

The Effectiveness of Project-Based Learning Model and Talking stickType of Cooperative Learning Model on the Quran-Hadith Subject Learning Outcomes

Farchatin Ulya^{1✉}, Achmad Rifai RC², Sri Sulistyorini²

¹ IAIN Kudus, Indonesia

² Pascasarjana, Universitas Negeri Semarang, Indonesia

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Abstract

In the Quran-Hadith learning activities, teachers still make use of conventional methods so that students do not achieve optimal results. Therefore, teachers, as managers in a learning process, are required to be creative in order to make their students learn more actively. This study aims to analyze the differences in learning outcomes gained by students treated using project-based learning model and talking sticktype of cooperative learning model withlevels of abilityand interaction as moderating variables. This study used a quantitative method throughan experimental approach using 2x2 factorial design. The results found there are differences in students' learning outcomes using project-based learning model and talking sticktype of cooperative learning model with a significance value of 0,000; there were differences in learning outcomes between students with high ability and those with low ability with a significancevalue of 0.002; an interaction between the learning models and the students' ability levels on their learning outcomes with a significance value of 0.011. The implication of this study is to provide teachers with direct experiences in examining the learning models and it can be used by teachers in selecting the proper learning model in improving the learning activity process.

✉ Correspondence address:

IAIN Kudus, Indonesia

Jalan Conge Ngembal Rejo PO BOX 51, Kudus, Jawa Tengah,

Indonesia

E-mail: farchatinaja@gmail.com

INTRODUCTION

Learning is a tool to achieve educational goals (Yasin, 2011). The teacher is a determining factor in the successful implementation of education (Bhakti, 2016). Teachers occupy a strategic position in the learning process, so they are demanded to have excellent competences in their field (Darimi, 2015). According to the new paradigm, not only do they serve as teachers, but also as educators, motivators, facilitators, guides, and evaluators of the teaching and learning process (Langgung, 1988; 86). The key to the success of education is in teachers' hands because they get involved directly in the learning activities. Therefore, they must manage an active learning process so that the educational goals are optimally achieved.

Based on an observation of the Quran-Hadith learning process at MI NU Banat Kudus, the learning methods used in the fourth grade are still teacher-centered, so that students' learning outcomes are not optimally achieved. Therefore, teachers are required always to make innovations in their learning activities. In the 2013 curriculum, one of the recommended learning models is project-based learning model (Permendikbud No. 22/2016). *Project-based learning* (PjBL) is a learning model which involves students in a project, based on a certain problem (Lisminingsih, 2010). Wati, W (2017) in her research results stated that pjbL can improve speaking skills. In line with the research conducted by Saifullah (2018); Fauzia (2017) and Rahman (2019) saying that PjBL can develop students' soft skills and improve the quality of their learning outcomes. Strengthened by Sundari's research results, (2016); Rohana, R. S (2017); and Aprianti, N. P (2017) claiming that project-based learning model can increase students' learning outcomes.

Another learning model, which also allows students to develop their knowledge actively is cooperative learning. It can improve students' cognitive abilities by making them active learners (Tsui-Er Lee, 2014). One of the cooperative learning types is *talking stick*. The procedure of which is done with an assist of

stick, where the person holding the stick must provide an answer to the question given by the teacher after they finished learning the material (Jahring et al., 2017). According to Wardana (2016) and Khadijah (2015), *talking stick* does not only train students to speak, but also create a learning atmosphere which is fun, creative and active in the classroom. The research conducted by Asri, B. W., Nurhalim, K., & Suhandini, P. (2018); Novida, I (2016); Alfiana, R (2018); Asnawan, A (2019) shows that talking stick type of cooperative learning model can improve students' learning outcomes.

In view of the exploration results on the learning accomplishment using venture-based learning and *talking stick* kind of helpful learning model, it is demonstrated that both can make a lovely learning climate in the classroom, cause understudies to adapt effectively, improve their delicate abilities, and increment their learning accomplishment. Meanwhile, students' learning outcomes in the Quran-Hadith subject at madrasah ibtidaiyah (MI) are affected by various factors, including individual student, including his/her levels of understanding, situation, condition, and events occurring in the environment. Another factor is individual teachers, including the choice of learning models (Sinambela, 2008).

This study is different from the previous ones; the learning activities carried out in the Fourth Grade of MI NU Banat Kudus is still conventional. It also causes students to achieve unsatisfactory learning results. Thus, a teacher must be innovative in managing and selecting a particular learning model according to subject and students' criteria. The learning models that can improve students' learning outcomes are project-based learning and talking stick type of cooperative learning model.

This study aims to compare the use of project-based learning model and talking stick type of cooperative learning model in terms of students' learning outcomes, the learning outcomes of students with high ability and those with low ability as well as the interaction between the two learning models and their ability levels on their learning outcomes.

METHODS

This study using quantitative method, throughan experimental approach with 2x2 factorial design (Creswell, 2012). The dependent variable is learning outcomes of the Quran-Hadith subject, affected by the independent variables, namely, project-based learning model andtalking sticktype of cooperative learning model,and students' ability levels: high and low based on class-ranking as the moderating variables. The population isthe Fourth Grade students of Islamic Elementary School (MI) NU Banat Kudus, of which classescomprise of IV A, IV B, and IV C. The sampling was conducted usingsimple randomsampling method, in which class IV B as the first control group, and IV C class as the second control group. A multiple choice test comprising of 25 items and a documentation study on class-ranking were administered as the data collection techniques. Meanwhile, the data analysis technique used was the two way anova test. The validity and reliability tests of the research instruments used SPSS 15.0.

