

Improving Student Learning Outcomes through Contextual Approach based on Learning Community

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Abstract

This study aims to improve student learning outcomes through the implementation of contextual approaches based on learning community in SMP Negeri 3 Tanjung in 2017/2018 Academic Year. This research is a classroom action research. Actions are carried out through two cycles, each cycle consisting of the process of planning, implementation, observation, and reflection. The instrument used was a multiple-choice test instrument. The subjects of this study were 26 students of class VIII-4 of SMP Negeri 3 Tanjung. The results of the study showed that in the cycle I the percentage of completeness of student learning outcomes was 76% with an average score of 74.23, while in the cycle II the percentage of completeness of student learning outcomes was 92% with an average score of 85.34. Based on the results of the study it can be concluded that the implementation of contextual approaches based on learning community can improve student learning outcomes.

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INTRODUCTION

One of the goals of national development is to develop the intellectual life of the nation. The government made various efforts to realize the improvement of the quality of education, one of which was through the renewal of the learning model. The renewal of the learning model is expected to create a more effective megajar learning process and in accordance with the real life that exists in the community today (Depdiknas, 2006), learning models such as inquiry models, problem based learning, project based learning, contextual teaching and learning highly recommended for use in school learning (Kemendikbud, 2013). Research by Prayogi and Ash'ari (2013) shows that the application of contextual learning models in accordance with real life such as problem-based learning can improve critical thinking skills and senior high school student learning outcomes. Detri et al (2018) on the other hand stated that the STAD and JIGSAW cooperative learning model had a positive effect on students' understanding of concepts. Dharmawati et al (2018) states that the active learning model based on *ikuri* has a positive effect on students' critical thinking skills, while Mariyana et al (2018) states the thinking aloud pair problem solving learning model has a positive effect on student physics learning outcomes.

Based on the results of interviews with physics teachers in junior high school, it was observed that the factor that caused the low student learning outcomes was the lack of student understanding of the material concepts taught by subject teachers because during the learning process took place teachers used lecture and question and answer methods so the teaching and learning process monotonous, less interesting and boring and certainly becomes an option for educators to be able to stimulate learning activities again to reach the desired competency. Previous studies (Purnamasari et al., 2017; Sukroyanti & Sufianti, 2017; Sanjaya, 2002) found that learning physics in schools tends to be monotonous and boring so that it impacts on motivation and learning outcomes, especially critical thinking of students.

Based on the description of the results of the study, it can be seen that the use of active learning models is student-centered and emphasizes the active construction of knowledge independently as an alternative solution to the improvement of students' learning outcomes in

science especially physics. Physics which is the science that analyzes natural phenomena and the interactions that occur in them (Purnamasari et al., 2017) is very relevant to be taught using contextual learning (Asy'ari, 2017). This study aims to improve physics learning outcomes of SMP Negeri 3 Tanjung in the academic year 2017/2018 through the implementation of contextual approaches based on learning communities.

METHOD

This research is a classroom action research with a quantitative approach. This research was conducted in class VIII-4 at SMP Negeri 3 Tanjung with 26 students. The design of classroom action research follows the flow as presented in Figure 1.

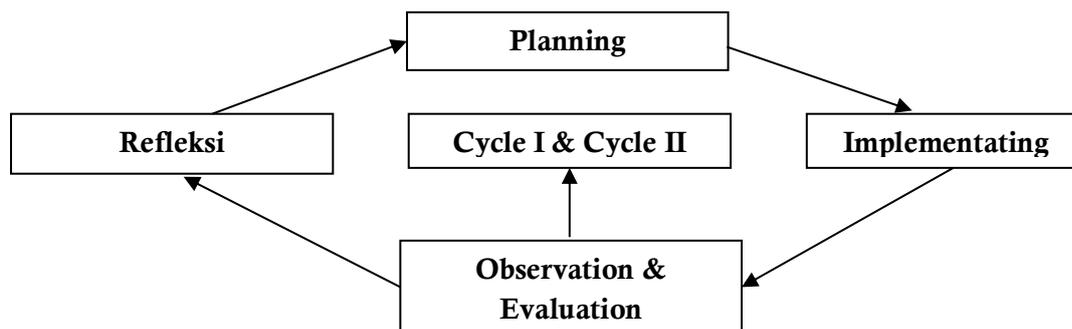


Figure 1. Classroom action research flow (Arikunto, 2006)

Classroom action research has stages of activities such as (1) planning, where at this stage the preparation of the lesson plan (RPP) is carried out, preparing an observation sheet for the implementation of learning, making a student worksheet (LKS), designing an evaluation tool in the form of multiple choice tests, planning the analysis of test results, (2) implementation by implementing the tools provided in the planning stage, (3) observing and evaluating the implementation of actions using observation sheets and giving multiple choice tests, and (4) reflection, where the processes that have been carried out evaluated its implementation and identify the obstacles found to be made further improvements in future learning.

