

# **DEVELOPMENT OF ACADEMIC ACHIEVEMENT USING COOPERATIVE LEARNING WITH STAD METHOD IN THE COURSE OF ADMINISTRATIVE LAW FOR PUBLIC ADMINISTRATION\***

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## **Abstract**

The purposes of this research are (1) to develop academic achievement using cooperative learning with STAD method and (2) to study student satisfaction using cooperative learning with STAD method in the course of administrative law for public administration. 68 students in the public administration major, who study administrative law in the second semester of the academic year 2017, were selected as samples by using purposive sampling. The researcher conducted the research using a collaborative learning plan with STAD method, then collected the academic achievement test and the student satisfaction questionnaire. The statistics used in the research were frequency, percentage, mean, standard deviation, and T-test. The study indicated that The students' development of academic achievement using cooperative learning with STAD method was higher after learning than before learning at the level of .05. The student satisfaction using a collaborative learning with STAD method is at the highest level. When considering each aspect, the most valuable aspect is the learning atmosphere, followed by the benefits, contents, and activities.

**Keywords:** Development of academic achievement; Cooperative learning; STAD method.

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## **Introduction**

Learning activities should be varied and be able to response to different learners. It is important to organize learning activities for learners. Organizing learning activities that meet the differences between people and focus on learners, can develop and promote the potential of the brain. It also corresponds to the process of learning according to the current state of education, in which people will live in a rapidly changing society today with happiness. People need to learn to keep up-to-date. Progressive technology is a complementary factor to life. Members of progressive societies need education in a variety of ways, because modern technology has become an important tool in supporting lifelong learning. The study is a process of empowering individuals to have desirable characteristics. The goal is to develop teaching activities. It is believed that if the instructor uses good teaching activities that is suitable for learners, they will achieve academic achievement and goals. (Buabangplu, 2011) The students did not learn from the teacher alone, but they can also learn from their friends. Students in the same class can have similar problems while learning. When they have learned to understand the content of the course, they can help other friends with their problems. Also learning to help friends in the classroom can help develop more effective teaching as well. Student-centered learning requires a skill to seek knowledge from many sources, especially knowledge from friends in the group, as a way to achieve effective learning outcomes. (Chatmontri, 2007; Thepnuan, 2013) The actual state of learning often encounters problems that hinder the effectiveness of teaching and learning, such as students who do not participate in the class always show abstention when the instructor asks questions or comments about the lesson, not participate in activities with other students, not responsible in group work, not listen to the lectures. So lecturing method taught by lecturers focusing on content, knowledge, and memory were not suitable for teaching in higher education or in university. This is because the atmosphere of the school is not only boring, but also makes students lack of critical thinking skills, it doesn't encourage students to express their opinions, and seek knowledge by themselves.

From these problems. One way that students can learn and achieve academic outcomes is by using collaborative learning method or collaborative teaching methods. Using these methods results in higher student achievement. It also encourages students to work in groups, be harmonious and help each other. This is a way of learning that learners can gain knowledge from working together as a team. It can develop the learners to be a good person, and the students can fully use their knowledge and ability. In addition, it encourages students to live and work with others, and to be responsible to the community.

They also learn good working behaviors, such as how to comment and encouraging friends. According to documents and research, there are many forms of group teaching and collaborative learning. (Boon-agaat, 2013) Each

form of group teaching and collaborative learning method is appropriate in its own way, which is different from each other. The researcher is interested in teaching by cooperative learning or collaborative learning. So the STAD method is selected as a collaborative learning model. Which aims to provide students with the knowledge and good understanding about the subject matter. Aiming that the students will be able to explain and exchange the knowledge to help other friends achieve better learning outcomes.

## Objectives

1. To develop academic achievement using cooperative learning with STAD method in the course of administrative law for public administration.
2. To study student satisfaction using cooperative learning with STAD method in the course of administrative law for public administration.

## Scope of Research

This study aims to study the development of academic achievement using cooperative learning with STAD method in the course of administrative law for public administration. The scopes of the study are as follow:

**1. Scope of content:** To study the development of academic achievement using cooperative learning with STAD method, and to study students' satisfaction using cooperative learning with STAD method in the course of administrative law for public administration.

**2. Scope of population and sample:** The samples used in this study were 68 public administration students who were enrolled in the course of public administration law for the second semester of the academic year 2017, study group 601947001.

**3. Scope of time spent in research:** To study the learning method using cooperative learning with STAD method, in the course of public administration law for the second semester of the academic year, during December 2017 - March 2018.

## Related Literatures

In the study of the development of academic achievement using cooperative learning with STAD method, the researcher studied the concept, theory, and relevant research as follows.

