The Development of Cooperative learning Activities with STAD on the Tipitaka and Buddhist Dhana Principles.

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Abstract

The objectives of this research were to 1) develop a collaborative learning activity with STAD technique on the Tipitaka and Buddhist Dharma Principles. For 3rd grade students to be effective on the 75/75 criteria. 2) To study the student's academic achievement obtained from the STAD cooperative learning management technique; and 3) To study the students' satisfaction towards the cooperative learning management with STAD technique. The study group consisted of 8 Prathomsuksa 3 students at Wan Khrua School, 1959. The STAD cooperative learning technique 2) the achievement test and 3) the satisfaction questionnaire. The statistics used to analyze the data were percentage, mean, and standard deviation.

The results showed that 1) The STAD cooperative learning activities had an efficiency value of 83.03 /77.50, which met the specified criteria. 2) The students had learning achievement. 77.50% were in good quality level and 3) the students were satisfied with the overall STAD cooperative learning activities at a high level. ($\overline{X}$= 2.48 , S.D. = 0.63).

Keyword : Collaborative learning, STAD techniques, Achievement in Buddhism.

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Introduction

The management of basic education is consistent with changes in the economy, society, culture, environment and the rapid advancement of scientific and technological knowledge. To develop and strengthen the potential of the nation's people to increase the country's competitiveness by upgrading the quality of education and learning to meet international quality and standards in line with Thailand 4.0. and the world in the 21st century. The Ministry of Education through the Office of the Basic Education Commission has reviewed the Basic Education Core Curriculum B.E. 2551. Information from the 12th National Economic and Social Development Plan, the 20-year National Strategy, and the National Education Plan 2017-2036 are used as a framework and direction for curriculum development to be more suitable and clear. And is an important foundation that will help human beings to be creative, to think rationally and systematically. able to analyze problems or situations carefully and thoroughly, can be applied in daily life Therefore, by virtue of Section 5 of the National Education Act of 1999 and its amendment (No. 2) of 2002 and Section 12 of the Ministry of Education Act of 2003, the Ministry of Education therefore Announcement of learning standards and indicators in the learning area of social studies, religion and culture. (revised version 2017) according to the Basic Education Core Curriculum, 2008 instead of learning standards and indicators for social studies, religion and culture learning subjects. In the Basic Education Core Curriculum, B.E. 2551 (Ministry of Education, 2560, p. 1-2)

Basic Education Core Curriculum 2008, which is the current basic education curriculum. and there is also a revised version in 2017, in which the course is stated that The subject group of social studies, religion and culture has defined 5 subjects of learning. which are 1) religion, morality, ethics 2) civic duty, culture and life in society 3) economics 4) history and 5) geography, especially in strand 1 religion, morality and ethics. Must have basic concepts about religion, morality, ethics, principles of Buddhism or the religion that one respects. The application of doctrines in self-improvement and peaceful coexistence is a good deed have good values always improve yourself as well as making good contributions to society and the public (Ministry of Education, 2008, p. 132) In this religion, morality, and ethics, the curriculum has stated that elementary

school students must have process skills and have the information necessary for developing them to be moral, ethical, and behave according to the doctrines of their religions have good citizenship responsible living together and working with others Participate in classroom activities and practice decision-making. Including more participation in religious ceremonies (Ministry of Education, 2008, p. 134)

The condition of the teaching and learning of the Buddhist subjects For Grade 3 students of Wankru School 1959, Maha Sarakham Province From the observation of teaching and learning activities in the past 2019 academic year, it was found that Some students still lack knowledge and understanding about the principles and teachings of Buddhism. This is because some students still see that religious matters are distant, uninteresting, and boring. Most teaching and learning activities still focus on lectures or reading based on textbooks. Activities have not been used to stimulate the interest and curiosity of the students. causing the learners to not create their own knowledge as they should and teachers often order to work individually as assigned by the lesson only. As a result, students still lack cooperation in learning and helping each other in learning. which is a teaching that does not focus on students is important As a result, students have relatively low academic achievement, 62.03 percent. which is lower than the criteria set by the school, which is 70 percent (Wan Kru School Academic Group 1959, 2019, p. 25). regular teachers who teach regularly in the Buddhist subjects at this level as well.