The instruments used in this study were (1) observation sheet of the implementation of the lesson plan (RPP), observation sheet of student learning activities and (2) multiple choice test to evaluate student learning outcomes in each learning cycle.

Learning achievement test data is analyzed by searching for learning completeness using formula of $\frac{\text{students' score}}{\text{maximum score}} \times 100\%$. Students are said to be complete when individual completeness reaches a value of ≥ 60 , and classical completeness $\geq 85\%$ of the 26 students in science-physics subjects.

RESULTS AND DISCUSSION

Evaluation of student learning outcomes is done using multiple choice tests in the form of 20 questions given at the end of the cycle. A summary of the results of evaluating student learning outcomes in cycle I can be seen in Table 1.

Tabel 1. Student learning outcomes in cycle I
Summary of cycle i student learning outcomes

Total of students	26
Students who are complete	20
Not completed Students	6
Highest score	85
Lowest score	55
Class average value	74,23

Summary of cycle i student learning outcomes	
Classical completeness	76%

Based on Table 1 it can be seen that of the 26 students who took the evaluation test there were 20 students who completed it and 6 students did not complete it, so students' mastery learning in this first cycle reached 76% with an average value of 74.32. Based on the results obtained in the first cycle, it can be stated that the students' cash completeness has not yet reached the expected results (76%) so the research continues to the second cycle.

The corrective actions taken in cycle II based on the results of reflection cycle I are (1) in delivering the teacher's material more actively involving students, (2) the teacher asks each group to first discuss the tasks of each student in the group so that the activities directed learning and all students are active in practicums and discussions that take place, (3) before learning is finished, the teacher asks students to record correct answers that have been discussed together, (4) the teacher is more set the allocation of time in each activity during the learning process. The summary of the evaluation results of student learning outcomes in the first cycle can be seen in Table 2 below.

Tabel 2. Student learning outcomes in cycle I

Summary of cycle i student learning outcomes	
Total of students	26
Students who are complete	24
Not completed Students	2
Highest score	100
Lowest score	70
Class average score	85,34
Classical completeness	92%

Based on Table 2, the data obtained from the evaluation test shows an increase in learning outcomes from the previous cycle. Classical completeness has met the established standards of 92% > 85%. Comparison of student learning outcomes in cycle I and cycle II is presented in Table 3 and Figure 2.

Table 3. Comparison of student learning outcomes in cycle I and cycle II

Implementation	Kategori	
	Average score	Classical completeness
Cycle I	74,23	76%
Cycle II	85,38	92%

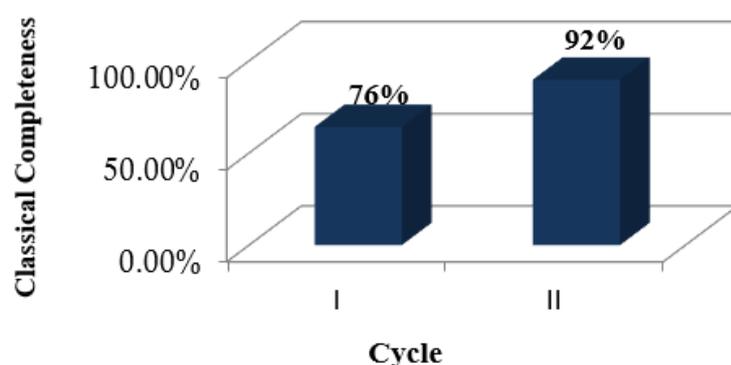


Figure 2. Comparison of student learning outcomes in cycle I and cycle II

Based on the results of research that has been carried out at SMP Negeri 3 Tanjung in class VIII-4 with a contextual approach based on learning communities, that the activities of the first cycle cycle cycle II that have been implemented have increased learning outcomes in physics that can be seen from students' mastery learning. In cycle I shows that the students' completeness classically is 76%. This means that students' learning completeness has not been achieved according to the learning completeness criteria according to established standards of $\geq 85\%$. This is caused by the lack of interest and motivation to learn of the students, they do not understand the evaluation questions that have been given even though the student response after the teacher did the initial activities is quite good.

An increase in the average score of student learning outcomes that is 85.38 occurred in the second cycle. Classical completeness of students reaches 92% so it can be stated that student learning outcomes increase from cycle I to cycle II. This is because most students have an active role in the group, can exchange information with other members, can help other members who have difficulty understanding the material and conclude the material that has been discussed. Students have also been able to work together and carry out evaluations properly and can conclude learning outcomes. In line with this statement Sriwahyuningsih et al (2018) states that the integration of contextual phenomena is useful in encouraging students to learn, responsible for completing tasks which according to Pour et al (2018) can be learned through direct interaction with the surrounding environment.

