

THE EFFECTIVENESS OF COOPERATIVE LEARNING STAD METHOD (STUDENT TEAMS-ACHIEVEMENT DIVISION) ON THE ACHIEVEMENT IN ISLAMIC RELIGIOUS EDUCATION

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Abstract - Although there are many studies on the effectiveness of cooperative learning STAD (Student Teams-Achievement Division) method for student achievement across various subjects, the study on the effectiveness of STAD method on the achievement in Islamic Education subjects is still in the embryonic phase. This study aims to identify the effectiveness of STAD on the achievement of Islamic Religious Education (IRE) learning among form two students. The study uses a quasi-experimental pretest-posttest control group design involving a total of 44 form two students (24 students in the experimental groups and 20 students in the control group) at a boarding school at Perak. The pretest and posttest consists of a combination of 15 and 20 multiple-choice and subjective questions respectively. Pretest and posttest are prepared according to the Test Specification Table to ensure the validity of the content. Given the significance in the pretest, the posttest data were analyzed using ANCOVA (Analysis of Covariance). The results from the ANCOVA analysis indicate that the experimental group that follow through the STAD method achieved a statistically significantly higher adjusted mean compared to the adjusted mean achieved by the control group. The findings are discussed based on the previous studies and the implications of studies on Islamic Religious Education are proffered.

Keywords: *STAD, Islamic Religious Education, Form 2 Students, Malaysia*

I. INTRODUCTION

One of the important goals of the Malaysian education system is to implement effective teaching and learning (TnL) in schools. This is in compliance to the National Education Philosophy that aims to provide a holistic education. The National Education Philosophy, according to Choong (2009), shows that education in Malaysia is a consistent step towards expanding the potential of the individual students in a comprehensive and integrated way so as to create a balanced and harmonious human in five realms, namely intellectually, spiritually, emotionally, physically and spiritually, based on the trust and obedience to God. This move is aimed at ensuring that the people of Malaysia have the knowledge, skills, noble values, responsibility and ability to acquire well-being and are able to contribute to harmony and universal prosperity.

In pursuit of the culture of religious knowledge and religious values in the community is explicitly stated in the Philosophy of Islamic Education which has been

conceptualized for the Malaysian Education System. The Islamic Education Philosophy aims to focus on the development of individuals who are competitive, dynamic, agile and resilient and able to master religious knowledge. With regard to the purpose of Islamic Education Philosophy, the Ministry of Education Malaysia (MOE) advocates that:

Islamic Religious Education is an ongoing effort to convey the knowledge, skills and appreciation of Islam based on the Qur'an and al-Sunnah to shape attitudes, skills, personality and vision as a servant of Allah who has the responsibility to develop oneself, society, environment and nation towards achieving the goodness of the world and eternal prosperity in the hereafter (KPM, 1997).

On that awareness, the Primary School Standard Curriculum (KSSR) and the Secondary School Standard Curriculum (KSSM) have been redesigned to improve the primary and secondary education across Malaysia. The Islamic Education Curriculum is built on the basis of the integration of theoretical and practical aspects such as the religious practices in daily life.

The purpose of this study was to identify the effectiveness of STAD cooperative learning (CL) on the development of religious knowledge among students in Islamic Religious Education subject as well as to provide students with the ability to apply the religious knowledge in real life. To achieve that endeavor, a diligent effort needs to be set up with a well-organized process so that it will achieve success as desired by the community. According to Diah (1989), "Islamic Religious Education is the process by which students are deliberately instructed by educators so that they have well-developed based on Islamic teachings."

In responding to the challenges of globalization in order to achieve a desire to produce students who can relate Islamic knowledge to their daily experience and to optimize their application, then the teaching and learning strategies in Islamic Education should be shaped in such a way that it will prioritize effective learning. In addition, teachers need to be wise in selecting the pertinent teaching and learning theories in determining the ways in which the skills are effectively taught and thus, the understanding of teachers should be intellectually, socially, morally, and spiritually encompassing,

stimulating interest and excitement, giving the students the right and freedom to overcome the weaknesses as an important factor in obtaining effective teaching and learning outcomes for students.

Additionally, the Malaysian Ministry of Education encourages teachers to optimize and leverage on the Teaching and Learning methods as practised in the Western countries and that have been proven of their effectiveness. However, it should be noted that the employment of these methods does not neglect the quality of education of students who are the heirs of the future generation of the nation. Traditional learning approaches such as didactic lectures, one-way explanations or chalk-and-talk methods need to be changed to the cooperative learning approaches. This is because cooperative learning is one of the modern teaching techniques. This method can help students to improve their understanding, inculcate higher order thinking skills (HOTS), and enhance student achievement as well as interest in the learning of Islamic Education.