There are many ways to organize student-centered learning activities that allow students to build their own knowledge from the study of the researcher One interesting way to promote true self-learning for students is to organize group activities to promote learning by using the Student Teams Achievement Division (STAD) approach to learning activities, it creates alternatives in the process of working with others to help promote collaborative learning and become a more important student-centered activity. The researcher studied research papers related to cooperative learning activities. STAD technique is a teaching method that makes students learn better by allowing students to study in small groups There are generally 4 members of the group with different abilities, consisting of 1 high student, 2 average student and 1 weak student. Each student must help their peers in the same group in studying or doing various activities (Slavin, 1978, p. 4-20). who learn the content together, solve problems, have exams, collect

points Group members work together to solve problems. Teachers encourage, reward, compliment, and help each other for group success. There are important steps in learning. lesson presentation stage group stage knowledge acquisition stage, testing stage, evaluation stage and group award stages The advantages of cooperative learning with STAD technique are have social skills, have collaborative problem-solving skills, learners are motivated to study take more responsibility for work Confidence, appreciation and self-esteem, resulting in enjoyment and greater retention in learning (Long-term Retention) (Maneerat Wongsri, 2013, p. 39). And can be used with learning in all subjects, at all levels, and will be more effective with learning activities that aim to develop learners in problem solving. setting learning goals multiple thinking carrying out complex missions Emphasis on morality, ethics, building democracy in the social skills class. Cultivating a habit of collective responsibility and cooperation within the group. In organizing learning activities, the instructor has a role and the instructor has a role in organizing the activity (Wimonrat Soonthornroj, 2010, pp. 10-15).

From the above The researcher therefore studied the effect of learning activities organized by cooperative teaching method STAD technique to improve learning achievement. Buddhism have more enthusiasm for learning and enjoy learning because it is a teaching method in which the instructor organizes activities for learners to seek knowledge, develop concepts, attitudes, methods of working as a group. Promote teamwork skills an important outcome of cooperative teaching is knowledge-seeking skills building knowledge by oneself and social skills in teamwork that are considered essential skills for living in today's and future societies.

Research objectives

1. To develop collaborative learning activities using the STAD technique on the Tripitaka and Buddhist principles. For grade 3 students, the performance criteria is 75/75.

2. To study academic achievement On the Tripitaka and the principles of Buddhism of Grade 3 students who received STAD-based cooperative learning management

3. To study student satisfaction. to the management of cooperative learning techniques STAD

Research scope

The study group

Grade 3 students, Wan Teacher School 1959, under the Maha Sarakham Primary Educational Service Area Office, Region 1, Maha Sarakham Province, semester 2, academic year 2020, 1 classroom with 8 students.

Research content

The contents used in this research are contents from the Basic Education Core Curriculum 2008, Social Studies, Religion and Culture Learning Subject Group, Strand 1, Religion, Morality and Ethics on the Tripitaka and Buddhist Principles, totaling 12 plans. 12 hours

Research variables

1. The independent variables were cooperative learning activities, STAD techniques

2. The dependent variable was academic achievement and satisfaction

The duration of the research

The duration of the research is the second semester of the academic year 2020 at Wankru School 1959 under the Office of Mahasarakham Primary Education Service Area 1, Maha Sarakham Province.

Research methodology

Research on Development of Collaborative Learning Activities STAD Technique on Tripitaka and Buddhist Principles Grade 3 had the following research methodologies.

Study group

The study group was grade 3 students, Wan Kru 2502 School under the

Office of Maha Sarakham Primary Educational Service Area Office 1, Maha Sarakham Province, semester 2, academic year 2020, 1 classroom, 8 students.

Research tools

1. The 12 plans for cooperative learning activities using STAD technique, which had the appropriateness of all plans between 4.07 – 4.67, could be used in all plans.

2. A multiple-choice learning achievement test with 3 options, 30 items, which had a consistency between 0.80 - 1.00, a difficulty between 0.50 - 075,a discriminating power between 0.72 - 0.94 and a belief value. The whole issue is 0.90

3. Student satisfaction questionnaire on cooperative learning activities, STAD techniques, were rated on a 3-level scale: high, medium and low. The questionnaire's consistency value was 1.00 for all items.

