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EXPERIMENTATION STAD WITH CTL TO MATERIAL OF PHYTAGORAS TEOREMA WAS INSPECTED FROM THE TEMPERAMENT OF STUDENT IN CLASS VIII SMP N 3 PENGASIH KULON PROGO THE ACADEMIC YEAR 2013/2014

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Abstract

STAD with CTL is a modification of the STAD and CTL where the phases follow STAD phase in which components inserted CTL. This study aimed to determine: (1) learning model which has better performance, (2) preferences which has better performance; these included a quasi-experimental study is planned for 6 months. Technique of cluster sampling is using random. Data collection techniques are learning achievement test, a questionnaire KTS, and documentation. The data analysis technique is the two ways of variation analysis.

Keywords: STAD, CTL, Personality thinking or felling.

INTRODUCTION

Education is an important role in our lives. With the education, both religious education and general education is very useful to promote themselves, develop the nation and the state, because education we can regardless of the stupidity that has been the main cause of our colonized by other countries. In addition, education is seen as a means to deliver quality beings, beings who are intelligent, active, creative, competent, skilled, responsible, and morally sublime. Therefore, the need to increase the quality of education in our country so that our country is more advanced and can change its status from a developing country into a developed country.

The low quality of education can be seen as less successful learning process caused by various factors. The factors causing the poor quality of education can be caused from the students, educators/ teachers, infrastructure, education systems are applied both in strategy, method possible, as well as models of learning, and so forth. For example, in applying learning methods simply monotonous lecturing or giving lectures and course assignments that cause students saturated no zeal, and no active/passive learning. Therefore, the selection of appropriate learning methods to be applied is essential in order to attract the attention of students so that students can be active and increase performance.

Eighth grade students' mindsets are still modest with different personalities. David Keirsey (984:13-26) classifies personality into 4 types, i.e. guardian, artisan, rational and idealist. This classification is based on how a person obtains energy (*Extrovert* or *Introvert*), how does one take the information (*Sensing* or *Intuitive*), how does one make decisions (*Thinking* or *Feeling*) and how the fundamental forces of life (*Judging* or *Perceiving*).

According to Aries (2010:55) a person who is more introspective will put the brain on top of everything and more abstract in looking at the world, and focuses on global events. Therefore is introspective, it is important for him to establish him in the concept. The concept

can be derived from the establishment of objective reasoning and unfounded emotion (*thinking*), as well as the concept formed based on feelings or emotions (*feeling*).

Keirsey (Aries, 2010: 56) also found what appears on a person's behavior is a reflection of what he thinks. In the world of education, the ideas of a learner will be able to be seen through his work on the questions given to him, both in training and in the test. However, as a teacher certainly will not be able to understand the ideas of the learners when teaches writing and just see the results of learners' work. For a better understanding of what is thought by the students, the teachers have to dig deeper into how the learners arrive at a certain thought. This is usually done with the interview, which the participants were asked to say what he was thinking.

One approach that is suitable to be applied is CTL. Jamil Suprihatiningsih (2013:178) states that the CTL is associated with the learning context of students' everyday lives. CTL emphasis on higher level thinking, cross-disciplinary knowledge transfer, collecting, analyzing and synthesizing information and data from various sources and views. As for the learning model is suitable STAD cooperative learning model. Slavin stated that the STAD students are placed in learning teams of 4-5 people who are a mixture according to achievement level, gender, and ethnicity. STAD is one type of cooperative learning model with the most simple small groups of 4-5 students are heterogeneous, both gender and level of intelligence.

This is supported by the theory of CTL and some relevant research to improve student achievement learning. Besides learning approach CTL teachers can also use cooperative learning model *Student Team Achievement Division* (STAD). The learning model is easy to implement compared with the models of other types of cooperative learning. With this model students can be active and work together in understanding the material help each other , but when the rest of the test are not allowed to work together . This is supported by the theory associated with STAD and some relevant research related about STAD in improving student achievement.

RESEARCH METHODOLOGY

This research is a type of quasi-experiment conducted on students of SMP N 3 Pengasih Kulon Progo. The primary objective of this study was to determine the effect of STAD cooperative learning model with CTL and personality of students on student achievement. Independent variable is a model of learning and personality of the students while the dependent variable is student achievement. The population was eighth grade students at SMP N 3 Compassionate Kulon Progo which consists of 5 classes, A, B, C, D, and E. Class A as the experimental class treated STAD cooperative learning model with CTL and class D as a grade control treated conventional learning models. The number of students in the control and experimental classes each class is 26 students. The instrument used is a multiple choice test with 20 items and a lot about the questionnaire were taken from the book Please Understand Me II, by David Keirsey and Marilyn Bates that has been modified and adapted first. Including direct and closed type questionnaire, because the list of questions and answers already given directly supplied. The analysis data technique that used is a two -way of anava. The design of the study as follows:

