

THE EFFECT OF FLIPPED CLASSROOM LEARNING MANAGEMENT ON THE LEARNING ACHIEVEMENT AND SATISFACTION OF GRADE 6 STUDENTS AT DEMONSTRATION SCHOOL OF SUAN SUNANDHA RAJABHAT UNIVERSITY

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ABSTRACT

The objective of this research was to study the effect of flipped classroom learning management on the learning achievement and satisfaction of Grade 6 students. The samples of the study included 37 Grade 6/1 students studying in the first semester of the academic year 2023 at the Demonstration School of Suan Sunandha Rajabhat University, selected through purposive sampling. Research instruments comprised a flipped classroom learning management plan in Mathematics focused on fractions, achievement tests, and satisfaction questionnaires. The data obtained were analyzed using mean and standard deviation. The findings revealed that the academic achievement of students who received flipped classroom learning was higher than before, and students' satisfaction with flipped classroom learning was at a high level.

Keywords: Flipped Classroom, Learning Achievement, Satisfaction

INTRODUCTION

The 21st-century world aims to equip learners with critical thinking skills. Critical thinking Problem-solving, creativity, technology, communication and collaboration, human resource development process, educational personnel, and related parties will jointly organize learning to develop learners with desirable attributes. In order for teaching to achieve the specified goals by relying on a system with continuous improvement procedures for improving quality, which is in line with the National Education Act No. 4 Amendment B.E. 2562, Section 22 states that the principles of education management are that all learners have the ability to learn and develop themselves. The educational process must encourage learners to develop naturally and to their full potential (Office of the Basic Education Commission, 2017). However, Thai society still faces problems Provide content-based instruction Learning management that is still a narrative format The instructor enters the data and the learner waits for the information only. As a result, learners are used to organizing learning in this way, and learners do not have the opportunity to express their ability to express their opinions. Lack of critical thinking skills and lack of planning (Commercial Review, 2012: 17) It does not train students in mathematical, scientific, and process skills or instill critical thinking and problem-solving skills. Therefore, in order for Thai children to survive in a rapidly changing society, it is necessary to Reform or improve education in line with changes that emphasize that children know how to think, think, cure, and learn, so it requires cooperation from all parties. Especially teachers who are not only knowledgeable. In terms of content, there must also be a variety of learning processes and teaching methods. To stimulate learning and attract attention from learners. Karjanarakpong, 2002)

To be successful, mathematics should be taught from concrete subjects. Organizing good teaching and learning activities should give learners the opportunity to create ideas. Self-

discovery We must prepare learners to learn things to meet the quality expectations of learners in elementary and upper elementary levels. subtraction Multiplication, and division and can be applied in various situations (Office of the Basic Education Commission, 2017)

The concept of inverted learning emerged based on the ideas of Jonathan Bergman and Aaron Sams. Using technology to enhance learning in different classrooms to have more time to interact with learners instead of lecturing in front of the room. This inverted classroom model wants to help students who are struggling to attend classes or learners with slow learning. The reason for reversing the classroom is to change the way teachers transfer knowledge from lecturing in front of the class to being substituted as trainers or coaches, also known as tutors (Yupaporn Duangtod, 2018). Saa, 2016) that the main concept of the "reverse classroom" is "study at home, do homework at school". Instead, take what was assigned to do it at home and do it in class. It is based on the principle that when a student really needs to see the teacher is when he needs help. He didn't. I want the teacher to be in class to teach the material because he can study it on his own. If the teacher records a video teaching the child to watch as homework. Then teachers use classes to guide students to understand. The core of knowledge is better. Teachers will distribute materials for children to study in advance at home. When you come to class Students ask questions and then embark on individual or group assignments with teachers. Answer any questions you may have.

Suan Sunandha Rajabhat University Demonstration School has students who are ready for learning and technology media and the researcher wants to improve the ability and achievement of Grade 6 students because after graduation, students will have to take the O-Net proficiency test at the national level and some students will have to go out for competitive exams to enter secondary school.

OBJECTIVES

1. To study the effect of inverted classroom learning management on the academic achievement of Grade 6 students, Suan Sunandha Rajabhat University Demonstration School.
2. To study students' satisfaction with the inverted classroom arrangement of Grade 6 students, Suan Sunandha Rajabhat University Demonstration School.

