

The Effects of Blended Learning using Collaborative Learning with Team Project Technique in Topic Visual Arts to enhance Creative Thinking of Grade VI Students

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Abstract—These This research has purpose. 1) to construct an the blended learning using collaborative learning with team project technique in topic visual arts to enhance creative thinking of grade VI students, 2) to study the creative thinking of grade VI students, 3) to study the achievement of grade VI students .The samples in this research were grade VI students of Sureephon Kindergarten School, Khon Kaen Province, Thailand, were 32 students

Index Terms—blended learning, collaborative learning, team project, creative thinking

I. INTRODUCTION

The world today has evolved rapidly. Technology has played a greater role in life. Can be seen from all things Relying on technology as a whole As the meaning of the word "technology" means Science that brings scientific knowledge to be useful in practice and industry (Thai Dictionary of the Royal Academy, 1999) Technology items that get attention from everyday use But also teaching and learning with modern technology Design and promotion of teaching and learning systems with an emphasis on educational objectives The participation of learners is a center of learning, rather than the content that is used in practical education, through the analysis and use of audiovisual education for teaching using various devices and self-study (Good, 1973) Teachers must provide media for teaching and learning. And bring technology to use in teaching and learning management Which is one way to help learners develop (Ministry of Education, 2008)

II. COLLABORATIVE LEARNING

Collaborative learning is finding knowledge everywhere, waiting for discovery by human efforts. With social methods by helping to rely on learning together. Besides that, Collaborative Learning is a learning activity with exchange of ideas in small groups. Not increasing the interest of the participants But will support analytical thinking the exchange of learning between students is an opportunity to cultivate discussion. Have responsibility for their own learning (Johnson and Johnson, 1986) Team project Technique has become a form of interest for presenters due to their unique work. Working together with others another important thing is to design a team project for collaboration only, but students must be able to collaborate, must be able to create work pieces to shape and presented as clear. Said that the learning model is a form of child-centered approach that allows students to work according to the level of skills they have in their interests and convenience. What questions will ask and what products will produce from this event. The teacher acts as a sponsor of the equipment and provides experience to students. Motivation for students (McDonel 2007)

III. CREATIVE THINKING

Creative Thinking not only taking notes of new things, but also linking existing knowledge or experiences in new arrangements, not necessarily a new world class (Wescott and Smith, 1963) In accordance with the idea that creativity is the ability of a person to think of production Or new strange things Not known before Which things Those may be caused by collecting various knowledge. Obtained from experience and connect to new situations and this new thing does not have to be truly complete. May come in the form of art products, literature, science, or just a process or method (Drevdahl,

1960). Not necessarily, a great thing only being able to apply the knowledge that has applied together to be able to solve problems or apply them to benefit further Creativity is available in almost every activity that taught in the curriculum and extra curriculum. Such as in the art of drawing and painting (Aree Punmanee, 2000)

From the reasons mentioned above Education as a teacher. Interested in a blended learning method with cooperative learning, team project technique Used in the management of visual arts courses. To promote creativity And to study the satisfaction of grade VI students By studying the subject The Effects of Blended Learning Using Collaborative Learning With Team Project Technique In Topic Visual Arts To Enhance Creative Thinking Of Grade VI Students. In order to continue to use the results as a guideline for teaching and learning activities.

IV. OBJECTIVES

A. To construct the effects of blended learning using collaborative learning with team project technique in topic visual arts to enhance creative thinking of grade vi students.

B. To study the creative thinking of grade vi students by of blended learning using collaborative learning with team project technique in topic visual arts to enhance creative thinking.

C. To study the achievement of grade vi students by blended learning using collaborative learning with team project technique in topic visual arts to enhance creative thinking.

V. METHODOLOGY

A. Population and Sample

Population was grade VI students at Sureeporn Kindergarten school, Non Sila district, Khon Kaen province under the office of Khon Kaen primary educational service area 3, first semester of academic year 2018. Sample of this research was 32 students of grade VI student in the first semester of academic year 2018, Sureeporn Kindergarten School, Non Sila District, Khon Kaen Province, which were obtained by Simple Random Sampling.

B. Research Tools

Tools used in the experiment

1) Tools used in the experiments. Blended Learning Using Collaborative Learning With Team Project

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Tools for data collection

- 1) Creative measurement form
- 2) Learning achievement test
- 3) Study satisfaction evaluation form

C. Data Collection

1) The researcher brought the book from the Department of Educational Technology, Faculty of Education, Khon Kaen University to Sureeporn Kindergarten to request cooperation in experimentation and collecting data in the study of expressions.

