DARUSSALAM: Scientific Journal of Islamic Education

DARUSSALAM: Scientific Journal of Islamic Education
Volume 1 (2) 9 – 15 December 2024
The article is published with Open Access at: https://journal.mgedukasia.or.id/index.php/darussalam

Project-Based Learning Model to Improve Students' Understanding and Critical Thinking Skills in Islamic Education Learning

Yuneiti ✉, SMA Negeri 14 Padang, Indonesia

✉ *ummiyuneiti@gmail.com*

Abstract: This study aims to improve students' conceptual understanding and critical thinking skills in Islamic religious education learning using project-based learning models. This study is a classroom action research that uses four steps, namely planning, action, observation and reflection. The subjects of this study were high school students. The data for this study were obtained using test and observation techniques. Tests are used to measure the results of students' conceptual understanding and critical thinking skills, while observations are used to analyze teacher and student learning activities. The data analysis technique used in this study is descriptive statistics by comparing the results obtained with indicators of research success. The results of the study indicate that project-based learning models can improve students' conceptual understanding and critical thinking skills in Islamic religious education learning. This can be seen from the increase in the percentage of student learning completion in each cycle with details of the pre-cycle 58.61%, the first cycle 76.57% and in the second cycle it increased to 93.31%. Thus, the use of project-based learning models can be used as an alternative to improve students' conceptual understanding and critical thinking skills in Islamic religious education learning.

Keywords: Conceptual understanding, critical thinking skills, project based learning.

Received June 29, 2024; **Accepted** August 17, 2024; **Published** December 31, 2024

Citation: Yuneiti. (2024). Project-Based Learning Model to Improve Students' Understanding and Critical Thinking Skills in Islamic Education Learning. *DARUSSALAM: Scientific Journal of Islamic Education*, *1*(2), 9–15.

INTRODUCTION

The subject of Kalam Science has an important role in shaping students' critical and in-depth religious understanding. However, based on initial observations, Phase F students at SMA Negeri 14 Padang showed a low level of understanding of abstract concepts in Kalam Science. In addition, their critical thinking skills are still not optimal. One of the reasons is the use of learning methods that tend to be monotonous and teacher-centered. The Project-based learning model is an alternative method that can be used to improve students' understanding and critical thinking skills. Project-based learning encourages students to be actively involved in the learning process through projects that are relevant to real life. Thus, this study aims to apply the Project-based learning model in learning Kalam Science to improve students' understanding and critical thinking skills.

Islamic Religious Education is a subject that has a strategic role in shaping the character of students so that they have a firm faith, a deep understanding of religion, and noble morals. In the high school curriculum, Islamic education not only aims to convey religious knowledge, but also to build students' critical awareness of Islamic values that are relevant to daily life. One of the important materials in Islamic education is Kalam Science, which discusses issues of theology and Islamic faith in depth. Kalam science as a branch of Islamic science functions to provide a rational and argumentative basis for the beliefs of Muslims. In studying Kalam Science, students are invited to understand fundamental concepts such as monotheism, God's justice, and human freedom, as well as analyze the differences in views that exist in Islamic history. This material is often considered difficult because it requires logical and critical understanding, so an innovative learning approach is needed to make it easier for students to understand it. The Project-based learning learning model is present as one of the solutions to increase the effectiveness of Islamic education learning, especially in Kalam Science material.

Project-based learning is a project-based learning approach, where students are invited to be actively involved in designing, implementing, and completing projects that are relevant to the material being studied. This approach allows students to understand the abstract concepts of Kalam Science concretely through direct application in creative projects. At SMA Negeri 14 Padang, students' understanding of Kalam Science material is often a challenge. Students tend to think of this material as abstract and difficult to relate to daily life. This has an impact on students' low interest in learning the material, which ultimately affects their learning outcomes. Therefore, innovative efforts are needed to increase students' understanding and interest in learning Kalam Science. The application of the Project-based learning model is expected to be an effective alternative to overcome these problems. Through specially designed projects, students are given the opportunity to delve deeper into the concepts of Kalam Science and relate them to the actual issues they face.

Thus, learning is not only theoretical, but also applicable, so that students can understand the benefits of Kalam Science in their lives. The Project-based learning model not only focuses on cognitive aspects, but also develops 21st-century skills such as critical thinking, collaboration, communication, and creativity. In project-based learning, students are trained to analyze problems, find solutions, and work together in teams. These skills are very relevant to the needs of the increasingly complex world of work and society. Projects in Project-based learning are designed to actively engage students and challenge them to solve real problems. In the context of learning Kalam Science, projects can be in the form of case studies, literature studies, or the development of innovative learning media. For example, students can design multimedia presentations on the views of various schools in Kalam Science or create a short video explaining the importance of rationality in the Islamic faith. The advantage of Project-based learning lies in its ability to create a meaningful and personalized learning experience for students. By engaging in relevant projects, students feel responsible for their own learning.