METHODOLOGY

1. Sample population

1.1 population The population used in this research was 74 students in Grade 6 of Suan Sunandha Rajabhat University Demonstration School (Primary Department) in 2 classrooms studying in Semester 1 of the academic year 2023.

1.2 Samples Samples used in this research are: Grade 6 students of Suan Sunandha Rajabhat University Demonstration School (Primary Department) who are studying in Semester 1 of the academic year 2023 were acquired by purposive sampling with a total of 37 students.

2. Research instruments

2.1 Inverted classroom learning plan Fractional Matters: 1 plan, duration 12 hours

2.2 Questionnaire on students' opinions on the inverted classroom arrangement of Grade 6 students, Suan Sunandha Rajabhat University Demonstration School It is a 5-level rating scale questionnaire (Boonchom Srisawat, 2553). as follows

- | | | |
|---|-------|--------------------|
| 5 | means | most agree. |
| 4 | means | agree a lot. |
| 3 | means | moderately agreed. |

- 2 means less agreed.
- 1 means least agree. Not sure or disagree?

Analysis using mean and standard deviation, and then presenting the data in tabular form to accompany the essay using interpretive criteria according to 5 levels of satisfaction (Boonchom Srisawat, 2553). As follows An average score of 4.51 – 5.00 means that satisfaction is very good. An average score of 3.51 – 4.50 means satisfaction is good. An average score of 2.51 – 3.50 indicates moderate satisfaction. An average score of 1.51 – 2.50 means that satisfaction is at a fair level. An average score of 1.00 – 1.50 means that satisfaction is at a level that should be improved.

3. Collection of Information

In this research, we conducted an experiment and collected data for 14 hours in the first semester of the academic year 2023.

1. The researcher clarifies the purpose of the research to the sample.
2. Take a pre-test before organizing inverted classroom learning with the group. Example with 20 math achievement tests in 60 minutes
3. Conduct learning management according to the inverted classroom learning management
4. Plan by having the sample experiment. Learn with video Study materials and self-study books at home according to the topics assigned by the researcher.

4. Statistics

The data were analyzed by the application of t-test, mean (\bar{x}), and standard deviation (S.D.)

RESULTS

We presented the results of data analysis according to the objectives of the research as follows:

1. The effect of classroom learning management on the academic achievement of Grade 6 students, Suan Sunandha Rajabhat University Demonstration School. We used the Mathematics Achievement Test. The researchers created the pre-school and post-study tests with students who were taught in an inverted classroom style, then used the data obtained for statistical analysis and independently tested the t-test dependent group.

Table 1: Effect of inverted classroom learning management on learning achievement of Grade 6 students, Suan Sunandha Rajabhat University Demonstration School

| Test | Score | N | \bar{x} | S.D. | t-test | p-value |
|-----------|-------|----|-----------|------|--------|---------|
| Pre-test | 20 | 37 | 9.05 | 1.76 | 20.63 | 3.59 |
| Post-test | 20 | 37 | 16.68 | 2.14 | | |

Table 1 shows that students who were organized to learn inverted classrooms in mathematics on fractions. The average score before inverted classroom learning was 9.05 points out of 20. The standard deviation was 1.76 and the average score of academic achievement after the inverted classroom learning arrangement was 16.68 points.

2. To study students' satisfaction with the inverted classroom arrangement of Grade 6 students, Suan Sunandha Rajabhat University Demonstration School. We used a questionnaire

of students' satisfaction with classroom teaching and learning in reverse and used the data obtained to analyze static data.

Table 2 shows the level of students' satisfaction with the inverted classroom approach.

| Estimate List | \bar{x} | S.D. | Satisfaction level |
|---|-----------|------|--------------------|
| 1. Clarify the agreement and tell the rules of learning step by step. | 3.55 | 0.72 | Very |
| 2. Interesting teaching techniques are used in addition to lectures. | 3.71 | 0.61 | Very |
| 3. Learning activities give students more courage to think and answer. | 4.26 | 0.64 | Very |
| 4. Teachers give students the opportunity to express their opinions. question Exchange ideas based on the data studied. | 4.02 | 0.37 | Very |
| 5. Teachers get closer to learners, giving them the opportunity to ask questions and talk. And ask for more advice. | 3.66 | 0.53 | Very |
| 6. Teaching activities make it easier to enter and remember the material. | 3.55 | 0.64 | Very |
| 7. More modern teaching materials are used. | 3.58 | 0.92 | Very |
| 8. Study techniques can be applied to other subjects. | 3.53 | 0.92 | Very |
| 9. More planning managers are prepared for classes. | 3.79 | 0.99 | Very |
| 10. Reduce the burden of homework better. | 3.52 | 1.20 | Very |
| Total | 3.71 | 0.26 | Very |

