

Factors of Learning Management in Classroom Contributed to the Disciplined Mind of Industrial Education of KMITL Students

ปัจจัยด้านการจัดการเรียนรู้ในห้องเรียนที่ส่งผลต่อจิตแห่งวิทยาการของนักศึกษา
คณะครุศาสตร์อุตสาหกรรม สถาบันเทคโนโลยีพระจอมเกล้าเจ้าคุณทหารลาดกระบัง

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Abstract

The purposes of this paper were 1) To study the factors that affect learning management in classroom contributed to the disciplined mind 2) To study the relationship between factors of learning management in classroom contributed to the disciplined Mind. 3) To study the important weight of the factors that learning management in classroom that affect into disciplined mind. The sampling were undergraduate students who study in the Faculty of Industrial Education at King Mongkut's Institute of Technology Ladkrabang during, the second semester of 2013 academic year. The sample size derived from square blocks of Yamane, the level of confidence of 95% on a sampling of 315 students and sampling using stratified random sampling procedure. The research tool used in this study were to measure factors of learning management in classroom. There were three aspects; which are learning management of child-centered education, the climate in the learning management and the authentic assessment and a measure of disciplined mind undergraduate students. The reliability was .95, .96, .92, and .96, respectively. The results showed that 1) factors of learning management in classroom include learning management of child-centered education, the atmosphere in the learning management and a measure of disciplined mind undergraduate students. The correlated with disciplined mind has a statistically significant in .01 with ties to disciplined mind the highest is the atmosphere in the learning management and the authentic assessment (.62). The correlated with learning management of child-centered education was (0.56). 2) The weight of standard scores in the factors on learning management in classroom contributed to the disciplined mind has climate in the learning management weight with the maximum weight and authentic assessment .33 followed learning management of child-centered education .09 respectively.

Keywords : Factor; Learning management in classroom; Disciplined mind; Child-centered education
Authentic assessment

บทคัดย่อ

การวิจัยในครั้งนี้มีวัตถุประสงค์เพื่อ 1) เพื่อศึกษาปัจจัยด้านการจัดการเรียนรู้ในห้องเรียนที่ส่งผลต่อจิตแห่งวิทยาการ 2) เพื่อศึกษาความสัมพันธ์ระหว่างปัจจัยด้านการจัดการเรียนรู้ในห้องเรียนกับจิตแห่งวิทยาการ 3) เพื่อศึกษาน้ำหนักความสำคัญของปัจจัยด้านการจัดการเรียนรู้ในห้องเรียนที่ส่งผลต่อจิตแห่งวิทยาการ กลุ่มตัวอย่างที่ใช้ในการวิจัยคือ นักศึกษาระดับปริญญาตรี คณะครุศาสตร์อุตสาหกรรม สถาบันเทคโนโลยีพระจอมเกล้าเจ้าคุณทหารลาดกระบัง ภาคเรียนที่ 2 ปีการศึกษา 2556 ได้มาจากการกำหนดขนาดกลุ่มตัวอย่างตามตารางสำเร็จรูปของ Yamane ที่ระดับความเชื่อมั่น 95% ได้ขนาดกลุ่มตัวอย่าง จำนวน 315 คน และสุ่มตัวอย่างโดยใช้วิธีการสุ่มแบบหลายขั้นตอน เครื่องที่ใช้ในการวิจัยประกอบด้วยแบบวัดปัจจัยด้านการจัดการเรียนรู้ในห้องเรียน มี 3 ด้าน ได้แก่ ด้านการจัดการเรียนรู้ที่เน้นผู้เรียนเป็นสำคัญ ด้านบรรยากาศในการจัดการเรียนรู้ และด้านการประเมินตามสภาพจริง มีค่าความเชื่อมั่นเท่ากับ .95, .96, .92 และ .96 ตามลำดับ ผลการวิจัย พบว่า 1) ปัจจัยด้านการจัดการเรียนรู้ในห้องเรียน ได้แก่ ด้านการจัดการเรียนรู้ที่เน้นผู้เรียนเป็นสำคัญ (.56) ด้านการสร้างบรรยากาศในการจัดการเรียนรู้ (.62) และด้านการประเมินตามสภาพจริง (.62) มีความสัมพันธ์กับจิตแห่งวิทยาการอย่างมีนัยสำคัญทางสถิติที่ระดับ .01 2) ค่าน้ำหนักความสำคัญที่เป็นคะแนนมาตรฐานของปัจจัยด้านการจัดการเรียนรู้ในห้องเรียนที่ส่งผลต่อจิตแห่งวิทยาการ ได้แก่ ด้านการจัดการเรียนรู้ที่เน้นผู้เรียนเป็นสำคัญ ด้านการสร้างบรรยากาศในการจัดการเรียนรู้ และด้านการประเมินตามสภาพจริง มีค่าน้ำหนักเท่ากับ .09, .33 และ .33 ตามลำดับ

