

A STUDY ON LEARNING ACHIEVEMENT IN STUDENT TEACHERS BY USING COOPERATIVE LEARNING MANAGEMENT WITH THE STUDENT TEAMS ACHIEVEMENT DIVISION TECHNIQUES (STAD), FACULTY OF EDUCATION, SUAN SUNANDHA RAJABHAT UNIVERSITY.

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ABSTRACT

This research on Student Teams Achievement Division Techniques is an experimental research that was conducted to compare the learning achievement in psychology courses for teachers on the first year undergraduate students of the Faculty of Education, Suan Sunandha Rajabhat University both before and after using the cooperative learning management with the STAD techniques, the samples used in this research were students of the Faculty of Education, Suan Sunandha Rajabhat University who are studying in the 1st year, academic year 2017, and the total number of sampling used was 29 persons. The instrument used in this research is through cooperative learning activities with STAD techniques, in psychology courses for teachers and through learning achievement tests. Statistics used to analyze the data were mean, standard deviation and comparing the learning achievement with the t-test statistic. Base on the research result, the researcher found that, students who studying with cooperative learning management by using STAD techniques in psychology courses for teachers, having higher learning achievement after using this learning techniques which means that there was a significant difference of learning achievement before and after the group experimental at the level of .05

Keywords: Learning achievement, Rajabhat University, Cooperative learning methods, Student Team Achievement Division Techniques.

INTRODUCTION

At present, Thai society is a developing society. Youth should be encouraged to develop academic skills, as well as various technologies skills in which the National Education Act, 2010 focuses on education management that must administered for the purpose of developing the Thai people to be a perfect human being including bodies, minds, intellectuals, knowledge and morals, ethics and culture of life that can live happily with others [1].

Cooperative Learning is considered as one of the teaching methods, which is established base on the learner or student-center method. The learning method was conducted as guidelines for learners through group activities that let students be responsible for solving problems together, wherein they all come together to accomplished a shared learning goal. As Jirachaya Tikatti (2007, page 2) [2]. said that, cooperative learning is a teaching and learning activity that the teacher will assign students into small groups or teams, about 4-6 people per group that are mixed in performance level or different level of abilities. Each members of the group will have the opportunity to express their opinions. They have to take their roles, duties and responsibilities together with each group members in order to accomplished the shared

goal by relying on social co-existence skills and shared-learning skills with others. And more importantly, individual learning of each of the group members determines the success of the team that they must be responsible for the results of the activities that the teacher has set.

STAD is a one of the cooperative learning techniques in which Salawin (Salavin, 1995, p.41) discussed that the STAD cooperative learning techniques is a form of cooperative learning that can be used in all subjects, from mathematics to languages or social studies and applicable to any educational level, from elementary school to university. The main purpose of using STAD techniques is to motivate students to actively express themselves and help each other to understand the learning content together. [3]

Faculty of Education, Suan Sunandha Rajabhat University is an institution that is responsible for producing undergraduate teachers to teach students in basic educational level including, early childhood educational level, pre-educational level both primary and secondary school. The Faculty of Education has organized teaching and learning for students according to the Ministry of Education's announcement on undergraduate qualifications standards. The Department of Education (Five-year course) has the main task in producing graduates according to the identity of the University and develop professional teachers to the responding of the educational reform and training teacher towards ASEAN community. Therefore, the Faculty of Education has set up the teaching method in order to develop students to be professional teachers by assigning the first-year students to study psychology courses for teachers which is classified as the subject in the teacher professional education. The main goal was to train students and to improve their skills to manage various forms of teaching in order to develop student to achieve the highest academic achievement result. (Faculty of Education Suan Sunandha Rajabhat University, 2012) [4].

As the researcher was responsible for the psychology courses for teachers, student in Thai language department in Suan Sunandha Rajabhat University, recently, the researcher found that students studying in this course had unsatisfactory learning achievement experience together with the nature of the theoretical content that mainly focused on lecture method of teaching, students often lack of involvement and interaction between friends who were attending school and with teachers. This led to the lack of enthusiasm learning environment which was not suitable for the teaching and learning management conditions in the present day.

For this reason, the researcher was interested in studying the learning achievement of students in the Faculty of Education, Suan Sunandha Rajabhat University by using cooperating learning management with Student Teams Achievement Division (STAD) techniques, emphasizing on an ability of responsibility of each individual in each group members on their own duties and they must work collaboratively with another group members to understand that lesson in order to achieve the group shared goals. As a result, students will be more interested in studying, also have more enthusiasm for learning that could enable a better achievement and resulting in the teaching and learning achievement of psychology courses for teachers. Moreover, students could use this teaching method as a guideline for their teaching in the future.

OBJECTIVE

To compare learning achievement in psychology course for teachers of the first-year undergraduate students of the Faculty of Education, Suan Sunandha Rajabhat University both before and after implementing the cooperative teaching and learning with STAD techniques

METHODOLOGY

The population used in this research was the student in Faculty of Education, Suan Sunandha Rajabhat University who were studying in the first-year, during the first semester of the academic year 2017, and the total population number were 360 students in which can be divided into 6 department, as following: Thai Language Department, English Department, Mathematics Department, Early Childhood Education Department, Science Department and Social studies Department.

