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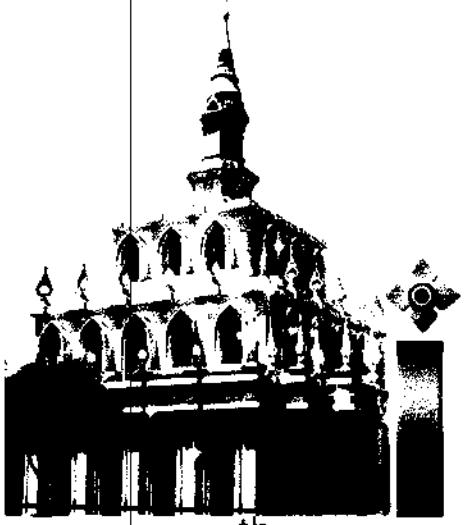

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57th WORLD ASSEMBLY

Innovations and Trends in Education

25-28 June 2013

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The Effective of Using Web board to Enhance the Ethics and Knowledge Construction of Undergraduate Students of Ramkamhaeng University

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Abstract

This research was to investigate the use of web board for enhancing the ethic and knowledge construction of undergraduate students of Ramkamhaeng University. The 35 samples were purposive sampled from undergraduate students majoring in educational technology. Research instruments were web board via online learning, knowledge construction assessment form of Vander Meijdem' coding scheme. Statistic analysis used was percentage, means, and standard deviation.

The research findings were the samples could gain knowledge at the level of "high". The samples used web board for enhancing and reflecting oneself ethics in every activity. Activity of knowing each other founded 100 % cooperation. The best three pros were hospitability and helpfulness, honesty, and gratefulness. The three cons were irresponsibility, absence, and delay submission, hot temperedness, and luxury. Analyzing for improvement were eightfold noble path, five precepts and dharma. Showing vision used a modernized person, eager to learn new things and self developed person. Reflecting the ethic action as making merit at the temple, helping social, and photos of gratefulness to the parents, teachers. Identifying the ethic project were to be responsible in earning more new knowledge and innovation, be polite in manner and characteristic, and obey in teachers, self honest and others, patient to obstruction and the students identify the ethics of educational technologist to be honest and hold fast to moral, responsible, punctual and love the institute, behave to institute in good way such as good personality, appearance, and trustable. Presenting the ethic project were the volunteer camp, summer ethic camp, library development project and book donation, and Dharma against drugs project. In addition, the frequency of using web board was "Reflecting the ethic action", "Knowing each other", and "Checking pros and con".

Keywords: Web board, Ethics, Knowledge Construction

Introduction

Ramkamhaeng University has a determination to develop the university for a knowledge market, hope to produce the qualified graduates with knowledge and ethics, and responsible to social with mind conscious. The philosophy of enhancing the equality in education, produce the graduates of knowledge and ethics, the students can participate the class or self – learning. The instructional management of a course; Ethics for Educational Technologist, ECT2901 of the faculty of Education, Ramkamhaeng University, beside the

knowledge according to the curriculum, it is necessary to enhance the students to have ethics by watching the students' behavior and use it for evaluation. The students who registered the course of Ethics for Educational Technologist, ECT2901 could not participate the class in the university, so the researcher designed the instruction to use technology for solving the problem in participating the class and sharing knowledge among the students by using web board via the internet to reflect the behavior and sharing the knowledge. The development of technology and communication are faster and capable to access anytime, anywhere via the network. The web board or discussion board – chatting can be applied to use for communication, express the idea, discuss among the students or with teacher, and technology is also to reflect the behavior of the students in inquiring the knowledge, summarize the knowledge by using learning management system as a base for knowledge asset and statistics of the instruction. Manee Chaiteeranuwatanasiri (2004) mentioned the higher education that the instructional method is not enough variety. The instruction cannot response the students' need, not flexible, no integration, cannot apply in real life and do not progress toward the world change. The instruction lacks of thinking process of development and knowledge construction. The knowledge is still delivered by teachers. The role of the teachers is to teach and solve problem in the class. The study of instruction use in any level reflected the quality of Thailand educational system by reflecting that the learners only receive knowledge and lack of communication, team learning, and solving problem skill.

