

A Learning Management Model that Promotes Creative Thinking Using a Flipped Classroom Learning Approach for Students Teacher

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Abstract

This study evaluated the creative thinking of students after learning from the learning management Model. The sample group includes 11 students from the faculty of education, Uttaradit Rajabhat University who studied learning management by the method of selecting a purposive sampling. Research instruments were the learning management model to promote creativity by using a flipped classroom learning management approach and the creativity test. The data analyzes using statistics average, standard deviations, content analysis, and the one-group pretest and posttest design. The results of the research showed that basic information on students' creativity, students have a demand for instructors to manage hands-on learning according to the aptitudes and interests of learners. There is an exchange of learning, challenges in order to create new knowledge and creativity. The overall results of the assessment of the learning management model are the most appropriate ($X=4.85$, $S.D.=0.20$). The overall evaluation result of the learning management model is 0.95, which is in accordance with the set criteria. The assessment of creativity using the learning management model before and after the class is 48.80% before the class and 81.60% after the class. It was found that students were more creative than before. This is 32.80 percent, which is statistically significantly higher than the threshold of .05.

Keywords

Classroom Learning Management, Creativity, Learning Management Model.

INTRODUCTION

A global society in the 21st century that focuses on learning that truly meets the needs of learners and practical actions so that learners can have direct experience and apply that knowledge to build on themselves. Instructors must be able to create and design a learning environment that is supportive and conducive to targeted learning and create opportunities for learners to access technology media. Quality tools and learning resources are very important for education and education is extremely important in life and work [1]. This allows them to come up with new ideas, exciting and challenging problems. Torrance, E.P. and R.E. Myers. said that creativity thinking is the process of action to achieve new products of thought, this is caused by imagination rather than reasoning [2]. This is caused by imagination rather than reasoning and Osborn's Education says that creativity is applied imagination [3]. Therefore, Ideas and imagination are the main characteristics of creativity thinking. Flipped classroom is a form of teaching and learning of students' homework. In traditional lecture teaching, it is changed to watching videos for learning outside of class and spending time studying for knowledge and homework or activities with friends. Learners must study for knowledge on their own outside the classroom by studying through technology materials provided by the instructor. The instructor is responsible for helping, giving advice, and asking students questions to solve problems together. So therefore, the flipped classroom is a learning

management that meets the needs of thinking practice [4]. It also meets the needs of teaching and learning management in various courses that want to train students to think, plan, act, and present their own works. In this research, the researcher focused on classroom learning management by applying Microsoft team online classrooms to organize learning activities to promote the learning of learners to their full potential. Learners can practice repetitive review with lesson content to study, submit homework and take tests including the work piece. This is by always relying on communication between teachers and students when students have questions.

PROBLEM STATEMENT

1. How did the students develop their creative thinking after using the learning management model?
2. How is the creative thinking of students after using the learning management model?

OBJECTIVE OF THE STUDY

1. To study the basic information on the creative thinking of students, Faculty of Education, Uttaradit Rajabhat University.
2. To develop a learning management model to promote creative thinking using a flipped classroom learning management approach for students, Faculty of Education, Uttaradit Rajabhat University.
3. To study the results of using the learning management model to promote creative thinking using the flipped classroom learning management approach for students,

Faculty of Education, Uttaradit Rajabhat University.

MATERIALS AND METHODS

Materials

1. Learning management models to promote creative thinking using a flipped classroom learning management approach for students, Faculty of Education, Uttaradit Rajabhat University including are 5 topics: learning innovation, digital media, integrated education management, classroom management, learning management plan design and writing, and classroom teaching experiments.

Teaching and learning activities are as follows:

- 1.1 Preparation activities before entering the school.
- 1.2 Classroom learning (1) Introduction to the lesson (2) Teaching stage: (2.1) Study, (2.2), Ask questions for learning, (2.3), Reading to build understanding, (2.4), Record knowledge, (2.5) Summarize and reflect on knowledge.
- 1.3 Summary and evaluation of creative thinking.
2. Evaluate creative thinking for students, Faculty of Education, Uttaradit Rajabhat University.

The research instruments were the learning management model and the learning management model manual.