Table 2 shows that students' satisfaction with classroom teaching and learning was reversed. With an average value (\bar{x}) of 3.71 and an S.D. value of 0.26, the top two most satisfied students were learning activities. It has an average score (\bar{x}) of 4.26 and an S.D. value of 0.64, and teachers give students the opportunity to express their opinions. Ask questions and exchange opinions based on the information studied. It has an average score (\bar{x}) of 4.02 and an S.D. value of 0.37.

CONCLUSION

We used the Mathematics Achievement Test "Fractions" created by the researcher to test before and after classes with students who were taught in an inverted classroom style.

1. Grade 6 students at Suan Sunandha Rajabhat University Demonstration School who received inverted classroom learning have higher academic achievement than before.

2. Grade 6 students at Suan Sunandha Rajabhat University Demonstration School who received inverted classroom instruction were very satisfied.

DISCUSSION

Research on the effect of classroom learning management on learning achievement and satisfaction of Grade 6 students, Suan Sunandha Rajabhat University Demonstration School We would like to present a discussion of the results on the following topics:

1. Grade 6 students at Suan Sunandha Rajabhat University Demonstration School who received inverted classroom learning have higher academic achievement than before.

According to the results of the research, students in Grade 6/1 who received classroom learning arrangements were reversed. The average score was 9.05 points out of 20 and the average score was 16.68 out of 20. There is a facilitator and/or coach who will help guide students in areas where they need help, which is in line with (Thanawat Srisirawat, 2556) who said that the teacher's teaching and learning style plays an important role in learners' learning that encourages learners to learn independently first by studying at home and then doing homework. Exercises or additional activities at school, which students must prepare themselves. This allows students to learn various materials before class, thus increasing the chances of students doing a variety of exercises.

2. Grade 6 students at Suan Sunandha Rajabhat University Demonstration School who received inverted classroom instruction had a high level of satisfaction. According to the research, students in Grade 6/1 at Suan Sunandha Rajabhat University Demonstration School who received inverted classroom instruction had a high level of satisfaction. The average sum (\bar{x}) was 3.71 and the S.D. value was 0.26. Learning activities make students more courageous to think and answer, with an average sum (\bar{x}) of 4.26 and an S.D. value of 0.64, followed by teachers giving students the opportunity to express their opinions. Ask questions and exchange opinions based on the information studied. A mean sum (\bar{x}) of 4.02 and an S.D. value of 0.37 indicates that learners are satisfied with learning management to a high extent. This may be due to the inverted classroom learning arrangement as a student-centered learning style. Emphasis is placed on students researching and learning on their own according to their abilities and that learners have questions before receiving guidance from teachers. This results in learners' self-esteem.

SUGGESTION

Research on the effect of classroom learning management on learning achievement and satisfaction of Grade 6 students, Suan Sunandha Rajabhat University Demonstration School
The following suggestions are made:

1. Recommendations for applying research results

1.1 To implement the inverted classroom learning arrangement, teachers and learners must prepare by clarifying with the students the nature of the teaching style first, and the teacher must plan the learning management in accordance with the content to be taught. Organizing learning activities and teaching materials

1.2 Teachers should give advice based on the learner's abilities or have a competent friend help teach more.

2. Suggestions for further research

2.1 The teaching style should be applied to subjects and students of other grade levels, and facilities should be provided. Set the time limit to suit the content no more, not too little. The learner must be taken into account.

2.2 Set the time period to suit the content no more, not too little. The learner must be taken into account.

ACKNOWLEDGEMENT

Weerayuth Plailek is deeply grateful to Suan Sunandha Rajabhat University for the financial support provided. Special appreciation is extended to the director of the Demonstration School of Suan Sunandha Rajabhat University for his valuable assistance. Additionally, I extend my gratitude to my coworkers for providing me with the opportunity to collaborate and to everyone else who supported the successful completion of this study.

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