As mentioned, the instruction design should be considered and let the students to learn, analyze to gain new technique for applying in real life of the students. The instruction should have a goal to develop oneself by creating the thinking process to the learners. The promotion on cooperative learning and changing the teachers' role to the facilitator would stimulate the learners to learn toward their interest and skill. Those of techniques used in the instruction will help the learners to think, self reliant, dare to make decision, and have problem-solving skill. Those of techniques mentioned are able to develop the individual progression. (Wichai, 1999) The instruction process should focus on learning how to learn and reflection using reflective thinking to consider anything carefully. The way of reflective thinking will help the students to review and reflective practice from their experience to improve themselves, improve their work and solve the problem effectively.)Johns, 2000)

The researcher realized the role of technology and communication to support the instructional management, to help learners in opportunity to gain the learning equality, and to access the knowledge, and do activities to develop the knowledge construction and realize the revision and reflection of the learners via web board using in the instruction for enhancing the ethics and knowledge construction as the researcher designed for the undergraduate students of Ramkamhaeng University.

Research objectives:

1. To study the effective of using web board for enhancing knowledge construction of undergraduate students of Ramkamhaeng University
2. To study the effective of using web board for enhancing ethics of undergraduate students of Ramkamhaeng University

Research Methodology:

1. Population and Samples:

1.1 Population was 45 undergraduate students of educational technology department, faculty of Education, Ramkamhaeng University who registered the course of "Ethics for Educational Technologist; ECT2901 in academic year 2011.

1.2 Samples was 35 undergraduate students of educational technology department, faculty of Education, Ramkamhaeng University who registered the course of "Ethics for Educational Technologist; ECT2901 in summer course of academic year 2011, derived from purposive sampled.

2. Research Instruments:

2. 1 The 10 contents of this research were from the course of "Ethics for Educational Technologist; ECT2901

2.2 Knowledge construction assessment form of Vander Meijdem' coding scheme (N.A. Shukor, J. Harun and Z. Tasir, 2011; Meijden, 2005) used for investigating the knowledge construction of the samples in three dimension, six items.

Dimension 1 Cognitive

Dimension 2 Metacognition; controlling and evaluate one's thought, individual's ability to develop, to control and direct the intellectual and thinking process, realization in work and using strategy for accomplishment

Dimension 3 Social Vander Meijdem' coding scheme assesses the knowledge construction in 6 items

1) Cognitive: Asking Questions
2) Cognitive: Asking Answer
3) Cognitive: Give Information
4) Affective
5) Regulative
6) Rest

Table 1: Description and meaning of knowledge construction form

Cognitive: Asking Questions	
CHV1	Question needs no explanation)facts or short/easy questions(
*CHV2	Questions needs explanation)comprehension or description)
CHVER	Confirmation proof or agreement
Cognitive: Giving Answers	
CHG1	Learners answer with no explanation
*CHG2	Learners answer by explaining the problem solving
Cognitive: Giving Information	
C11	Learners specify new idea but no knowledge extend
*C12	Learners specify new idea with knowledge extend
CIT	Learners refers to the prior data
CIE	Learners can evaluate, summarize, or conclude
ACCEPT-	Learners accept the other supporting with no idea
ACCEPT+	Learners accept the other supporting with adding some discussion
NACCEPT-	Learners do not accept the other supporting with no reason
NACCEPT+	Learners do not accept the other supporting with reason
Affective	
A	Positive, Medium, Negative Emotion that effect the other cooperation or task carefulness
Regulative	
RV	Plan, follow up and evaluate the task
RINS	Advice of teacher to learners
Rest	
AND	Notices that are not related to the task or other interaction
GREE	Congratulations to others

* Level of advanced knowledge construction

2 .3 A model of activities KPCASRIP using for enhancing knowledge construction and ethics via web board consist of 1) knowing each other, 2) checking pros and con, 3) analyzing for improvement, 4) showing vision as the role, 5) reflecting the ethic action, 6) identifying the ethic project and 7) presenting the ethic project.