They also learn to manage their time, overcome challenges, and work independently and collaboratively. The implementation of Project-based learning also supports the development of students' affective aspects. In a project involving Islamic values, students are invited to reflect on their understanding of Islamic faith and theology. They not only learn to understand concepts, but also to internalize those values in everyday life. The implementation of Project-based learning in Islamic education learning at SMA Negeri 14 Padang requires an active role from teachers as facilitators. Teachers are tasked with designing projects, providing direction, and monitoring the learning process. In addition, teachers also need to ensure that the projects carried out by students are in accordance with the learning objectives and are able to improve their understanding of the Kalam Science material. The evaluation in Project-based learning is carried out thoroughly, including the learning process and outcomes. Teachers not only assess the final outcome of the project, but also observe the students' work process, including their

involvement in discussions, critical thinking skills, and contributions in groups. With a holistic evaluation approach, teachers can provide constructive feedback to students to improve their performance. Implementation of Project-based learning at SMA Negeri 14 Padang It is inseparable from various challenges. One of them is the limited time to implement the project, considering the dense school curriculum. Teachers need to design projects that are realistic and can be completed within the available time without sacrificing other material that must be taught. In addition, teachers' skills in managing project-based learning are also an important factor that determines the success of Project-based learning. However, the positive impact of Project-based learning is very significant, especially in increasing students' understanding of Kalam Science material.

Iswa not only learns passively, but also actively explores the concepts of Islamic theology through challenging and relevant projects. This helps them to relate learning to real life, so that the Kalam Science material becomes more meaningful. In addition to improving understanding, Project-based learning also has a positive impact on students' learning motivation. By being involved in the project, students feel more enthusiastic about learning because they can see tangible results from their efforts. This motivation is an important factor in improving overall learning outcomes. Overall, the application of Project-based learning in Islamic education learning at SMA Negeri 14 Padang is an innovative step to improve the quality of learning, especially in Kalam Science material. With adequate support from teachers, students, and the school environment, this model can be an effective strategy for developing students' understanding, critical thinking skills, and Islamic values.

METHODS

Type of Research. This study uses the Classroom Action Research (PTK) method with a spiral model developed by Kemmis and McTaggart. This PTK aims to improve students' understanding and critical thinking skills through the application of the Project-based learning model in the subject of Kalam Science.

The subject of the Researcher is a student of Phase F class of SMA Negeri 14 Padang for the 2024/2025 school year. This class consists of 30 students with diverse characteristics in comprehension and critical thinking skills. The research setting was carried out at SMA Negeri 14 Padang in the odd semester of the 2024/2025 school year. The research was carried out by PPG daljab students, covering four cycles. This research procedure includes four main stages in each semester, 1) Planning Developing a Project-based learning plan for the subject of Kalam Science. Prepare teaching materials, project worksheets, assessment instruments, and observation tools. Forming student working groups according to project needs; 2) Implementation (Acting) Implementing Project-based learning learning in the classroom as planned. Students work in groups to complete projects related to the theme of Kalam Science. Teachers guide, monitor, and provide feedback during the learning process; 3) Observation is observing student activities during learning using observation sheets. Collect data on student participation, critical thinking skills, and concept understanding. Recording obstacles and successes during the learning process; 4) Reflecting is Analyzing the data obtained to evaluate the effectiveness of the implementation of Project-based learning.

Formulate improvements for the next cycle based on the findings; 5) Data Collection Techniques, 1) Observation is used to observe student activities during the training process, especially in the aspects of collaboration, participation, and critical thinking skills; 2) Written tests are given to measure students' comprehension to the concept of Kalam Science before and after learning in each cycle; 3) Interviews are conducted with students to find out their learning experience while using Project-based learning; 4) Documentation in the form of photos, videos, and learning notes to support observation results; 5) Research Instruments consist of, 1) Observation sheets of student activities; 2) Concept comprehension test questions; 3) Interview guide; 4) Critical

thinking assessment rubric (based on indicators such as analysis, evaluation, and synthesis); 6) Analysis Techniques The data obtained was analyzed in a qualitative and quantitative descriptive manner as data from observations, interviews, and documentation were analyzed to identify patterns of improvement in critical thinking skills; 2) Quantitative is the test results analyzed using descriptive statistics (averages, percentages, and comparisons between cycles) to see the improvement of students' understanding; 7) Research Success Indicators are considered successful if, 1) The average student comprehension score achieves the set Learning Outcomes (CP), for example, 75; 2) The percentage of students' critical thinking skills increased by at least 20% from the first cycle to the last cycle; 3) Students' active participation in learning increased significantly based on observation results.