The research instruments for data collection were a creativity test for students, Faculty of Education, Uttaradit Rajabhat University.

Development of instruments used in research

- 2.1 Study documents, textbooks, and research related to creative thinking and test creation. The researcher has set 3 levels of explanation of the answers to cover the content and behavioral purpose of 1 paper, 25 questions, 300 points.

The form of the students' creative thinking was analyzed by finding mean and standard deviation with the 3 levels. The three rubric score was defined: "3" means the level of the students' creative thinking was at the highest level, "2" means the students' creativity thinking was at a moderate level, and "1" means the students' creative thinking was at the lowest level.

- 2.2 Bring the creativity test to 3 experts to verify the accuracy and accuracy of the content, which has the following features:

- 2.2.1 Curriculum and Instruction Specialist 1 person who is a lecturer in a higher education institution with a doctoral degree or an academic position from assistant professor or higher.
- 2.2.2 Measurement and Evaluation Specialist 1 person who is a lecturer in a higher education institution with a doctoral degree or an academic position from assistant professor or higher.
- 2.2.3 Creative thinking specialist 1 person who is a lecturer in a higher education institution with a

doctoral degree or an academic position from assistant professor or higher.

The results of the quality of the creativity test of students were found to have an IOC value between 0.60-1.00. 25 questions show that all items are of appropriate quality and can be used.

- 2.3 Take the creativity test to find the Discrimination value (B) of 25 questions
- 2.4 Take an enhanced creative thinking quiz. Try out with the students of the experimental group. There were 6 students in the learning management science course, and the score from the creativity test was used to analyze the reliability of the whole text, which was 0.95
- 2.5 The test was prepared as a test before and after class, which is the same set of tests.
- 2.6 Print out the complete test to use for further data collection.

Methods

1. Study the basic information on the creative thinking of students, Faculty of Education, Uttaradit Rajabhat University. The sample group were students from the Faculty of Education, Uttaradit Rajabhat University. In the first semester of the 2024 academic year, A total of 60 students were selected using a simple random sampling method. They were surveyed to obtain basic information about creative thinking. Data Analysis: The data obtained from the synthesis of documents and interviews with experts is used to conduct content analysis and draw conclusions.
2. Develop a learning management model to promote creative thinking using a flipped classroom learning management approach for students, Faculty of Education, Uttaradit Rajabhat University. Source 3 experts with the following qualifications: Specializing in curriculum and instruction 1 person, specializing in a flipped classroom learning management 1 person, specialist in creative thinking 1 person and students from the Faculty of Education, Uttaradit Rajabhat University who studied the learning management science course in the 1st semester of the 2024 academic year for a trial group. The research instruments include an assessment of the appropriateness of the learning management model and a manual for the use of the learning management model.
3. Study the results of using the learning management model to promote creative thinking using a flipped classroom learning management approach for students, Faculty of Education, Uttaradit Rajabhat University. Designed this research experiment, the researchers used a single-group research methodology. Using the pre-experimental research model of the one-group pretest and posttest design. The sampling group of study were 11 students. This study used the purposive sampling to select the sample group, which is a student of the Faculty of Education, Uttaradit Rajabhat University 1 classroom.

PRESENTATION AND DISCUSSION OF THE RESULTS

Research Methods

Designed this research experiment, the researchers used a single-group research methodology. Using the pre-experimental research model of the one-group pretest and posttest design.

Data Analysis

1. The creativity test measures by finding the mean (X) and standard deviation (S.D.) and comparing the scores of students before and after the study from the model using the pre-experimental research model of the one-group pretest and posttest design.
2. Bring the data from the study on creative thinking to analyse the results of the students' activities after the use of the learning management model, analyze the qualitative results by content analysis and summarize the results.
3. From the successful application of the learning management model to students, the results of the evaluation of the creative thinking of the students were concluded.