2) Place preparation and experimental equipment where the location of this experiment is the use of computers.

3) Test before class (first test) with students in the sample group online.

4) The researcher pointed out the sample group of the objectives of the experiment and explained the learning process from the lesson.

5) Divide students into sample groups into small groups.

6) Explain how to learn the pattern by creating a team project for students to understand.

7) Take the test after studying online, using a test before class, without including the time for studying the lesson from the lesson.

8) The data obtained from pre-test and post-test and satisfaction assessment form are used to prepare statistical analysis in the following order.

VI. RESEARCH RESULT

A. The Results of the Efficiency of Blended Learning

From Table I. Shows that in one-to-one experiments, the efficiency value (E_1/E_2) equal to 66.31/ 63.75. The small group study has the efficiency value (E_1/E_2) equal to 74.21 / 70.0. The field experiment has the efficiency value (E_1/E_2) equal to 86.64 / 85.85. A summary of the studies to find the effectiveness of the integrated lesson by cooperative learning. The achievement group pattern on the learning management system to promote analytical thinking for grade VII students with efficiency (E_1/E_2) equal to 86.64 / 85.85, which is in accordance with the set criteria 80/80 can use for teaching and learning about Team Project technique in topic Visual Arts to enhance Creative Thinking of Grade VI Students.

TABLE I. SHOW CALCULATING THE EFFICIENCY OF THE BLENDED LEARNING IN 3 STEPS

The experiments	No. of group (Group) (member)	Total score	The score after each examination	The effectiveness of the Blended Learning E_1/E_2
One to One Testing	1(4)	80	40	66.31/63.75
Small Group Testing	2(8)	80	40	74.21/70.00
Field Testing	5(20)	80	40	86.64/85.85

B. The Results of the Comparing on Creative Thinking

From Table II. Found that the score to measure creative thinking. The learners with Blended Learning has average score equal to 8.09, standard deviation equal to 1.46. The regular learning session has average score equal to 16.93, standard deviation equal to 0.82. T-test independent value equal to -31.35. Analytical thinking score of the learners with Blended Learning higher than the analytical thinking scores of students studying in the normal learning style at .05

TABLE II. SHOWS A TABLE TO COMPARE THE CREATIVE THINKING OF THE LEARNERS WITH THE BLENDED LEARNING WITH THE BLENDED LEARNING AND THE LEARNER IN THE REGULAR LEARNING SESSION

Experimental group.	The number of groups (people)	\bar{X}	S.D.	T	P
The learners with the Blended Learning.	32	8.09	1.46	-31.35	.000*
The regular learning session.	32	16.93	0.82		

* $p < .05$, $df = 31$

C. The Results of the Comparing on Achievement

From Table III. Found that the score to measure achievement. The learners with Blended Learning has average score equal to 111.87 standard deviation equal to 3.98. The regular learning session has average score equal to 17.37, standard deviation equal to 0.75. T-test independent value equal to -15.55. Achievement score of the learners with Blended Learning higher than the achievement scores of students studying in the normal learning style at .05

TABLE III. SHOWS A TABLE TO COMPARE THE ACHIEVEMENT OF THE LEARNERS WITH BLENDED LEARNING AND THE LEARNER IN THE REGULAR LEARNING SESSION

Experimental group.	The number of groups (people)	\bar{X}	S.D.	T	P
The learners with the Blended Learning.	32	11.87	3.98	-15.55	.000*
The regular learning session.	32	17.37	0.75		

* $p < .05$, $df = 31$

VII. CONCLUSION

The researcher received the lesson learned form by learning to create a work as a visual arts team to promote creativity for grade 6 students created for experimentation. And the sample group is the grade 5-6 students in the Philippines studying in the Department of Biology 1, academic year 2018, with research results

A. The result of learning the teaching model, Blended Learning Using Collaborative Learning with Team Project Technique in Topic Visual Arts To Enhance Creative Thinking of Grade VI Students subject

complementary colour has the efficiency of 86.64 / 85.85 according to the criteria.

B. The results of comparison of pre-test and post-test creativity by Blended Learning Using Collaborative Learning With Team Project Technique In Topic Visual Arts To Enhance Creative Thinking Of Grade VI Students subject complementary colour, having the creative score after studying higher than before learning significantly at the level of .05

C. The comparison of learning achievement before and after learning by Blended Learning Using Collaborative Learning With Team Project Technique In Topic Visual Arts To Enhance Creative Thinking Of Grade VI Students subject complementary colour, with the scores of academic achievement after learning before learning significantly at the level of .05.