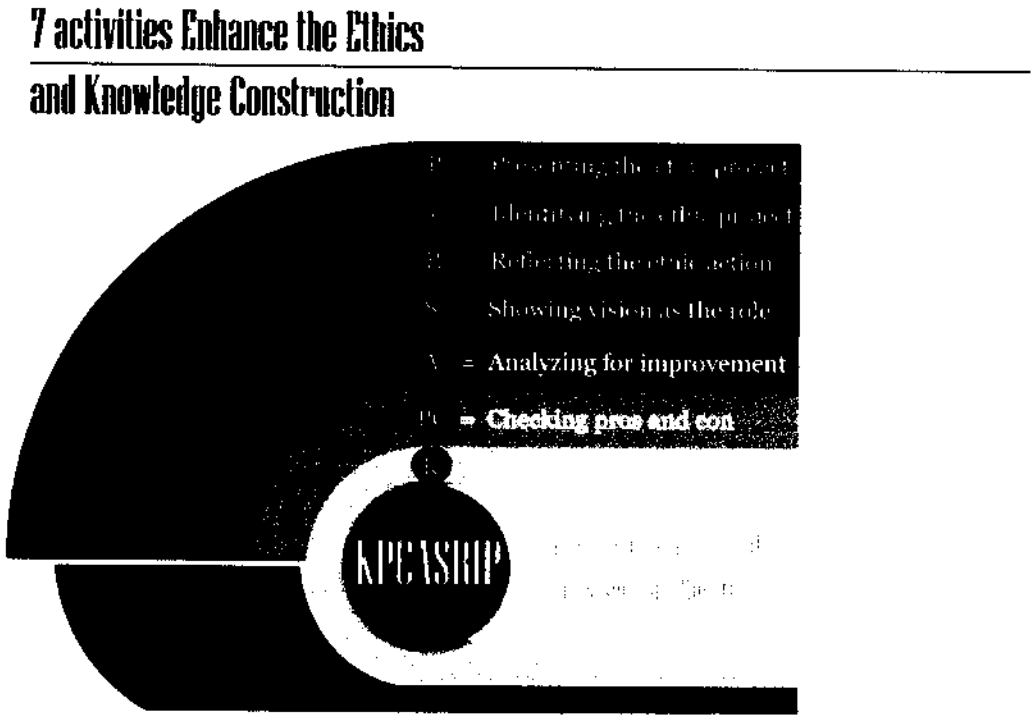

Figure 1 A model of activities - KPCASRIP using for enhancing knowledge construction and ethics

The description of activities' model - KPCASRIP

1. Knowing each other: learners identify oneself to friends and teacher to know each other by providing personal information, interest, and photo

2. Checking pros and con: learners evaluate their own positive and negative behavior and the correction

3. Analyzing for improvement: learners choose moral or ethic for improving oneself

4. Showing vision as the role: learners express the moral or ethics with educational technologist in the era 2012

5. Reflecting the ethic action: learners use photos to reflect the moral activity (3 photos for 1 activity)

6. Identifying the ethic project: group of learners identify moral and ethics of educational technologist

7. Presenting the ethic project: learners write a project for social development

3. Research procedure

The experimental phase of research was summer semester, academic year 2011 of the course "Ethics for Educational Technologist" ECT2901. The study lasted 8 weeks and each week took 2 hours. The total time was 16 hours. The students (samples) study the course and participated the web board activities' model via a website http://www.innolearn2day.com during 14-30 May, 2012.

4. Research variables:

4.1 Dependent variable: The activities' model - KPCASRIP on web board

4.2 Independent variables: knowledge construction and ethics behavior

5. Data Collection

The data of students' participation using the model- KPCASRIP on web board was recorded and observed via a web board and evaluate the knowledge construction after the instruction was end.

6. Data Analysis:

6.1 Analyze the frequency and percentage of knowledge construction using the message posted via web board and consider the knowledge construction for learning evaluation)Schellens et al., 2008)

6.2 Analyze the frequency of students' participation on web board using percentage

Research Findings

The research finding of the effective of using web board to enhance the ethics and knowledge construction of undergraduate students of Ramkamhaeng University were as follow:

1. The findings on knowledge construction of Ramkamhaeng University's undergraduate students

From the procedure of using web board to enhance knowledge construction were:

1.1 The 35 samples studied the content on the course "Ethics for Educational Technologist" ECT2901 by 10 contents for 8 weeks (2 hours a week – totally 16 hours)

1.2 The students search information, inquire and summarize for knowledge and reflect via the activities – KPCASRIP; 1) knowing each other, 2) checking pros and con, 3) analyzing for improvement, 4) showing vision as the role, 5) reflecting the ethic action, 6) identifying the ethic project and 7) presenting the ethic project.

