom as experience outside the classroom should be reviewed in the classroom in order to be reflective learning and conclusion for the application to learn next. Its including the preparation and self-study through the learning process in 4 steps, there are as follows: 1) Preparation, 2) Action, 3) Presentation, and 4) Assessment. Each phase should include a cycle of learning and reflection [11]. In accordance with the Gibb's reflective cycle so findings out of this study would indicate the developed model could improve the student's inquiring mind effectiveness.

VII. CONCLUSIONS

From this study, the results indicated that students benefited from this developed model as it facilitated their learning and could enhance their inquiring mind. It would be better to do more using facebook and experience learning outside the classroom on blended learning in order to find a better way to develop onto the inquiring mind; the results of the qualitative data would be collected for future comparisons. Students have the opinion that Facebook is one of the most effective ways of helping them with their communication skills is through doing presentations in the classroom, addition to it is most powerfully used outside the classroom as a way to increase interaction with them inside the classroom. Learning experiences outside the classroom activities makes them so happiness learning and meaningful.

Regarding the suggestions and recommendations from the students who experimented the model were agreed on the ease and convenience of use and improve a better way to develop the students' inquiring mind. However, the further improvement was suggested as the blended learning model would be better to do more research and

development on blended learning in order to find a better way to develop the students' inquiring mind. These would be benefited in different subjects.

REFERENCES

(Arranged in the order of citation in the same fashion as the case of Footnotes.)

- [1] Wanaklang, P. (2013). "Policies and approaches for administering work of the Institute of Physical Education during 2013-2017". Chon Buri: Institute of Physical Education.
- [2] Uonahaseth, P. (2010). "Factors affecting inquiry mind of Chulalongkorn university undergraduate students from an E-learning classroom integration". A Thesis for the Degree of Master of Education Program in Educational Technology and Communications. Chulalongkorn University.
- [3] Mallia, G. (2015). "THE SOCIAL CLASSROOM: Integrating Social Network Use in Education". IGI Global, Hershey, PA, 17033, USA.
- [4] Chandra, S.A. and George, M. (2015). "International Journal of Virtual Communities and Social Networking". 2015, pp. 36-51.
- [5] Rodniam, N. (2014). "Using Facebook that Affected Institute of Physical Education Students' Lifestyles". International Journal of the Computer, the Internet and Management. 22(1) (January-April), pp. 75-81.
- [6] Caulfield, J. (2011). "How to design and teach a hybrid course: Achieving student-centered learning through blended classroom, online, and experiential activities". Sterling, VA: Stylus Publishing.
- [7] Hartman, J.H., Dziuban, C., and Brophy-Ellison, J. (2007). "Faculty 2.0". EDUCAUSE Review, 42(5), pp. 62-76.
- [8] Lin, Q. (2009). "Student view of hybrid learning: a one year exploratory study". Journal of Computing in Teacher Education, 25(2), pp. 57-66.
- [9] Cohen, M. and Morrison. (2007). "Research Methods in Education". (5th Ed). Routledge, London, UK.
- [10] Gibbs, G. (1988). "Learning by Doing: A guide to teaching and learning methods". Further Education Unit, Oxford Brookes University, Oxford.
- [11] Tami, B. (2014). "Facebook Groups and Student-Driven Learning in a Hybrid Course: Media in Asia at Furman University".