คำสำคัญ: ปัจจัย การจัดการเรียนรู้ในห้องเรียน จิตแห่งวิทยาการ การจัดการเรียนรู้ที่เน้นผู้เรียนเป็นสำคัญ การประเมินตามสภาพจริง

1. INTRODUCTION

To survive in information society people should have the ability and skills necessary to cultivate. To be able to live in the days ahead be happy. To thrive in the future be happy in life and work. It has to adjust to knowingly changes of globalization which must have kind of mind. The importance and necessary in this century was disciplined mind, synthesizing mind, creating mind, respectful mind, and ethical mind. [1]

Gardner [1] was discussed the five mind for the future that has developed under the above reasons. "Today, education management is not really effective but conditions in the world have changed but the education system is still being used to prepare the students in the past better to prepare in the future". Students of successful students must be able to think creatively and independently that use application of the learning strategies to use in new situations, exposed to new to have their goal in their life and the disciplined mind which is one of the five mind is the key to achieving the goals in life

that is to say the expertise in science teaching in the view of understanding and application a kind of science for answering or solving problems in their real life. The current study is focused on training in order to develop their thinking ability. To know processes and thinking skills that are not confined to one subject knowledge. So, disciplined mind is the cornerstone of Creativity by bringing the other knowledge of applications that makes it possible to understand the essence and overview of the problem, so that learners can use or create a new one. Disciplined mind is the importance for developing countries as a way to enhance cognitive abilities of humans which factors are the most important to enhance the competitiveness of business and improving the quality of society.

The above shows features of humans today. This is consistent with the purposes and principles of National Education Act B.E. 2542 (1999) and Amendments (Second National Education Act B.E. 2545 (2002) Chapter 1 in section 6 said that Education shall aim at the full development of the

Thai people in all aspects: physical and mental health; intellect; knowledge; morality; integrity; and desirable way of life so as to be able to live in harmony with other people. The section 7 the learning process shall aim at inculcating sound awareness of politics and democratic system of government under a constitutional monarchy; ability to protect and promote their rights, responsibilities, freedom, respect of the rule of law, equality, and human dignity; pride in Thai identity; ability to protect public and national interests; promotion of religion, art, national culture, sports, local wisdom, Thai wisdom and universal knowledge; inculcating ability to preserve natural resources and the environment; ability to earn a living; Self-reliance; creativity; and acquiring thirst for knowledge and capability of self-learning on a continuous basis. In addition, National Education Mentioned approaches to education in chapter 4 National Education Guidelines of section 22 said that Education shall be based on the principle that all learners are capable of learning and self-development, and are regarded as being most important. The teaching-learning process shall aim at enabling the learners to develop themselves at their own pace and to the best of their potentiality and in section 24 In organizing the learning process, educational institutions and agencies concerned shall: Enable instructors to create the ambiance, environment, instructional media, and facilities for learners to learn and be all-round persons, able to benefit from research as part of the learning process. In so doing, both learners and teachers may learn together from different types of teaching-learning media and other sources of knowledge. [2]

The researcher recognizes the importance, imperative and interested to study factors of learning management in classroom contributed to the disciplined mind of undergraduate students in the Faculty of Industrial Education at King Mongkut's Institute of Technology Ladkrabang. The results of this study will be helpful in promoting the learning

management of teacher with disciplined mind to the students and the policy of promoting factors of learning management in classroom to develop in students of disciplined mind. This is an important feature in the 21st century.

2. OBJECTIVE

1. To study the factors that affect learning management in classroom contributed to the disciplined mind.

2. To study the relationship between factors of learning management in classroom contributed to the disciplined mind.

3. To study the beta weight of the factors that learning management in classroom that affect into disciplined mind.

3. HYPOTHESIS

A factor of learning management in classroom at least one factor that can affect the disciplined mind of undergraduate students.