Data collection

1. The researcher requested a book from the Faculty of Education, Rajabhat Maha Sarakham University. To request a courtesy to collect data in the Wan Kru 2502 School in the second semester of the academic year 2020

2 . Conduct an experiment with the study group by organizing cooperative learning activities using STAD technique, totaling 1 2 learning management plans, 1 hour each, totaling 1 2 hours, excluding test time before and after the lesson, then recording and collecting scores. Worksheets and exercises during class until all learning plans are completed.

3. When organizing cooperative learning activities, STAD techniques are completed in all plans. Take the academic achievement test. Let's test it with students. to study the learning achievement after class and record the score stored for data analysis

4. To measure satisfaction by asking students to complete a satisfaction questionnaire on cooperative learning activities, STAD technique, to check the validity of the questionnaire. Then save the data to be used for data analysis.

5. Use the data obtained from the experiment with students to perform statistical analysis. to summarize the experimental results according to the research objectives

Data analysis

1. Analyze the effectiveness of the STAD joint learning activity plan on the Tipitaka and Buddhist principles. Grade 3 to be effective according to the criterion 75/75 by finding the percentage.

2. Analyze the study of learning achievement on the Tripitaka and Buddhist principles. Grade 3 by using the cooperative learning activities using the STAD technique, which used percentages to compare with the quality assessment criteria of student learning achievement as follows:

21 – 30 points, 80.00 – 100.00 percent means good quality

11 – 20 points, 60.00 – 79.99 percent means moderate quality.

0 – 10 points, 0.00 – 59.99 percent means weak quality.

3. Analyze the level of satisfaction of the students towards the cooperative learning activities STAD technique by using the mean. standard deviation and interpret the satisfaction level against the specified criteria The rating is given as follows:

3 points mean high level of satisfaction

2 points means moderate level of satisfaction.

1 point means low level of satisfaction

Assessment Criteria used to consider interpreting satisfaction results (Boonchom Srisa-at, 2002, p. 103).

2.51-3.50 means having a high level of suitability

1.51-2.50 means having a moderate level of suitability.

1.00-1.50 means that there is a low level of suitability.

Research results

1. Points during the course of the study by using Worksheets during class and quizzes on Tripitaka and Buddhist principles. There were 12 plans for Grade 3 grades obtained by collecting scores from group worksheets and sub-tests at the end of the plan with an average of 96.30 points, representing 83.03 percent, and scores after learning using an achievement test. The average score was 23.25 points, representing 77.50

percent. Therefore, the efficiency was 83.03 / 77.50, which was in accordance with the specified criterion, which was 75/75. The results were as follows.

Table 1 :Find the efficiency of developing collaborative learning activities using the STAD technique on the Tripitaka and Buddhist principles. For Grade 3 students, performance must be 75/75.

The person who	Score during study (E1) (120 points)	Post-graduate score (E2) (30 points)
1	101	26
2	101	23
3	100	23
4	98	25
5	96	20
6	98	20
7	100	22
8	103	24
Together	797	186
Percentage	83.03	77.50

2. The students who studied by using the STAD cooperative group learning activities had overall learning achievement equal to 77.50 percent in good quality level when considering individually, it was found that There were 2 students with excellent academic achievement and 6 students with good quality. The results were as follows:

Table 2 : A study of academic achievement by organizing cooperative learning activities using the STAD technique on the Tripitaka and Buddhist principles. for students in grade 3

The person who score after school	Full score	Score after school	Percentage of Quality level
1	30	26	86.67 Excellent
2	30	23	76.67 Good
3	30	23	76.67 Good
4	30	25	83.33 Excellent
5	30	20	66.67 Good
6	30	20	66.67 Good
7	30	22	73.33 Good
8	30	24	80.00 Good
Average		23.25	77.50 Good
Standard deviation		1.83	

3. The overall satisfaction of the students towards the cooperative learning activities using STAD technique was at a high level. ($\overline{X}$ = 2.48 , S.D. = 0.63) When considering item by item, it was found that the students had the highest satisfaction. Sort as follows: Students enjoy doing group activities. ($\overline{X}$ = 2.75 , S.D. = 0.47) and the students were impressed with the approval of the work, indicating that the work that was done what level ($\overline{X}$ = 2.75 , S.D. = 0.47) Followed by students understand the content from group learning with the characteristics of performing duties clearly. ($\overline{X}$ = 2.63 , S.D. = 0.52) and the students were satisfied with the test results in the form of group learning ($\overline{X}$ = 2.63 , S.D. = 0.52), the results were as follows:

Table 3 : The mean and standard deviation of the satisfaction of Prathom Suksa 3 students towards the cooperative learning activities using the STAD technique on the Tripitaka and Buddhist principles.