1.3 The researcher use knowledge construction form of Van der Meijdem's coding scheme to evaluate the knowledge construction in 6 items; 1) Cognitive: Asking Questions 2) Cognitive: Asking Answers 3) Cognitive: Give Information 4) Affective 5) Regulative 6) Rest

1.4 The researcher used data of knowledge summarization, reflection of knowledge and the students' answers during the week and considered each message that reflect the knowledge (Rourke et al, 2001) The 465 messages were analyzed to percentage as follow:

Table 2: The students' knowledge construction analyzed from each message

	N	Percentage (%)
CHV1	0	0
*CHV2	0	0
CHVER	1	0.22
CHG1	23	4.95
*CHG2	85	18.28
C11	22	4.73
*C12	67	14.40
CIT	2	0.43
CIE	37	7.96
ACCEPT-	4	0.86
*ACCEPT+	0	0
NACCEPT-	0	0
*NACCEPT+	0	0
A	120	25.80
RV	3	0.65
RINS	56	12.04
AND	35	7.53
GREE	10	2.15
Total	**465**	**100**

*the advanced knowledge construction

From table 2, the knowledge constructions of the samples are considered the meaningful of knowledge reflection.)Rourke et.al, 2001) The finding on cognitive: asking questions, the learners of confirmation proof or agreement)CHVER) was at 0.22 %, on cognitive: giving answers, the learners who answer with no explanation)CHG1) was at 4.95 %, and answer by explaining the problem solving)CHG2) was at 18.28 %. On cognitive: giving information, the learners who specify new idea but no knowledge extend)C11) was at 4.73 %, and the learners who specify new idea with knowledge extend)C12) was at 14.40 %. For the learners refers to the prior data)CIT) was at 0.43 %, learners who can evaluate, summarize, or conclude)CIE) was at 7.96 %. On affective, learners of positive, medium, negative emotion that effect the other cooperation or task carefulness)A) was at 25.80%. On regulative, learner who plan, follow up and evaluate the task (RV) was at 0.65 %, learners who use advice of teacher to learners (RINS) was at 12.04 %. For the rest, learners who notice that are not related to the task or other interaction)AND) was at 7.53 %, and learners who congratulate to others)GREE) was at 2.15 %

Table 3: The data analysis of samples' knowledge construction

	N	Percentage%
High-Level elaboration	152	32.69*
Low-Level elaboration	89	19.14
Affective contributions	120	25.80
Regulative contributions	59	12.69
Non Task related	45	9.68
Total	**465**	**100**

*The samples can construct advanced knowledge)High-Level elaboration(

From table 3, the effective of knowledge construction analyzed from the level of knowledge construction found that high-level elaboration was at 32.69 % and low-level elaboration was at 19.14 %. The affective contributions were at 25.80 %, the regulative contributions were at 12.69 % and the non task related was at 9.68 %.

2. The effective of Ramkamhaeng University's undergraduate students analyzed from students' behavior reflected from the web board via activities' model - KPCASRIP were as follow:

2.1 Knowing each other: the students introduce him/herself to friends to know each other at 100 %.

2.2 Checking pros and con: to check negative and positive of their own behavior, the students identified 3 positive ethics; hospitable, helpful at25 .71 %, honest at 22.86 %, and grateful at 17.14 %. The 3 negative behavior that should be improved were irresponsible, absent, and delay submission was at 31.43%, hot tempered was at 20.00 % and luxury was at 17.14 %.

2.3 Analyzing for improvement: The students chose 3 ethics to develop themselves by eightfold noble path at 25.71 %), the five precept at 22.86 %, and five precept and five dharma at 11.14 %.

2.4 Showing vision as the role: the students identify the role of educational technologist in 2012 era should 1) be a modernized person, eager to learn new things, and self developed person, 2) be creative, and have lateral thinking and 3) analyze, design, plan and produce instructional media for users. In addition, they should have the ethics and moral of educational technologist.

