

Study for Applying Active Learning Theory for Master Degree in Logistics Technology

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Abstract. Instruction of learning is critical as a communication channel to educate the teachers were conveyed to the student to meet learning objective and current teaching model there are many forms for models with the most popular. Researcher realized the importance of learning and teaching development a comparative study for applying in the class room for Master Degree in Private University. The study objective 1) To the satisfaction of the students on the course lectures active learning. 2) For the achievement of students with some form of teaching active learning. 3) The comparative study for satisfaction and achievement of a form of active learning. Reporting in which in which it was evaluated by a panel of experts in education technology at a "good" level. The contents were evaluated by a panel of experts in logistics at a "very good". Data were analyzed by using, mean, standard deviation, and a t-test statistic. The results indicated that efficiency of the achievement scores of the post-test were higher than that pre-test at the significant level of .01. The student's satisfactions were rated at a "very much" level. However, there was no significant difference between student's satisfactions and learning achievement at the level of .05.

Keywords— Active Learning, Learning Instruction

INTRODUCTION

Universities in Thailand attempt to applied learning method in their universities according developing technology and learning innovation that affects to improve potential individual, expedient to study and easy to understanding including enhance learning which is learners build own their knowledge by themselves for example thinking of pictures or symbols instead of things or situations. They will manage information or data from their old experiences and new experiences or new stimulations. Human capable to create thinking systems such as active learning is motivate interaction when learners meet conflict or any problems they will attempt to find and solve its by themselves (Sakda C., 2005). This learning method is contrast generally lecture class which is traditional learning methods that most class spend more time with lecturer as teacher - center and students will watch and listen in class. The lecturer can not aware that their students able to understand or not, students passively receive information from lecturer without thinking system that occurs miss success learning objectives. (Wichan K., 2015).

TOOLS AND METHODOLOGY

2.1 Objectives

1. To study learner's satisfaction in active learning among graduate students Majoring technology Logistics of a privacy University.
2. To find the results of active learning among graduate students Majoring technology Logistics of a privacy University.

2.2 Limitation

1. Population of graduate students Majoring technology Logistics of a privacy University
2. Sample group is 12 graduate students Majoring technology Logistics of a privacy University specifics by sampling and purposive sampling
3. One semester academic study time

LITERATURE REVIEW

Learning method means status or kind of learning is along theories, principles, concepts, or belief procedure by teaching and guiding to encourage learning achievement which is proven to acceptable that efficiency, that the method able to apply in each different objectives as defined cognitive domain learning, affective domain learning, psychomotor domain learning, process skills or integration. These methods refer to learners are most important. (Tisana Khammani, 2008).

Concepts of Active Learning

Concepts of Active Learning mean instructional activities for teaching learners and build their own understanding (Sakda C., 2005). Instructors attempt to make them role in the class and advise them to develop knowledge and understand able to adapt, create and improve their potential learning. Teacher will arrange and suggest special activities to motivate learners to writing, discussing and analysis that required in higher order thinking tend to analyzing and evaluating skills. These methods learners can develop their skills and create own (Learning How to Learn) including selecting receives information skills.

Generally active learning method had often coped with Cooperative Learning, Problem-based Learning, Case Study and Simulations. The elements can provide activities experience in studying. As follow Picture 1 show Level of learning and remembering chart of learners as defined learning by remember reading, they can receive only 10% of learning. Second level show learning by lecturer without chance to attend activities, they can receive 20% of learning but third level show as if learner have chance to attend activities, they will receive 30% of learning. Fourth level, learner have chance to listen like audiovisual such as see movie, display activity, demonstration or they can receive 50% of learning. Fifth level show if learners have chance to practice doing and interact learning, they will receive 70% of learning and last level is biggest defined as learners get chance to conference in academic and ate in real situation that affect to receive 90% of learning.

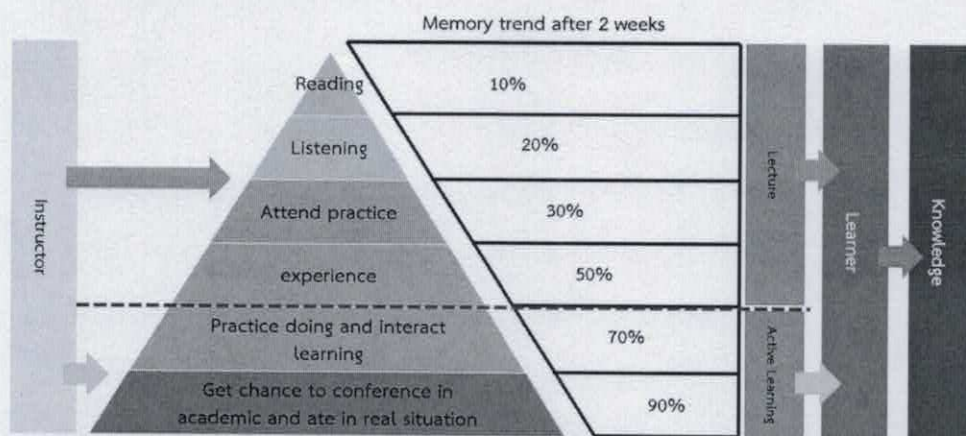
Systems Thinking

System means set of things that perform collaborate and relation as natural in the order or in academic reason. Barry Richmond, 1987 gave definition of thinking system that is operates and sciences of creditable reference related with developed foundation concept working. The core of thinking of human is ability of brain system that separated by 2 sides refer to left brain side is Systems Thinking and right brain side is Memory. The systems thinking divided by 5 types as below. (Wikorn R., 2007)

1. Principles thinking refer to restraint thinking or competency thinking is core overall thinking separated by nature, general and specific academic.
2. Rational thinking refers to relationship thinking in results separated by 3 kinds are Cause and effect, Logical Reasoning and Strategic Reasoning.
3. Mental Model refer to things created by human for cognitive and life experience, we have vision our attitude. Therefore that is principle of systematic thinking of human.
4. Frame thinking is thinking in framework if without framing cause lack of clarity all elements will be confused.
5. Objective thinking is system always having purposes may be understood or not even in animations still have living purpose system, because if lack of objectives, human not able to line or objectives are changed, system also will be changed.