Results of Research

1. Results of quality assessment of learning management models for students. Overall, the results of the quality assessment were at the highest level ($X = 4.85$, $S.D. = 0.20$). Included: the source of the learning management model is assessed at the highest level ($X = 4.67$, $S.D. = 0.47$), the components of the learning management model are assessed at the highest level ($X = 5.00$, $S.D. = 0.00$), the use of the format, the assessment items are assessed at the highest level ($X = 4.83$, $S.D. = 0.24$) the results that occur with learners are assessed at the highest level ($X = 4.89$, $S.D. = 0.16$).

The results of the quality assessment of the learning management model manual found that the learning management model promotes creative thinking using a flipped classroom learning management approach for students overall is at the highest level ($X = 4.67$, $S.D. = 0.32$).

2. Develop a learning management model to promote creative thinking using a flipped classroom learning management approach for students.

Table 1. Results of the creativity assessment before and after studying

Percentage of average creativity scores Before studying	Percentage of average creativity scores After studying
48.80	81.80
Activity Effectiveness Index 0.64	

From the table, it can be concluded that the learning management model promotes creative thinking using a flipped classroom learning management approach for students, Faculty of Education, Uttaradit Rajabhat

University. This shows that the effectiveness index of the learning management model is 64 percent.

3. Study the results of using the learning management model to promote creative thinking using a flipped classroom learning management approach for students, Faculty of Education, Uttaradit Rajabhat University.

Comparative results of creativity using learning management model before and after studying.

Table 2. Displays the total results of the Creativity Assessment

Points include each area of creativity					
	Before	%	After	%	Compare after learning higher than before studying (%)
Fluency thinking	30	39.87	69	92	51.9
Flexibility thinking	36	49.10	75	99.6	50.5
Elaboration thinking	34	44.97	73	98	52.6
Originality thinking	38	50.66	75	100	49.3

Table 3: Comparison of creativity between before and after studying from the learning management model

Study creative thinking	N	Full Score	\bar{X}	S.D.	p
Before studying	11	300	48.80	0.50	.000
After studying	11	300	81.80	0.48	

* $p < .05$

CONCLUSION AND RECOMMENDATIONS

1. Students have the need to act on their interests and want to use creativity in organizing learning activities. They want to be strengthened in organizing learning activities to inspire learning activities. Most students have a desire to develop thinking skills and other skills that are fundamental to creative thinking. To be able to design teaching or other creative works effectively, there is a need to be flexible and modify learning activities or teaching and learning content from time to time to suit the times [5]. Moreover, students also need to think and make their own decisions in choosing content or activities that they are interested in learning [6]. They want to participate in setting learning goals with their classmates and instructors, and they want to collaborate in designing learning activities that focus on teamwork and learning with a variety of individuals. In conclusion, most students have a need for instructors to use questions to stimulate creative thinking. To stimulate creativity in designing lesson plans. Teaching and learning process teaching materials and other activities.

2. From the table, it can be concluded that fluency thinking increased by 51.9 percent, flexibility thinking increased by 50.5 percent, elaboration thinking increased by 52.6 percent and Originality thinking increased by 49.3 percent. In conclusion, the average percentage of creativity after studying is higher. Average score percentage of creativity before studying and learning management model to promote creativity thinking using a flipped classroom learning management approach for students, Faculty of Education, Uttaradit Rajabhat University, shows that the effectiveness index of the learning management model is 95 percent.
3. Results of comparison of creativity using learning management models before and after studying from Table 2, it was found that the average score before studying was 48.80 ($X = 48.80$, $S.D. = 0.50$) and the average score after studying was 81.80 ($X = 81.80$, $S.D. = 0.48$).

Results of creativity study from the learning management model to promote creative thinking using a flipped classroom learning management approach for students, Faculty of Education, Uttaradit Rajabhat University are as follows:

Aspect 1:) Fluency thinking it was found that in the first stage, the preparatory activities before entering the school. The instructor assigns learners to study from the teaching materials, including: videos, audio files, lectures, and online media, in advance. Learners are interested and enthusiastic about learning according to the pattern by asking questions about their doubts and exchanging learning with other friends [2]. 2) Learning in the classroom the instructor introduces the lesson by connecting the old knowledge and the new knowledge, allowing the learners to exchange and brainstorm about learning innovation. Digital media teaching is taught through the concept of a flipped classroom, and after the learners have studied the content to be learned from various media on their own outside the classroom [7]. 3) Summary and evaluation by the instructor check the knowledge gained from the activity using the creativity test that has been prepared. In conclusion, by participating in the activity, learners have been able to think creatively, and they can creatively learn innovations and digital media in a fluent and diverse manner.