2.5 Reflecting the ethic action: most students want to use photos for reflecting the ethics; the first is religious activities such as making merit at the temple (38.09 %), activity of helping social such as helping the foundation, volunteer camp, or teaching (20.95 %), and photos of gratefulness to the parents, teachers. (12.38 %)

2.6 Identifying the ethic project: the students identified that the educational technologist should be responsible in earning more new knowledge and innovation, polite in manner and characteristic, and obey in teachers, self honest and others, patient to obstruction and the students identify the ethics of educational technologist to be honest and hold fast to moral, responsible, punctual and love the institute, behave to institute in good way such as good personality, appearance, and trustable.

2.7 Presenting the ethic project: the students hold the volunteer camp, summer ethic camp (25.71 %), library development project and book donation (22.86 %), and Dharma against drugs project. (20.00 %)

In addition, the statistic of using web board in any activity during 14 April – 30 May, 2012 found that the most activity was "Reflecting the ethic action" (41.22 %), "Knowing each other" (13.18 %), and "Checking pros and con" (10.90 %)

Summarization and Discussion

The effective of using web board for enhancing ethics and knowledge construction of undergraduate students of Ramkamhaeng University can be summarized as follow:

1. Seven learning activities' Model - KPCASRIP on web board enables to enhance students' ethics. Behaviors of submission, answering the questions, reflecting knowledge, and ethic photos reflection found that 100% of the students participated all activities. The students realized their positive and negative behavior and found the way to improve themselves using

basic ethics. This finding harmonized with the research of Panit Yenkhae (2001) that found CIPPA Model can be used for students' ethic development. The 8 steps of ethic development were 1) Survey the prior knowledge and behavior to check pros and con, 2) Construct learning process of ethics by behavior adaptation, 3) Summarize and create new idea for practicing, 4) Practice, 5) Share knowledge and experience to check the accomplishment and improve, 6) Present the products and process of learning, 7) Application – using ethic project to benefit him/herself and social, 8) Evaluate oneself. Furthermore, the findings also harmonized to Wilson and Wing - Jan (1993) that mentioned the way of idea reflection and to know ones' thinking. Teachers should provide activity of lesson learned record, concept map writing, asking questions, learn to choose, and make decision on his/her learning, and self evaluation. The meditation or consideration is the center of learning process for students and teacher. A development of learning process will enhance the self learning. Smith & McGregor (1992) also support the idea of cooperative learning that students can use the view or experience of others by using group process and learn from the social and cultural environment by chatting with friends. The learning activities via web board is one of learning environment provided for increasing students' competency to access the content, to communicate and share knowledge among learners (Alstete, 2001)

2. Learning activities' Model - KPCASRIP on web board enables to enhance the high-level elaboration at 32.69 %. The students of Ramkamhaeng University can or cannot attend the class (individual learning), so the students have to be responsible and self-direct and also use web board as a tool for learning. The students use web board to reflect the idea, knowledge of his/her own view. The students can answer the questions by describing the way of problem-solving at 18.28 % and the students can identify the new idea and extend that knowledge at 14.40 %. This might cause identify the high-level elaboration. In addition, learning activities' Model - KPCASRIP form the expert was at the level of "most" ($\bar{x} = 4.80$, S.D. =0 .13) can stimulate the students to reflect the opinion, support the interesting task of learning, provide the learning achievement, and use the appropriate technology to develop the learning process in term of knowledge construction.)Sumalee, 2004; Sayamon, 2010(

Research Application:

1. This research develops the quality of Education in Thailand by reforming Thailand society of Education System. The instructional design can enhance ethics of the individualized students, role and duty, equality, and democratic way of life. The finding of the research identified the realization of the students in individual ethics and continuing improving their ethics. Learning activities' Model - KPCASRIP can enhance the knowledge construction in high-level elaboration by studying and ensure to construct new knowledge and reflect the ethical behavior of learners.

2. Learning activities' Model - KPCASRIP can be applied in web board using in other field of study that enhance ethics and knowledge construction. The further research should also be done in other level of study.

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