Collaborative learning is a way to organize the student-centered learning activities. The purpose of this activity is to let the students learn and work together with friends as a team with shared and self responsibility to achieve the goal. Conforming with Aporn Chaitieng (2007), collaborative or participatory learning management means learning activities that the learners with different knowledge and abilities get to work together as a team, and willing to take responsibility for their roles in the team. To work towards the goal. The

composition of teamwork consisted of 1) Interdependence 2) Intimate interaction in a creative way 3) Examination of the responsibility of each member 4) Practicing team working skills, and working in a small group 5) Group training process that based on the theory or principle of collaborative learning which the instructor encourages learners to collaborate in learning and the learner participates in learning activities throughout the learning process. (Laksasupha Buabangplu, 2011, pp. 7-8) The steps are as follows:

1) Planning for learning management is the first step of cooperative learning. Instructors as learning managers and learners as learners, determine learning outcomes, purpose, size of the group, composition of the group, the role of the members in each group, and prepare the facility.

2) Group preparation for learning together is a step in understanding the work in the group. From knowing job description to contacting with the person or organization involved, knowing how to work, criteria for evaluation and a common agreement about important issue, interdependency, clarification of roles and duties, reward systems or benefits that the group should receive. Including a system for examining the responsibilities of members in the group.

3) Working in the group which members work together to analyze the work, discuss the comments, and take their responsibility. There are discussions about decision making and problem solving. Instructors will supervise and assist the group, and take care of group members. To observe the work and members' behavior. Also the teachers will assist the group as seen appropriate. Then analyzes the learning and working process of the group.

4) Measurement of learning outcomes and learning based on participatory learning theory use a variety of methods. The evaluation must assess both quantity and quality. And most importantly, learners need to participate in the evaluation.

## **Conceptual framework**

Conceptual Framework for the development of academic achievement using collaborative learning in the course of administrative law for public administration, is based on the study of concept, theory and relevant research, consists of the concept of collaborative learning (Slavin, 1990) and the concept of student-centered learning management. (Wattanaporn Rangaphthuk, 2011) After that, the researcher synthesized a conceptual framework. The independent variable was cooperative learning with the STAD method and the dependent variable was the academic achievement, and the satisfaction of the students, as follows:

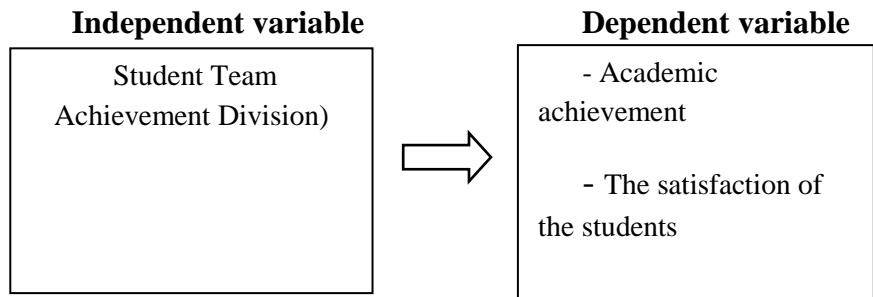


Fig.1 Conceptual framework

## Research methodology

### 1. Sample

68 students in the public administration major, who studied administrative law in the second semester of the academic year 2017, study group 601947001, were selected as samples by using purposive sampling.

### 2. Research Instruments

are as follow:

2.1 Learning plan for the administrative law for public administration by collaborative learning with STAD method, the second semester of the academic year 2017.

2.2 Academic achievement test for administrative law for public administration, is the 20 multiple choice questions with 4 choices, with the reliability of 0.832 and the difficulty of 0.30-0.80.

2.3 Student Satisfaction Questionnaire is a 5-level scale estimation of 4 aspects, including the content, activity, school atmosphere, and benefits. The reliability was 0.870.

### 3. Data collection

3.1 Pre-test, using the test for public administration about knowledge of the government administration act, is 20 multiple choice questions with 4 choices, and the time given is 30 minutes.

3.2 To create opportunities to work together in groups. For the students to work together in groups, the students were divided into groups of 6-7 students. Government administration was selected as a topic to conduct a group learning management. Teachers clarified the understanding of learning styles, how to measure and evaluate. Then teachers assigned tasks for each group to study and collect data for classroom presentation.

3.3 To reflect on the results of the development of academic achievement in order to use as a guideline to develop teaching method. The students presented information from the study, problems and obstacles in team working. Then discussed and summarized the results of collaborative group work.

3.4 Evaluate student achievement using Post-test, 20 multiple choice questions with four choices in 30 minutes.

#### 4. Data analysis

4.1 The academic achievement of cooperative learning with STAD method in the course of administrative law for public administration was analyzed by statistical method. Descriptive statistics were used to determine mean and t-test dependent.

4.2 The academic achievement of cooperative learning with STAD method in the course of administrative law for public administration was analyzed by statistical method. Descriptive statistics were used to determine the mean and standard deviation, in order to summarize the description research.

#### Research results

The results of the study of the development of learning achievement using cooperative learning with STAD method in the course of governing law for public administration are summarized as follows:

1. Academic achievement of students using cooperative learning with STAD method in the course of administrative law for public administration. The details are shown in Table 1.