Clause	Assessment Items	$\bar{X}$	S.D.	level of satisfaction
1	Students enjoy doing group activities.	2.75	0.47	a lot
2	Students like to organize teams in a mix of good, medium and weak abilities.	2.50	0.65	a lot
3	The students appreciate the division of duties: reader, contributor, note-taker and evaluator.	2.50	0.52	a lot
4	The students were impressed by the way of learning with an emphasis on cooperation.	2.50	0.52	a lot
5	Students understand the content from group learning. with the characteristics of performing duties clearly	2.63	0.52	a lot
6	Students are satisfied with the test results in a group learning style.	2 . 6 3	0.52	a lot
7	Students enjoy checking each member's test results together with their teacher.	2.50	0.71	a lot
8	The students were delighted to produce each member's improvement score. and group development points	2.50	0.54	a lot
9	The students were impressed with the approval of the work, indicating that What level is the work done?	2.75	0.47	a lot
10	Students like to publish their works in various ways.	2.60	0.52	a lot
11	Impressive students because it helps to achieve higher academic achievement	2.62	0.54	a lot
12	Impressive students because it's fun fun and more interested in studying Buddhism	2.50	0.47	a lot
Together		2.48	0.63	a lot

Summary and discussion of research results

1. The cooperative learning activities using the STAD technique had an efficiency value of 83.03 /77.50, which was in accordance with the specified criteria.

2. Students have overall academic achievement representing 77.50 percent in good quality level.

3. The students were satisfied with the activities. The overall STAD technique cooperative learning was at a high level. ($\overline{X}$ = 2.48 , S.D. = 0.63)

Discussion of research results

1. The development of cooperative group learning activities using STAD techniques on the Tipitaka and Buddhist principles Grade 3 according to the specified criteria 75/75, which has an efficiency value equal to 83.03 / 77.50, which is in accordance with the specified criteria. This is because The researcher has studied the concept Principles and theories related to the process of creating and developing learning management plans by organizing cooperative learning activities using STAD techniques. All 12 maps were then presented to 5 experts for appraisal. The mean was 4.07 to 4.67, which was appropriate at the level up to the most can be used to teach practically every plan and when used to organize learning activities as planned Resulting in an efficiency value of 83.03 /77.50, which is higher than the 75/75 criteria set because the activities that teachers provide help students have a truly self-learning process in a systematic division of duties in group work. Help each other to build knowledge. Responsible for assigned roles and take pride in developing their own works therefore resulting in ingrained knowledge persistence in learning It can help raise the level of higher academic achievement. This is in line with the concept of Katreeya Jaimun (2007, p. 14) who said that Collaborative learning management STAD technique means learning that arranges for learners to study in mixed groups at the level of learning achievement. namely 1 high level, 2 medium levels and 1 weak level. The main purpose is to help students with low academic achievement. have higher academic achievement and focusing on students working together as a group and in line with the concept of Wimonrat Sunthornroj (2008, p. 53-56) said Cooperative learning activities are group learning that can be applied to

all subjects and grade levels and will be more effective. This is in line with the research of Chiranan Boonlong (2019, p. 82) on the development of learning management using the STAD technique to enhance learning achievement on Buddhist principles. Grade 4, the results of the study showed that The learning management plan using the STAD technique had an overall efficiency of 76.97/77.45, which was higher than the specified standard.

2. The students who studied by organizing group learning activities using the STAD technique on the subject of the Tripitaka and the principles of Buddhism. have overall academic achievement The mean was 23.25, equivalent to 77.50 percent, in a good quality level. This is because Organizing cooperative learning activities using STAD techniques has demonstrated the knowledge and abilities of each student. derived from learning or setting up different learning environments taking into account the individual differences in learning ability that teachers have divided into groups of good students moderate and weak in the mix in each group. making it an opportunity for the better-studied children to help the weaker-students When they help each other learn and create a body of knowledge together, allowing students to eventually develop their own learning to a higher level. which is consistent with the concept of Wimonrat Sunthornroj (2010, p. 10-15). The learning process and the role of cooperative learning STAD technique is cooperative learning that can be applied to all subjects and levels of learning and will be more effective in organizing learning activities aimed at developing learners in problem solving setting goals in the field of multi-disciplinary learning carrying out complex missions Emphasis on morality, ethics, building democracy in the social skills class. Cultivating the habit of collective responsibility and cooperation within the group. In the organization of learning activities, the teacher has a role and the teacher has a role in organizing the activities. This is in line with the research of Maneerat Kongpanao, Sittisak Chulsiripong, Lalita Thongphakdee (2016, p. 75) to study Subject: Study of Learning Achievement in Learning Units Sukhothai Kingdom and group work behaviors of grade 4 students using cooperative learning management, STAD techniques, and historical methods, found that the learning achievement after learning was significantly higher than the criteria of 70 percent. Statistics at the .05 level and group working behavior After learning is higher than before. Statistically significant at the .05