4. SCOPE OF THE RESEARCH

4.1 Populations and samples

Populations were 1,456 undergraduate students who study in the Faculty of Industrial Education at King Mongkut's Institute of Technology Ladkrabang during, the second semester of 2013 academic year.

Samples were undergraduate students who study in the Faculty of Industrial Education at King Mongkut's Institute of Technology Ladkrabang during, the second semester of 2014 academic year. The sample size derived from square blocks of Yamane [3], the level of confidence of 95% on a sample of 315 students and sampled using stratified random sampling procedure.

4.2 Variable

1. Independent variable are factors of learning management in classroom such as learning management of child-centered education, the atmosphere in the learning management and the

authentic assessment and a measure of disciplined mind.

2. Dependent variable is the disciplined mind.

5. RESEARCH INSTRUMENT

The questionnaire was used in the current research by using rating scale 4-level.

Part 1 the questionnaire ask general information of undergraduate students

Part 2 Measurement in factors of learning management in classroom

Part 3 Measurement of disciplined mind

6. DATA COLLECTION

Data collection were collected with undergraduate students on a sampling.

7. DATA ANALYSIS

1. Analysis of samples
2. Analysis of the basic factors of the learning management in classroom and disciplined mind with undergraduate students on a sample of 315 students in the Faculty of Industrial Education at King Mongkut's Institute of Technology Ladkrabang.
3. Analysis relation factors of the learning management in classroom contributed and disciplined mind and the important weight of the factors that learning management in classroom that affect into disciplined mind. The sample is undergraduate student's people in the Faculty of Industrial Education at King Mongkut's Institute of Technology Ladkrabang. To use the correlations and regression enter statistics.

8. RESULT

Basic factors of learning management in classroom contributed and disciplined mind.

Table 1: Mean and Standard deviation in the factors of learning management in classroom contributed and disciplined mind

Variable	\bar{X}	S.D.	Results
The factors of learning management in classroom	2.98	.36	Good
learning management of Child-Centered Education	2.98	.43	Good
atmosphere in the learning management	2.94	.36	Good
the authentic assessment	3.01	.41	Good
The disciplined mind	2.92	.35	Good

As shown in table 1 the study found that students gave their opinion about the factors of learning management in classroom is good (\bar{x} =2.98), the authentic assessment is highest (\bar{x} =3.01) followed learning management of child-centered education (\bar{x} =2.98) and atmosphere in the learning management (\bar{x} =2.94) respectively for disciplined mind which undergraduate students of behavior in accordance with disciplined mind is good (\bar{x} =2.92).

Table 2: Correlation between factors of learning management in classroom and disciplined mind (n=315)

Variable	X ₁	X ₂	X ₃	Y
The factors of learning management in classroom				
learning management of Child-Centered Education (X ₁)	1.00	.76**	.69**	.56**
atmosphere in the learning management (X ₂)	-	1.00	.71**	.62**
the authentic assessment (X ₃)	-	-	1.00	.62**
The disciplined mind (Y)	-	-	-	1.00

**significance at .01 level

As shown in table 2 found that The factors of learning management in classroom such as learning management of child-centered education (X₁), atmosphere in the learning management (X₂), the authentic assessment (X₃) have relationship with disciplined mind has statistically significance at .01 level. The relationship of disciplined mind highest are atmosphere in the learning management and

the authentic assessment (.62) followed learning management of child-centered education (.56)

Table 3: Regression Coefficients between factors of learning management in classroom contributed and disciplined mind

Model	Source of Variation	SS	df	MS	R	R ²	F-test	Sig
1	Regression	17.02	3	5.67	.67	.45	85.84	.00**
	Residual	20.55	311	.07				
	Total	37.57	314					

**significance at .01 level

As shown in table 3 found that the factors of learning management in classroom such as learning management of child-centered education (X1), atmosphere in the learning management (X2) and the authentic assessment (X3) contributed to the disciplined mind has statistically significance at .01 level regression coefficients of disciplined mind is .67 and variable factors in The factors of learning management in classroom include analysis of variance's disciplined mind is 45 %

Table 4: The beta weight of the factors that learning management in classroom that affect into disciplined mind

Model	Variable	B	Std.error	Beta	t-test	Sig
1	Constant	.97	.12		7.85	.00**
	X ₁	.07	.05	.09	1.31	.19
	X ₂	.31	.07	.33	4.63	.00**
	X ₃	.27	.05	.33	5.17	.00**