Table 1 Academic achievement of students using cooperative learning in the course of governing law for public administration

Achievement test	n	$\bar{x}$	S.D.	t	df	Sig
Pre-test	68	8.41	1.60	-37.007	67	.041*
Post-test	68	16.67	1.38			

\* Statistical significance level .05

According to table 1, it was found that the academic achievement using STAD method in the course of public administration law for public administration students, from 68 students, the pre-test mean score was ( $\bar{x} = 8.41$ ) and the post-test mean score was ( $\bar{x} = 16.67$ ). The mean score of post-test achievement was significantly higher than pre-test at .05 level.

2. An analysis of student satisfaction in cooperative learning with STAD method in the course of administrative law for public administration. The details are shown in Table 2.

Table 2. Analysis of student satisfaction in cooperative learning with STAD method

Satisfaction with learning	$\bar{x}$	S.D.	Interpretation
Content	4.36	0.212	Excellent
Activity management	4.35	0.271	Excellent
Learning atmosphere	4.47	0.241	Excellent
Benefit	4.43	0.229	Excellent
Total	4.40	0.127	Excellent

According to table 2, The overall of the analysis of students' satisfaction in cooperative learning with STAD method in the course of administrative law for public administration is in excellent level (highest) ( $\bar{x} = 4.40$ , S.D. = 0.127). Considering each aspect, the most valuable aspect is learning atmosphere ( $\bar{x} = 4.47$ , S.D. = 0.241), followed by content ( $\bar{x} = 4.36$ , S.D. = 0.212). And the least valuable aspect is activity management ( $\bar{x} = 4.35$ , S.D. = 0.271).

### Discussion of research results

According to the study of the development of academic achievement using cooperative learning with STAD method in the course of governing law for public administration, there are some important issues to be discussed as follow:

1. From the academic achievement in cooperative learning using STAD method in the course of public administration law for 68 public administration students, it's found that the mean score of post-test achievement was significantly higher than pre-test at .05 level. This is because when the students were learning together, high-performing students would help the students with lower grade, and made harmony within the group. They helped each other with shared responsibility so the students' grade was higher, correspond with the research of Sukanya Chan-Daeng (2013) who studied the results of collaborative learning management on academic achievement and interoperability in sciences of sixth grade students. The research found that the academic achievement of the students in the cooperative learning was significantly higher than before learning at the 0.05 level, which conform with the research of Athitiya Suayroop (2013) who studied the academic achievement of students in mattayom 1 in computer information technology course with cooperative learning using STAD method. The research found that the academic achievement of the students after cooperative learning using STAD method was obviously higher than before learning. And overall of the students in cooperative learning group with the

STAD method achieved a high level of development score. Corresponding with the research of Kanokporn Thongraya (2014) who studied the results of the learning activities using the STAD cooperative learning model. It was used to support the achievement of computer course of sixth grade students. The research found that the academic achievement of the students in the cooperative learning method was significantly higher than before learning at the 0.05 level.

2. The students' satisfaction in cooperative learning with STAD method in the course of administrative law for public administration is in excellent level (highest) Considering each aspect, the most valuable aspect is learning atmosphere, followed by content. And the least valuable aspect is activity.

This is because cooperative learning helps create the learning atmosphere and learning activity that offer learning in a various way. The students were able to think and do their activities freely, which encourages them to cooperate and participate in the learning activity and made successful teaching and learning process. Conforming with the research of Thasanie Butudom (2009) who studied the development of a plan for learning activities on the topic of equations and solving equations for mathematics course of sixth grade students using cooperative learning with STAD method, together with the skill training exercise. The research found that the students' satisfaction in the overall aspects is at the highest level. Corresponding with the research of Sukanya Chan-Daeng (2013) who studied the result of cooperative learning plan that affects on academic achievement and collaborative working ability in sciences course of sixth grade students. The research found that the students' opinion towards the cooperative learning plan is at excellent level. Corresponding with the research of Suchawadee Dechthongchan (2015) who studied the development of achievement of the local administration students compared the teaching and learning plan by using cooperative learning with the STAD method. It's found that the local administration students compared the teaching and learning plan by collaborative learning with the STAD method is at a high level and the mean score is high. Conforming with the research of Montree Maneewong (2015) who studied the academic achievement of additional physics 4 in electrostatic topic for sciences course of mattayom 6 students, using cooperative learning with STAD method. The research found that the learning satisfaction of the students in mattayom 6 towards the cooperative learning using STAD method is at the high level.

## **Suggestions**

### **1. General suggestion**

1. The use of cooperative learning techniques in teaching and learning should help students understand that everyone needs to help and collaborate as a team. In order for the students to understand the content so the group can achieve the goal.

2. Collaborative learning techniques should be applied in the teaching and learning process so that students with lower grade are encouraged to engage in activities with high-achieving students or students with moderate learning outcomes. In order to create an effective learning within the group.

3. In group activities, the instructor must supervise and encourage all students to express their opinions and discuss in the group as much as they can.

## 2. Suggestions for further study

1. The results of STAD collaborative learning management should be studied together with other techniques to develop learning achievement, work skills, and analytical skills.

2. There should be research on the development of student achievement in other subjects. Using various teaching and learning techniques such as Group Investigation (GI), Jigsaw, and Team Games Tournament (TGT) to continuously improve students' academic achievement.

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