II. STATEMENT OF PROBLEM

Islamic Education is a compulsory subject taught to Muslim students across the schools in Malaysia. This provision is based on the Education Act 1996 Section 50 (1) which states that, *"If in an educational institution there are five or more students who are professing Islamic religion then the students should be given the teaching of Islam by teachers approved by the State Authority"*.

In the Curriculum and Assessment Standard Documents of the Standard Curriculum for Secondary Schools, Religious Education is indeed a core subject. Islamic Religious Education is designed to improve and meet the needs of building and forming a Muslim personality that understands and practices of Islam. Islamic Religious Education also emphasizes on aspects of science, practices, appreciation and culture. Through Islamic Religious Education, students are provided with the basic knowledge as contained in its syllabus. Students are not just supplied with knowledge, but they are educated to practise and appreciate the learned knowledge. Through this subject the students are also guided and coached to develop themselves and the community based on the Quran and al-Sunnah. Therefore, if seen in the description of the above goals of Islamic Religious Education, it is clear that the discipline of students is able to be shaped by the instruction and religious rules. This is because, Islam always makes Shari'ah a fortress in facing any challenge and challenges in life (Abdullah (2000)).

Teaching is a dynamic technique that changes according to the current situation. It is also emphasized in the study of Zamri and Norazah (2011). who state that in

the context of teaching and learning, cooperative learning is able to promote bilateral interactions between teachers and students effectively. The use of cooperative learning inculcates high social skills, avoids selfishness and facilitates the understanding of the subject content in depth (Meh, 2008). Although cooperative learning raises parents' concern for the application of heterogeneous groups in which high-achieving students are in the same group with the low-achieving students, Slavin (1990) nevertheless argues that such heterogeneous grouping will benefit the different groups of abilities to learn as a group.

In addition, cooperative learning improves students' thinking skills. If performed properly according to the planned procedure, each student will have the responsibility to master something and be able to communicate his/her knowledge with other members of the group. For this purpose, students must understand the in-depth of the topics discussed, rather than merely memorizing. This has resulted in higher levels of thinking which are capable of improving the quality of students' learning and presentations. Attitude displayed during the activities carried out by each group member is also highlighted because the attitude could be assessed (e.g., the cooperativeness of each student). In addition, students involved in the cooperative learning may have a higher propensity to learn and collaborate with the team members.

Cooperative learning, with its various approaches and methods, can help shape students to have a sense of accountability for their own learning while teachers play a role as facilitators and observers. Planning for cooperative learning entails the development of various activities which are not only interesting but also encouraging in that it helps students to focus on learning. Hence, cooperative learning will be able to overcome the problem of disruption in the classroom. According to Johnson and Johnson (1989), teaching using traditional methods is a passive and unsavory teaching method. Students are easily bored and not interested in continuing their studies even if they do not understand the subject matter. According to Burton (1987), students can learn more effectively through cooperative learning methods as opposed to the traditional methods. Besides, the study by Burton (1987) also found that students enjoyed the cooperative learning in addition to the increase in student achievement as well as the development in community skills and communication skills among students. Despite the effectiveness, the study of the effectiveness of cooperative learning methods on the achievement in Islamic Religious Education in Malaysia is scarce. Therefore, a study needs to be done to examine the effectiveness of a cooperative learning model such as STAD on the learning of Islamic Religious Education in high school. The effectiveness in this context is measured through student achievement in Islamic Religious

Education through the use of STAD cooperative learning in school.

III. PURPOSE AND OBJECTIVES OF STUDY

This study aims to see the effectiveness of cooperative learning using the STAD method in improving student achievement in learning Islamic Religious Education in high school. Comparison of student achievement in Islamic Religious Education is gauged between the experimental groups (cooperative learning using STAD method) and the control group (traditional method). In particular, the objective of this study is to:

1. Identify the effectiveness of STAD on the achievement in Islamic Religious Education among form two students.

RESEARCH QUESTIONS

Based on the objective of the study, the following corresponding question is posed: -

1. What is the effect of STAD cooperative learning on the achievement of Islamic Religious Education among form two students?

THE NULL HYPOTHESIS

On the basis of the above mentioned research question, the following null hypothesis will be tested:-

Ho There is no significant difference between the achievement means of Islamic Religious Education among the form two students taught using the STAD cooperative learning as compared to their counterparts who were taught using the traditional method.

IV. RESEARCH METHODOLOGY

Given the intent of this study, the most appropriate research design is that of quasi-experimental pretest-posttest control group design. The target population of this study was the population consisting of form two students in a school in the Bagan District of Perak. In this study, two form two intact classes were selected to conduct such definitive study to illuminate the research question.