The samples used in this research were students of the Faculty of Education. Suan Sunandha Rajabhat University who were studying in the first-year, during the first semester of the academic year 2017. The researcher conducted the research by using purposive sampling technique with one section that served as the experimental group which contained 29 students from Thai Language Department.

Variables used in this research as following: Dependent Variable is the Student Team Achievement Division (STAD) cooperative learning techniques. Independent Variable is students' learning achievement.

The tools used in this research are Student Team Achievement Division (STAD) cooperative learning techniques in psychology courses for teachers. And the learning achievement test.

The researcher conducted the research by issuing a notification letter to the Faculty of Education, Suan Sunandha Rajabhat University and requests for the permission to conduct research with the first-year students as a sample group. The researcher then collected the data by himself with the first-year students according to the specified amount during October - November 2017. When the researcher compiled the assessment form completely, as well as selected and examined the completeness of the information already, then, the data will be analyzed by using the software package respectively.

RESULTS

The researcher analyzed the data by using comparative learning achievement in psychology courses for teachers of the first-year undergraduate students of the Faculty of Education, Suan Sunandha Rajabhat University both before and after using cooperative learning with STAD techniques, then, it was found that the mean score of the test before the study was 15.79, the standard deviation was 3.155, and the post-test average score value was 32.31. The standard deviation was 3.626 as shown in Table 1.

Table 1
Average and standard deviation of score before and after the test

Sampling	Score	N	\bar{X}	S.D.
Pre-test	40	29	15.79	3.155
Post-test	40	29	32.31	3.626

Comparison of learning achievement both before and after using the cooperative teaching and learning with STAD technique is shown in Table 2, which found that learning achievement after using the STAD technique on student cooperative learning teaching, the average value was at 32.31 (SD = 3.626), which was higher than before teaching by using the STAD technique. The mean score was at 15.79 (SD = 3.155) with statistically significant at the level of .05

Table 2
Comparison of learning achievement both before and after using cooperative teaching and learning with STAD techniques

Sampling group	No. of student	\bar{X}	S.D.	ΣD	t-score
Pre-test	29	15.79	3.155	16.52	38.53*
Post-test	29	32.31	3.626		

*Statistical significance at the level of .05

CONCLUSION AND FUTURE WORK

From the results of the study, the researcher can discuss the results on learning achievement of students in the Faculty of Education, Suan Sunandha Rajabhat University by using cooperative learning management with the Student Teams-Achievement Division techniques (STAD), as follows:

This sampling group of students using STAD cooperative learning technique had higher learning achievement with statistical significance at 0.05 level. This was due to the using of learning by using STAD techniques as a learning method that enables students to perform various activities together. The groups have been divided into small group of mixing level of ability of each individual in the group. The students were engaged in active cognitive process of learning during discussion, exchange of opinions, understand the contents of the lesson together. Then do the tests individually. The score from each member in the group will be taken as an average for group scores and the group score will be announced. The teacher will offering a compliment and reward to the group that their score has reached the specified criteria. The collaboration, the idea sharing, the exchanges of opinions, and the interaction in helping each other facilitated the resulting in higher academic achievement outcome respectively.

In accordance with the research results of (Chaiyut Thanasaswecha 2010) [5] that has studied on the development of mathematics problem solving skills by using cooperative learning with STAD techniques in secondary school students, the results indicated that the students who studied with the cooperative learning activities with STAD techniques had higher mathematics problem solving skills after the experimental program with the statistical significance level of 0.05. Furthermore, from the studying on the opinions of students towards learning activities, students expressed their opinions that they have gained more knowledge. So, group learning allows students to exchange ideas, adopted a new way to solve problems, having fun talking to friends, allow an interacting with others member in their team. Students knew how to work together, get collaboration among their team. Besides that, this technique facilitated faster accomplishment work accordingly.

The results also supported by Kanokporn Thongraya (2014) [6] in her research paper on the result of the learning activity management by using STAD cooperative learning method to promote learning achievement in studying computer for elementary student, her research results indicated that the overall achievement in studying computer on Microsoft Excel program of the student in elementary school by using STAD cooperative learning techniques, was significantly higher after the experimental at the statistical level of 0.05. which was related with the hypothesis set. This is in accordance with the study results of Surachai Sriworachai and team (2017: 217-227) [7]. that has studied on the learning achievement by using cooperative learning method with STAD techniques in Physics subjects, Mechanical wave subject in secondary school, Mattayom 5, at Wang Krasae Wittayakom School, Nakhon Phanom Province. It was found that students who learned by using cooperative learning

method with team achievement division techniques in Physics subject, in Mechanical waves subject in secondary school, Matthyom 5, have performed significantly higher score than pre-test performance at the statistical level of 0.05. Moreover, students were satisfied with learning by using cooperative learning method with team achievement division techniques on Physics subject, Mechanical waves subject, at a high level

ACKNOWLEDGEMENTS

I would like to express my sincere thanks to Suan Sunandha Rajabhat University for invaluable help throughout this research.

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