level and consistent with Nisa's research. Pirom Kraipak (2017, p. 100 - 112) has conducted a study on The development of a cooperative learning management plan using STAD technique that affects learning achievement. Ayutthaya old city story In the history subject of grade 5 students, it was found that the students' knowledge increased by 0.8122 or 81.22%. The student's academic achievement was higher than before. Level .01 Including in accordance with the research of Chiranan Boonlong (2019, p. 82) has studied the development of learning management by using the STAD technique to enhance learning achievement on Buddhist principles. Grade 4 found that the learning achievement of students. The effectiveness index was 73.03, which was higher than the set criteria.

3. The overall satisfaction of students with STAD Technique Cooperative Learning activities was at a high level. ($\overline{X}$ = 4.48 , S.D. = 0.21) This is because Collaborative Learning management, STAD technique, students enjoy doing group activities have teamwork skills the students were impressed with the approval of the work, indicating that What level is the work done? have seen their own development Take pride when you can and accomplish it. Because the students understand the content from group learning that has the characteristics of performing duties clearly Responsible for assigned roles and responsibilities The students were therefore pleased with the test results in a group learning style that seeks knowledge and builds knowledge together. It can help elevate the student's academic achievement. This is consistent with the concept of Urairat Thurasuk (2007, p. 26) saying that Cooperative learning management STAD technique fosters a good learning atmosphere. All learners in the group help or exchange and cooperate with each other in a friendly and open atmosphere. All group members dare to ask questions that I don't understand This atmosphere leads to discussion both inside and outside the class, leading to borderless learning. and in line with the concept of Maneerat Wongsri (2013, p. 39). have said The cooperative learning management STAD technique has the advantages of having social skills, having skills to solve problems together, students are motivated to learn. take more responsibility for work have confidence, value, and self-esteem, making it fun and more durable in learning. This is in line with the research of Chulalak Rakphong (2015 : 233-242) to study on the

development of learning management by using the STAD cooperative teaching method for civics subjects. In Grade 6, it was found that the students' satisfaction towards learning management by cooperative teaching using the STAD technique was at a high level.

Suggestion

1. Suggestions for applying the research results

1.1 STAD cooperative learning management of students had the effect of changing student's academic performance in a higher way. Teachers should provide modern learning materials or learning resources that are suitable for the activities and age of the learners. To help stimulate learning and interest to be more.

1.2 STAD cooperative learning management In the first hour, students still do not understand about the activities. Therefore, teachers should start by clarifying the purpose. How to act, how to act, how to help each other as well as individual scoring criteria and by group for students to understand before carrying out activities It is suggested that the division of groups should clearly divide the responsibilities for each hour of study.

1.3 Group activities teachers should encourage students to help and discuss during activities especially in the learning stage teachers should provide instructions for correct practice and frequently use reinforcement techniques for learners such as compliments, applause, etc.

1.4 Organizing cooperative learning activities STAD technique has limitations in organizing activities according to various steps, so teachers should be flexible in the time spent on activities to be appropriate and control the time to be able to complete various activities.

2. Suggestions for further research

2.1 The effect of STAD cooperative learning activities should be studied on other content or other subjects that are suitable for group activities and promoting teamwork skills.

2.2 Study of cooperative learning activities using STAD technique should be compared with other cooperative learning activities according to conditions and appropriateness such as TGT, TAI, CIRC, Jigsaw, etc.

2.3 Other variables related to group learning activities, such as pursuit of learning, should be studied responsibility persistence in learning awareness Teamwork skills, social skills, etc.

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