VIII. DISCUSSION

The researcher received the lesson learned form by learning to create a work as a visual arts team to promote creativity for grade 6 students created for experimentation. And the sample group is the grade 5-6 students in the Philippines studying in the Department of Biology 1, academic year 2018, with research results

A. The result of learning the teaching model, Blended Learning Using Collaborative Learning With Team Project Technique In Topic Visual Arts To Enhance Creative Thinking Of Grade VI Students subject complementary colour has the efficiency of 86.64 / 85.85 according to the criteria.

B. The results of comparison of pre-test and post-test creativity by Blended Learning Using Collaborative Learning With Team Project Technique In Topic Visual Arts To Enhance Creative Thinking Of Grade VI Students subject complementary colour, having the creative score after studying higher than before learning significantly at the level of .05

C. The comparison of learning achievement before and after learning by Blended Learning Using Collaborative Learning With Team Project Technique In Topic Visual Arts To Enhance Creative Thinking Of Grade VI Students subject complementary colour, with the scores of academic achievement after learning before learning significantly at the level of .05.

IX. SUGGESTIONS

A. Suggestions from the Research

1) Developing creative thinking Teachers should respond to the needs of a wide variety of learners by using vocabulary linked to feelings and summarizing self-learning.

2) Should add excellent research assistants

3) Teachers should increase time in the process of creating more activities.

B. Suggestions to study next research

1) Create blended learning with cooperative learning with a project creation model to promote creativity at other levels

2) Create blended learning with cooperative learning with a project creation model that promotes other skills such as analytical thinking skills Problem solving skills etc.

3) Create blended learning with cooperative learning with various learning styles. To promote creativity such as learning styles (LT), jigsaw puzzles (Jigsaw) etc.

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REFERENCES

- [1] R. Arnat, *Create an e-learning System with Moodle Full Version*, Bangkok: SE-EDUCATION, 2015.
- [2] A. M. Einfeld, *Liberal arts Education and Online Learning: Practices, Prospects, and Limits*, Retrieved, 2016.
- [3] E. Hallmark. (2011). Arts as Collaborative Inquiry: Re-Defining and Re-Centering Quality Arts Practice in Schools. [Online]. Available: <http://search.proquest.com/docview/853642732/751F758819ED4323PQ/1?accountid=27797>
- [4] R. S. Harris. (2017). Teachers as designers: Creativity, innovation and technology in professional development. [Online]. Available: <http://search.proquest.com/docview/1868507640/BA7F14FCC24748A6PQ/1?accountid=27797>
- [5] K. Intharaphet, "Development of creative thinking in the art of pre-primary students using creative skills training," Science Science Education Khon Kaen University, 2005.
- [6] M. R. Kissinger. (2015). The effects of collaborative creative artson leadership competency self-awareness: A social science portraiture study. [Online]. Available: <http://search.proquest.com/docview/1786987781>
- [7] D. W. Lee. (2006). The impact of nurturing creativity in language arts classrooms for improving students' creative products. [Online]. Available: <http://search.proquest.com/docview/304937333/E1DCE8B51B984DA1PQ/1?accountid=27797>
- [8] S. McClurg. (2009). Increasing middle school student achievement in reading and language arts with project -based learning methods of instruction. [Online]. Available: <http://search.proquest.com/docview/276075080/D1602BB9D1304196PQ/1?accountid=27797>
- [9] M. R. Miller. (2011). Integration of an Arts-Based Curriculum in a K-5 Charter School. [Online]. Available: <http://search.proquest.com/docview/911992753/488B1E138DFE4D93PQ/1?accountid=27797>
- [10] R. A. H. Doering, *Pearson Education Limited*, USA, 2014, pp. 381-406.
- [11] A. A. Truitt. (2016). A case study of the Station Rotation blended learning model in a third grade classroom. [Online]. Available: <http://search.proquest.com/docview/1868417334/8E8ADC635B214AC8PQ/1?accountid=27797>
- [12] N. M. Wayer. (2013). From design to enactment: A case study of blended learning across the content areas in a K-12 school. [Online]. Available: <http://search.proquest.com/docview/1547360014/74BF7E9192847BBPQ/15?accountid=27797%E0%B8%83>



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