**significance at .01 level

As shown in table 4 found that 1) score of beta weight in the factors of learning management in classroom contributed to the disciplined mind. For atmosphere in the learning management (X2) was the highest beta weight .31 followed the authentic assessment (X3) was .27 and learning management of child-centered education (X1) was .07, respectively and standard deviation is .97. 2) The beta weight of factors of learning management in classroom contributed to the disciplined mind focused on

atmosphere in the learning management (X2) was the highest beta weight and authentic assessment (X3) .33 followed learning management of child-centered education (X1) was .09, respectively. The equation can be written as below;

$$Y = .97 + .31X_2 + .27X_1 + .07X_3$$

$$Z_y = .33Z_2 + .33Z_1 + .09Z_3$$

9. DISCUSSION

From the study relation of factors of learning management in classroom contributed to the disciplined mind of undergraduate students in the Faculty of Industrial Education at King Mongkut's Institute of Technology Ladkrabang found that factors of learning management in classroom. There are three aspects; learning management of child-centered education, the atmosphere in the learning management and the authentic assessment have relationship with disciplined mind has statistically significance at .01 level. Because of 1) learning management of Child-Centered Education has relationship with disciplined mind which learning management of child-centered education was the importance indicators in learning management. The students have to experience the relationship with nature and the environment; practitioners discover their aptitudes and their own way. Learners make a knowledge exchange activities of thinking and practicing into creative and realistic. There are reinforcement training for data collection and creation of self-knowledge. To select was an ability, aptitude and interest, to practice self-discipline and responsibility in their work that evaluate and improve their practice the others eagerness to learn continuously. [4] The students have learned the guidelines, it will learn the affect principles and knowledge content in interests. Feature of self-discipline operation is a symbol of the disciplined mind [1] [5] Office of The Civil Service Commission according to, cultivating the disciplined mind, in the person of five were Implanted to think in a systematic and rationally, promoting lateral thinking

and imagination in thinking, experimental and practical in order to think it is, promoting the idea of an integrated, promoting in the lifelong learning which relation in learning management of child-centered education. However, the beta weight of the factors of learning management of child-centered education not contributed to the disciplined mind because variable of learning management of child-centered education related to variable of the atmosphere in the learning management and authentic assessment has statistically significance at .01 level and coefficient of correlation .76 and .69. 2) The atmosphere in the learning management under the indicators learning management of child-centered education and Ways to Implanted of disciplined mind has relation contributed to the disciplined mind that one of the important mechanisms in the development in the students of disciplined mind due to the atmosphere in the learning management is important. The atmosphere in the learning management has opportunity increase efficiency their learning. On the other hand, classroom it is not good for an atmosphere that affect learning management inevitably reduce the effectiveness the learning of the students as well. [6] In addition, Bloom has also started learning theory showed that the atmosphere in the classroom is one of the most important variables to predict human features such as intelligence and achievement conducted comply with Gunt Intuwog and Pairote Nathiang [7] and Pimpun Techakup [8] said that atmosphere in the learning management was important variables that help encourage learning efficiency. 3) The authentic assessment has variable the relationship and impact of disciplined mind tasks that is important for teachers to do for to evaluate the work of students of trace evidence or results of learning with a variety of methods such as observation, recording, experiment, data collection and to show of student. However, all data showed competence of student in match the fact which the goal is to help the

students learn to their full potential at full capacity, to find the strength and encourage development of their full capacity and to know their own deficiencies and to improve in time by keeping in corresponds to assessment of the situation that happened in real life. [9]

For this reasons, the factors of learning management in classroom such as learning management of child-centered education, atmosphere in the learning management and authentic assessment was relation and contributed to the disciplined mind of student when students want to develop the disciplined mind that should use learning management of child-centered education, atmosphere in the learning management and authentic assessment.

10. RECOMMENDATION

10.1 Recommendation of research

The result showed the factors of learning management in classroom such as learning management of child-centered education, atmosphere in the learning management and authentic assessment have relation in a positive way and predictors of disciplined mind. So, instructor who teach in undergraduate level should focus on encourage as learning management of child-centered education, atmosphere in the learning management and authentic assessment of undergraduate students.

10.2 Recommendation for future research

10.2.1 Should study other contributed to the disciplined mind of undergraduate students in the Faculty of Industrial Education at King Mongkut's Institute of Technology Ladkrabang.

10.2.3 To be able to study with the other schools and other institutions.

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