Table 1. Design Research

ng Model (A)	Type Preference (B)	
	Thinking (b_1)	Felling (b_2)
STAD by CTL (a_1)	$(ab)_{11}$	$(ab)_{12}$
Conventional (a_2)	$(ab)_{21}$	$(ab)_{22}$

RESULTS AND DISCUSSION

By charging *Keirsey Sorter Test* (KTS) found that of the 26 students in the control class has 19 students and 7 students thinking preferences have a feeling preference. Similarly, the experimental class of 26 students and 19 students has thinking preferences and 7 students have a *feeling* preference. Based on the results of data analysis and summary of the two-way average of anava as follows:

Table 2. Mean Value Students

	STAD CTL(b1)	Conventional (b2)	the average marginal
thinking(a1)	86,842	78.158	82,5
feeling(a2)	89.286	73,571	81,4285
the average marginal	88.064	75,8645	

Table 3. Summary of Two-Way ANOVA

Sources	JK	Dk	RK	Fobs	Ftab
Learning Model (B)	1522,56	1	1522,56	10,3985	4,08
Personality (A)	11,7445	1	11,7445	0,08021	4,08
Interaction (AB)	126,4061	1	126,4061	0,8633	4,08
Sources	JK	Dk	RK	Fobs	Ftab
Error	7028,1955	48	7028,1955		
Sum	8688,9062		146,4207		

Based on Table 3 above obtained results include (1) Fb obs > Fb tab means learning model affects student achievement, (2) Fa obs < Fa tab personality means students no effect on student achievement, (3) Fab obs < fab tab means there is no interaction between the model of learning and personality on student achievement .

Based on Table 2 above obtained results include (1) the average of STAD models with CTL > conventional learning model means learning achievement using STAD learning models with CTL better than conventional learning model , (2) the average preferences of *thinking* > *feeling* means learning achievement students' preferences better than *thinking* in students feeling preferences, (3) the mean learning model with CTL preference STAD *thinking* > preference conventional *thinking* means *thinking* preference student achievement using STAD learning model with CTL better than using the conventional learning model, (4) STAD mean learning model with CTL preference *feeling* > preference conventional learning model means feeling preference student achievement using STAD learning model with CTL better than using the conventional learning model, (5) mean learning model with CTL preference STAD *thinking* < preferences *feeling* means student achievement preference better *feeling* than *thinking* preference using STAD learning model with CTL, (6) the mean of conventional learning models preference *thinking* > preferences *feeling* student achievement means *thinking* is better than the students preference *feeling* use conventional learning models.

Based on the analysis of the learning achievement of students who use STAD cooperative learning model with CTL is better than the learning achievement of students who use conventional learning models. STAD cooperative learning model with CTL better because

students are not required to sit passively in place but the students are grouped in small groups and are required to construct a given problem with a teacher who had experience and was associated with their daily lives. Students can solve the problem by itself and discussing with a group of friends. After the problem is solved one of the students represents the group presentation to the class in turn. Then, the drawn conclusions are together with the teacher. This makes learning more meaningful, students easily understand the concept as it is associated with everyday life, and the student will not quickly forget what they have gained.

Based on the analysis of data it can be concluded that the personality of the students does not affect the learning achievement of students of class VIII A and VIII D SMP N 3 Compassionate Kulon Progo, DIY. This means that students who have a preference to students thinking preference feeling to have the same performance. Personality of the student has no direct effect on student achievement but rather influence the mindset of the students. If the average value seen in Table 2, the mean value for the thinking preferences and the average value of 82,5 for 81,4285 is preference feeling. There are differences in the mean 1,0715. The mean thinking preference is greater than the average preferences of feeling it can be concluded that the learning achievement of students preferences thinking better than the students preferences felling. However, if anava going to be tested so, there is no significant difference in learning achievement for each-their preferences.

CONCLUSION

Based on the discussion, it can be concluded that (1) learning math using STAD cooperative learning model with CTL better than conventional learning models. Learning achievement of students using STAD cooperative learning model with CTL better than on student achievement using conventional learning model, (2) Students with a preference for thinking and feeling preferences have the same learning achievement.

ADVICE

Based on the results of research conducted at SMP N 3 Compassionate Kulon Progo, researchers need to suggest some of the following.

1. Not all learning materials mathematics academic achievement either using conventional learning models. Teachers must choose appropriate learning model for mathematics instruction so that every material good academic achievement. Researchers suggest teachers use STAD cooperative learning model with CTL in learning mathematics, especially in the matter Pythagorean Theorem. Learning to use STAD cooperative learning model with CTL can improve learning achievement in class VIIIA students of SMP N 3 Compassionate Kulon Progo.
2. Teachers should pay attention to each student's character through student preferences. One was the preference of students in this study. Students with a preference for thinking and feeling will be more effective and produce better learning achievement using STAD cooperative learning model with CTL.
3. To the researchers to conduct more in-depth assessment and learning extensively about the effect of using STAD cooperative learning model with CTL and its relation to the personality of the student learning achievement at junior high school students , especially SMP N 3 Compassionate .

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