In this study, the sample of the study consists of 44 form two students from two separate classes (as experiment and control groups respectively) and these two classes are science-based classes. The experimental and control groups consist of 24 and 20 students respectively.

The use of intact classes is in line with the recommendation by Mohd Majid (2005) who argues for sample selection using existing classes so that it brings benefits in terms of cost reduction, energy and time of study, while not disturbing the school ecosystem.

The research instrument essentially consists of two test papers namely pretest and posttest. Pretest was used to determine if there is any initial difference between the two groups in terms of their knowledge in Islamic Religious Education. If there is a difference, then the posttest data would be analysed using ANOVA. Posttest was measured to test the effect of STAD cooperative method as compared to the traditional method in learning the Islamic Religious Education among form two students. The questions tested in the pretest and posttest are the questions that meet the objectives of the study as stated in the Test Specification Table.

The pretest was administered to the students before the intervention was conducted to gauge their initial level in Islamic Religious Education. Posttest was administered after the three-week intervention.

The researcher conducted a pilot test on 22 students who were not involved in the actual study by using the test-retest test method to determine the reliability coefficient for the achievement test used. The test period between test and repeated test is 30 days as suggested by Kaufman (2005). The analysis of the correlation between the scores obtained from the first measurement (test) and the second measurement (repeat test) were analyzed using the Spearman correlation and it yielded a coefficient of 0.91, indicating that the achievement test has high reliability (Majid, 2005).

For the analysis, pretest and posttest data were analyzed inferentially. If there is no significant difference in pretest data, then both groups are considered equivalent and accordingly, the posttest data can be analyzed using the independent samples t-test. However, if there is a significant difference in the pretest data, the posttest data should then be analyzed using the ANCOVA method. This study uses the alpha significance level of 0.005 ($\alpha = 0.05$).

V. FINDINGS

Table 1 Findings from the independent samples t-test for pretest data

Experiment			Control			t	p
N	Min	SP	N	Min	SP	2.51	.016
24	40.0	6.76	20	32.75	12.08		

Table 1 shows the result of the analysis using the independent samples t-tests for the pretest on the topic on Tayamum. As shown in Table 1, the independent samples t-test yield a t-value of 2.51 which is statistically significant ($p = .016 < .05$). Thus, this indicates that experimental groups and control groups are unequal at the onset of the study. Therefore, post test data (on the learning of the topic on Tayamum) should then be analyzed using the ANCOVA method.

Table 2 Results obtained from ANCOVA for posttest data

ANCOVA						
Source	Sum of Squares	df	Mean Squares	F	p	
Group	5182.276	1	5182.276	93.09	.000	
Pre	1.769	1	1.769	0.32	.859	
Error	2282.514	41	55.671			
Mean						
Covariate (Pretest)			Achievements (Posttest)			Adjusted Mean
Group	N	Min	SP	Min	SP	
Exp.	24	40.00	6.76	91.17	8.36	91.24
Control	20	32.75	12.08	68.0	6.0	67.87
Total	44	36.70		80.61	13.78	

Table 2 shows the results of the analysis using ANCOVA to compare the achievement in the learning of Tayamum in the Islamic Religious Education between the experimental and control groups. The findings indicate that, after controlling for pretest, there was a statistically significant difference between the treatment group and the control group, $F(1,41) = 93.09$, $p = .000 < .05$, favoring the experimental group.

Accordingly, this shows that the adjusted mean obtained by the treatment group (91.24) is statistically significantly higher as compared to the adjusted mean obtained by the control group (67.87).

Therefore, the null hypothesis (H_0) is rejected. This shows that there was a significant difference in the posttest (Tayamum topic) between the experimental group and the traditional group in favor of the experimental group. Furthermore, this shows that the achievement in Islamic Religious Education of students in the experimental group who had undergone the STAD

cooperative learning is markedly higher than the achievement of students in the control group.

VI. DISCUSSION

In summary, the achievement in Islamic Religious Education of form two students who have been taught using the STAD cooperative learning is statistically significantly higher than their counterparts who were taught using the traditional method. In terms of positive effects, while the subject is different, the significant effect of this study parallels the findings of other studies such as those of Burton (1987), and Kaufman (2005). The finding of this study also sets a pace for further research on the effect of STAD cooperative learning in Islamic Religious Education.

VII. CONCLUSION

The school-wide implementation of STAD cooperative learning in Islamic Religious Education should involve planning and training, and of course getting teachers' commitment. Given its effectiveness, cooperative learning pedagogical skills should be within the repertoire of every teacher, particularly those who are teaching Islamic Religious Education. In view that cooperative learning needs to be skillfully executed in order to harness on its effectiveness, teachers need to be given appropriate and adequate training or continuing professional development so that they are competent in its use.

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