METHODOLOGY

This study modified in active learning among graduate students Majoring technology Logistics of a privacy University. Researcher studied analyzed documents and data including literature review others researches related active learning by determined conceptual framework methodology which concerns instructor to learner. That create knowledge management and systematic in active learning then measure achievement of learning and satisfaction for comparing level of knowledge before and after study as Picture 1 Conceptual framework



Picture 1 Conceptual framework, show Level of learning and remembering chart

Researcher instructed active learning in first semester academic by doing activities and learner participated to analyzed procedure they was change role of receiver to co-creator at same environment when instructed as lecturer method. Then researcher investigated to satisfaction of learners and the results of this study in Active learning class by comparing between pre-test and post-test score. Testing analyzed of study by using Index of (IOC) to find mean in each question and not lower than 0.5 of IOC means able to ask that question but less than 0.5 means that question need to revise or ignore then of this testing formula KR-20 (Kuder-Richardson). Finding Reliability of questionnaire in learner satisfaction of active learning, by using Coefficient of variable (Cranach Alpha Coefficient) have to more than 0.7.

RESULTS

This study modified in active learning among graduate students Majoring technology Logistics of a privacy University by post-test and pre-test as Table 1

Table 1 Achievement test of post-test and pre-test of learner in active learning among graduate students Majoring technology Logistics of a privacy University

Sampling	Pre test		Post test	
	M	S.D.	M	S.D.
Student	22.27	2.55	26.37	2.04

Table 2 evaluation of learner satisfaction in Active learning

No.	Description	S.D.	M	level
1.	Satisfaction of learning method			
	1.1 Learning Activities	0.50	4.57	highest
	1.2 Interaction among learners	0.50	4.60	highest
	1.3 Interaction between instructor and learner	0.53	4.70	highest
	1.4 Media instruction	0.41	4.80	highest
	1.5 Appropriately Media instruction	0.68	4.47	highest
	Mean	0.53	4.63	highest
2.	Satisfaction of environment in class			
	2.1 Quantity of learner are suitable with learning method	0.45	4.73	highest
	2.2 Atmosphere suitable with learning method	0.43	4.77	highest
	2.3 suitable learning time	0.41	4.80	highest
	Mean	0.43	4.77	highest
3.	Beneficial satisfaction in learning			
	3.1 encourage to learning easy to understand	0.62	4.60	highest
	3.2 encourage to get experience in class	0.61	4.63	highest
	3.3 encourage to get new learning method	0.31	4.90	highest
	3.4 encourage to achieve objective learning	0.38	4.83	highest
	mean	0.48	4.74	highest
	Total mean	0.25	4.70	highest

From Table 3 the results of learner satisfaction evaluating on Active learning Method are shown highest level in every factors with mean equal 4.70. However, factors are considered found that the results study modified in active learning among graduate students Majoring technology Logistics of a privacy University get mean as below

1. Satisfaction of learning method get highest level Mean equal 4.63
2. Satisfaction of environment in class get highest level Mean equal 4.77
3. Beneficial satisfaction in learning get highest level Mean equal 4.74

CONCLUSION AND INSTRUCTION

The results of this researcher show active learning impact to higher order analysis because learner engaged activity that motive reading procedure and discussing for exchange knowledge and they will get experience if they mistake in learning. Therefore made them remember, understand and learning skill better than lecturer method, lecturer Method which is only one side of knowledge transfer from instructor. Even learner has chance to ask questions but most of them will feel bored while they are listener. So it is no stimulus to Attend and participate to study, that (Natte R., 2011)said, instruction theory and concept of active learning to apply in creation and development of instruction Media will motivated , learning and reduce study's limitations.

Active learning is defined as instructional method that engages learners to do meaning full learning activities and think about what they are doing until teacher aware students who understand or not . Also lecturer gave opportunities to solve the problem from to the beginning to the finish with test. That related to Sudarath P. (2016) who is researcher in case study the reasons midway resignation of students in non-degree academic : in case study of : College of Business Administration Viboon ramindra in Bang Khen, Bangkok. The research found factor of learning is most important affect to halfway resignation cause of in appropriate learning method. Besides, less no of students understand in difficult cognitive enable to build own new knowledge from lecturer.

On the order hand most of learner will able to study better when they do learning activities by themselves. Such as thinking discussing or debating with classmate and instructor. This learning method motivate then to active in their study. However instructor or teacher have to spend more time and dedicate for instruction and required supporting from their institute such as university faculty.

Graduated students in Private University in mention are only sampling group relied on Active learning theory which if instructor or teacher are conscious in developing learning Method and apply to the class learners will relied more on institution understand and success in their learning objectives.

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