RESULTS AND DISCUSSION

The project-based learning model was applied in class IV B in the Quran-Hadith subject learning with the topic "Let us get to know *sura Al-'Adiyat*." Before starting the activity using a project-based learning model, the teacher conveyed the learning objectives. The students were asked to create a *tajwid* (elocution of the Quran recitation) gallery according to the topic being studied. The procedurescarried out were: determining a project; designing the project to be created, that is,*tajwid* gallery creation; arranging the project implementation schedule; completing the project by the teacher's monitoring; presentingthe result of the project, and evaluating the process and result of the project.

Meanwhile,the students in class IV C were treated using talking sticktype of cooperative learning model with the same topic given in class IV B. The teacher divided them into six groups and prepared a stick. After

that,she presented an outline of the material to be studied. The students were then allowed to discuss it ingroups,talking about the material together. Furthermore, she started rolling the stick from one student to another, accompanied by the sound of music. When she said 'stop,' the student holding the stick gota question from her and answered it. Eventually,she evaluated and, together with the students, formulated a conclusion.

The Differencesin Learning Outcomes by Using Project-Based Learning Model and Talking stickType of Cooperative Learning Model

The *two way*ANOVA testing results using SPSS 15.0, can be seen in the following table:

Table 1. The Result of *Two Way Anova*Test

Source	F	Sig.
Learning Models	13.996	0.000
Levels of Ability	10.648	0.002
Learning Models *	6.836	0.011
Levels of Ability		

Table 2. Learning outcomes using project-based learning and talking sticktype of cooperative learning model

Explanation	Learning Models	
	Project-Based Learning	Talking stick Type of Cooperative Learning
Min	68	64
Max	100	88
Mean	82.16	75.89
Std. Deviation	8.773	7.313

Based on table 2, the average score of project-based learning is higher than that of talking sticktype of cooperative learning model. Likewise, in the two way ANOVA test (table 1), a sig. The value of 0.000 was obtained at a significance level of 0.05. This shows that there were significant differences in learning outcomes between the students who were treated using the project-based learning model and those using talking sticktype of cooperative learning model.

According to research conducted by Saifullah, A. (2018) stating that project-based learning can improve the quality of students' learning outcomes in Islamic Education subject and result in a positive response from students. This is strengthened by the research results proposed by Susilowati et al. (2013), asserting that the project-based learning model can have an effect on students' learning outcomes. A research conducted by Sugito (2018) concludes that *the* talking stick method can improve the learning outcomes of fifth-grade students of an elementary school on Islamic Education subject with the topic 'The God's Apostles.' Similar research results by Saihu (2020); Surbakti (2018); Hanafy (2019) suggest that talking stick type can improve the achievement of learning outcomes.

The results of this study strengthen the previous researches that both learning models improve students' learning outcomes; however, this study suggests that the group treated using a project-based learning model obtains better results. This model affects classroom learning and is useful in improving the students' learning outcomes. In practice, the students were assigned the task of making a tajwid gallery, which turns out to develop their understanding and potentials.

The Differences in Learning Outcomes Between the Students with High and Low Ability

From the research result, the following table is presented:

Table 3. The Learning Outcomes of Students with High and Low Ability

Explanation	Levels of Ability	
	High	Low
Min	64	64
Max	100	92
Mean	81.89	76.32
Std. Deviation	8.789	7.623

Based on table 3, students with high abilities got higher average scores than those with low abilities. As well as in table 1, a sig value of 0.002 was obtained at a significant level

of 0.05. This shows significant differences in learning outcomes between students with the ability and those with low ability.

These different learning outcomes occur because in the implementation of learning, the process of which is affected by a hereditary factor which lies within the individual student, namely, the student's ability level. The learning outcomes which the student achieves can be affected by both internal and external factors (Sudjana, 2006, p. 22). The former includes intelligence level, interest, skill, and motivation. Whereas, the latter includes learning models, learning methods, and even environmental factors, which puts many effects on the learning outcomes achieved by students. A person with good intelligence tends to find it easy to understand the material, and the results also tend to be good. Conversely, a person with low intelligence tends to go through difficulties in learning, slow in thinking, so that their academic achievement is also low (Dalyono: 1997). This is also the following research conducted by Riyani (2012), stating that students' intelligence affects learning achievement with a coefficient value of 0.429. Also, Putra's research (2017) claims that intelligence positively affects learning outcomes in mathematics by 56.6%.

The Quran-Hadith learning action requires a profound seeing, so the understudies with a significant level of understanding think that it is more visible the learning materials with higher learning results than those with a low degree of capacity.

The Interaction Between Learning Models and Students' Level of Ability on Learning Outcomes

Based on the test result in table 1, the sig. The value of learning models with students' ability level obtained was 0.011, with a significance level of 0.05. This shows a significant interaction between the learning models and the students' ability levels on the students' learning outcomes.

This is because, in learning, the ability is not the only factor affecting the learning outcomes. At least two main factors affect the

students' learning outcomes: the quality of learning and the students' characteristics. The first is an external factor that affects learning, including learning models, methods, and media. Meanwhile, the second is the internal factor, including levels of ability, learning motivation, learning style, thinking style, and creativity. Thus, these two factors cannot be ignored because they interact with each other. This study is in line with previous research results explaining that the implementation of discovery learning models and talking stick type of cooperative learning has significant effects on learning outcomes (Arifin, 2018).

Based on the study results and supported by several previous researchers' arguments, it can be concluded that the project-based learning model is more effective in improving students' learning outcomes. The differences in learning outcomes are also affected by the differences in the ability level of the fourth-grade students of MI NU Banat Kudus.

CONCLUSION

In light of the past section, that can be concluded that there are significant differences in students' learning outcomes using project-based learning model and those using talking stick type of cooperative learning model; there are significant differences in learning outcomes between students with high ability and those with low ability, and there is an interaction between learning models and students' ability levels on their learning outcomes.

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