CONCLUSION

Based on the results of the study, it can be concluded that the application of a learning community based contextual approach can improve student physics learning outcomes at SMP Negeri 3 Tanjung in the academic year 2017/2018. Evaluation of student learning outcomes in the cycle I of 74.23, and in the cycle II of 85.38 with the percentage of classical completeness in the cycle I and cycle II consist of 76% and 92%.

SARAN

Further research needs to be done related to optimizing student activities in learning, bearing in mind the obstacles faced by researchers in learning are the tendencies of student learning activities that are not in accordance with the learning steps in planning.

DAFTAR PUSTAKA

- Arikunto, S. (2006). *Prosedur Penelitian Suatu Pendekatan Praktik*. Jakarta: PT. Rineka Cipta.
- Asy'ari, M. (2017). Implementasi Perangkat Pembelajaran Fisika Berbasis Pembelajaran Inkuiri dengan Strategi Konflik Kognitif untuk Melatihkan Kemampuan Berpikir Kritis. *Lensa: Jurnal Kependidikan Fisika*, 5(2), 55-62. Retrieved from <http://ojs.ikipmataram.ac.id/index.php/Lensa/article/view/512/1364>
- Depdiknas. 2006. *Peraturan Menteri No 22/2006: Standar Isi untuk Satuan Pendidikan Dasar dan Menengah*. Jakarta: BSNP.
- Detri, N., F., A., Verawati, N., N., S., P., & Rahayu, S. (2018). Pengaruh Model Pembelajaran Kooperatif Tipe STAD dan Jigsaw Terhadap Penguasaan Konsep Fisika. *Lensa: Jurnal Kependidikan Fisika*, 6(2), 70-75. Retrieved from <http://ojs.ikipmataram.ac.id/index.php/Lensa/article/view/1146>
- Dharmawati, I., Prayogi, S., & Hidayat, S. (2018). Pengaruh Model Pembelajaran Aktif Berbasis Inkuiri (ABI) Terhadap Kemampuan Berpikir Kritis Siswa. *Lensa: Jurnal Kependidikan Fisika*, 6(1), 8-17. Retrieved from <http://ojs.ikipmataram.ac.id/index.php/Lensa/article/view/930>
- Kemendikbud. (2013). *Peraturan menteri pendidikan dan kebudayaan nomor 65 tentang standar proses pendidikan dasar dan menengah*. Jakarta: Kemendikbud.
- Mariyana, R., Ahzan, S., & Sukroyanti, B., A. (2018). Pengaruh Model Pembelajaran Thinking Aloud Pair Problem Solving Terhadap Hasil Belajar IPA Fisika Siswa. *Lensa: Jurnal Kependidikan Fisika*, 6(1), 18-22. Retrieved from <http://ojs.ikipmataram.ac.id/index.php/Lensa/article/view/931>

- Pour, D., N., Herayanti, L., & Sukroyanti, B., A. (2018). Pengaruh Model Pembelajaran Talking Stick terhadap Keaktifan Belajar Siswa. *Jurnal Penelitian dan Pengkajian Ilmu Pendidikan: e-Saintika*, 2(1), 36-40.
- Prayogi, S., & Asy'ari, M. (2013). Implementasi Model PBL (Problem Based Learning) Untuk Meningkatkan Hasil Belajar Dan Kemampuan Berpikir Kritis Siswa. *Prisma Sains: Jurnal Pengkajian Ilmu dan Pembelajaran Matematika dan IPA IKIP Mataram*, 1(1), 80-88. Retrieved from <http://ojs.ikipmataram.ac.id/index.php/primasains/article/view/521>
- Purnamasari, R., Ahzan, S., & Sukroyanti, B., A. (2017). Pengembangan Multimedia Flash pada Materi Energi untuk Meningkatkan Motivasi Belajar Siswa. *Lensa: Jurnal Kependidikan Fisika*, 5(2), 31-35. Retrieved from <http://ojs.ikipmataram.ac.id/index.php/Lensa/article/view/135/133>
- Sanjaya, W. (2011). *Strategi Pembelajaran Berorientasi Standar Proses Pendidikan*. Jakarta: Kencana.
- Sriwahyuningsih, D., Ahzan, S., & Habiburrahman, L. (2018). Pengaruh Model Pembelajaran Kooperatif Tipe Make A Macth dengan Permainan Rangking One Physical Terhadap Motivasi dan Hasil Belajar Siswa. *Jurnal Penelitian dan Pengkajian Ilmu Pendidikan: e-Saintika*, 2(1), 29-35. doi:<https://doi.org/10.36312/e-saintika.v2i1.109>
- Sukroyanti, B., A., & Sufianti, I. (2017). Pengaruh Pendekatan Saintifik Terhadap Keterampilan Berpikir Kritis Siswa. *Lensa : Jurnal Kependidikan Fisika*, 5(2), 36-40. Retrieved from <http://ojs.ikipmataram.ac.id/index.php/Lensa/article/view/136/134>