Aspect 2: Flexibility thinking was found that in the first stage, learners answered questions raised by the instructor in the Microsoft team and recorded various events that they had encountered. Learning in the classroom the instructor introduces the lesson by linking the old knowledge with the new knowledge [7]. Let learners exchange and learn together. The instructor asks questions to help students think flexibly about the integrated curriculum and classroom management, such as "Integrated learning in a regular classroom, how should teachers use teaching techniques so that students with special needs can study with regular learners with quality?" and "How should teachers manage classes so that students can think analytically, synthesize and apply content with quality?" The instructors provide guidance on integrated study and class management. In addition, answer questions

and help learners in various situations where learners can answer questions and solve problems.

Aspect 3: Elaboration thinking was found that in the first stage, preparatory activities before entering the school. The instructor assigns learners to study from the teaching materials. In addition, ask questions about your doubts and exchange learning with other friends [8]. The instructor introduces the lesson by linking the old knowledge with the new knowledge. Classroom management and design and writing of learning management plans after the learners have studied the content to be learned from various media on their own outside the classroom. Then, they discussed and answered questions. Learners ask questions together to exchange learning together fluently, and the instructor gives advice in case of problems for learners. The instructor randomly asks the learners to answer the questions "How should the instructor manage the class or arrange the classroom atmosphere so that students can learn together happily?" and "How to arrange the external and internal classroom atmosphere so that students know how to respect the rights of others, respect others, and have harmony." Also, most of the students have elaborate thinking from the challenges and prompts of the instructors, and the knowledge exchange among peers in the group.

Aspect 4: Originality thinking it was found that in the first stage, learners studied from teaching materials and videos in advance, and learners answered questions that the instructor set up in the Microsoft team and recorded events. Subject: designing and writing learning management plans learners ask questions together to exchange learning together fluently, and the instructor gives advice in case of problems for learners. The instructor randomly asked the learners to answer the questions "How should the instructor design and write the learning management so that students can gain knowledge effectively?" and "How to design and write a learning management plan that helps students be creative and apply knowledge appropriately" and ask other learners to comment. Learners can take the initiative to answer questions about designing and writing a learning management plan. In summary, the instructor checks the knowledge gained from the activity using the creativity test that has been prepared. In conclusion, from participating in the activity, learners have been creative in classroom management and designing and writing learning management plans. Learners are more creative and original [2].

From the trial teaching practice in the classroom and have each group of learners make a knowledge map about the content taught. Motivate learners to design their own group diagram. Since the learners in the group have different abilities, it takes effort to work together [2]. In drawing a knowledge map, it is necessary to set goals and deadlines for submitting tasks together. It motivates learners to work with quality by setting clear goals. Students take creative initiative in teaching design and write a learning management plan. The learning management model helps students develop their own potential appropriately and use the potential that

motivates students to manage teaching and learning successfully. It shows creativity in teaching design. Writing a learning management plan and creating modern and quality innovative learning materials.

Therefore, it can be concluded that student's express creativity in four areas: fluency thinking, flexibility thinking, elaboration thinking, and originality thinking. Students should be encouraged and challenged to learn throughout the school hours. Always encourage learners to complete their tasks. Choose modern and open innovative media in studying and researching knowledge, giving learners the opportunity to present their own work appropriately. Based on the principles of learning management models to promote creative thinking using a flipped classroom learning management approach for students, Faculty of Education, Uttaradit Rajabhat University, with the process of allowing teachers to reflect on learning design through innovative media and for students to study at home and do homework and learning activities in the classroom has been very successful because students are happy from learning through innovative learning materials.

Acknowledgements

We are very grateful to experts for their appropriate and constructive "one of us thank you to all the faculty members who have contributed their knowledge." and "Thank you to Uttaradit Rajabhat University for facilitating the venue and providing the opportunity to study the data with the researchers".

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