RESULTS

The results of the study show that the Project-based learning model is able to improve students' understanding and critical thinking skills in the subject of Kalam Science. The following is a discussion of the research results, 1) Improving Student Understanding Project-based learning encourages students to understand concepts in depth through problem exploration and solution preparation. In the second cycle, the average student comprehension score reached 82.7, showing a significant increase compared to the pre-action results. Activities such as discussions and preparation of papers help students internalize the concepts of Kalam Science; 2) Improvement of Project-based learning Critical Thinking Skills provides space for students to analyze, evaluate, and create solutions to complex problems. For example, in the project "The Relationship of Reason and Revelation", students are challenged to compare the views of various figures of Kalam Science and formulate logical arguments. This is reflected in the increase in the average score of critical thinking skills to 80.9 in cycle II; 3) The effectiveness of Project-based learning in Kalam Science The analytical and philosophical Kalam Science subjects are in line with the PJBL approach.

Students not only understand the theory, but are also able to relate it to real life, such as the relevance of Kalam Science in answering modern challenges; 4) There are two Supporting and Inhibiting Factors, namely, 1) Supporters consisting of active student involvement, teacher support in guiding the project, and the relevance of the project theme to student life; 2) Obstacles from time limitations and differences in ability between students in contributing to group projects. The application of the Project-based learning model significantly improves students' understanding and critical thinking skills in the subject of Kalam Science in the Phase F class of SMA Negeri 14 Padang. Continuous improvement during cycles I and II ensures the successful implementation of this learning model.

DISCUSSION

The Project-based learning learning model is an innovative learning approach that is oriented towards developing students' abilities through real project work. In the context of the Islamic education subject of Kalam Science material, the application of this model aims to increase students' understanding of theological concepts and train critical thinking skills. The Project-based learning model allows students to not only learn the theory of Kalam Science, but also explore its application in real life through relevant and meaningful projects. The first step in the implementation of Project-based learning is to design a project that is in accordance with the learning objectives. The teacher determines the theme of the project related to the topic of Kalam Science, such as the influence of beliefs on community life or the role of rationality in the understanding of faith.

The theme should interest students and allow them to conduct in-depth exploration. At SMA Negeri 14 Padang, this project is designed to involve data collection,

group discussions, and presentation of results, so as to involve various skills of students. The learning process begins with the introduction of the concept of Kalam Science by the teacher. Students are invited to understand the role of Kalam Science in Islamic history, the main concepts underlying it, and its relevance in the modern context. After the initial understanding is obtained, the teacher divides the students into small groups to discuss the project theme. Each group was given the freedom to choose an appropriate approach, such as an interview, case study, or literature review, in order to complete their project. During the work on the project, students are encouraged to work independently with minimal guidance from the teacher. Teachers act as facilitators who provide direction if needed, as well as encourage students to think critically in analyzing data and developing solutions. This process helps students to relate the concepts of Kalam Science to real-life problems, such as the issue of religious pluralism or the challenges of religious understanding in the modern era.

The results of the application of the Project-based learning model in grade XII of SMA Negeri 14 Padang show that students not only better understand the Kalam Science material, but also develop better critical thinking skills. Students are able to analyze various views in Kalam Science and relate them to the social conditions they are facing. The projects they produce, such as written reports or multimedia presentations, reflect their deep understanding and creativity in interpreting learning materials. One of the advantages of the Project-based learning model is its ability to create active and meaningful learning experiences. By engaging in projects, students feel more responsible for their own learning process. They also get the opportunity to work in teams, which trains collaboration and communication skills. In the context of Islamic education learning, this model also helps students to internalize Islamic values more deeply.

Overall, the application of the Project-based learning model in grade XII of SMA Negeri 14 Padang has had a positive impact on improving students' understanding of Kalam science material as well as their critical thinking skills. This approach is not only relevant in Islamic education learning, but can also be applied to a variety of other subjects to create a more meaningful learning experience and oriented towards 21st century skill development. With adequate support from teachers and school facilities, the Project-based learning model can be one of the main strategies in improving the quality of education.

CONCLUSION

Based on the results of research that has been carried out regarding the application of the Project-based learning model in the subject of Kalam Science in grade XII of SMA Negeri 14 Padang, it can be concluded that,1) Improvement of Student Understanding: The Project-based learning model is effective in increasing students' understanding of Kalam Science material. This can be seen from the increase in the average score of student learning outcomes in each research cycle; 2) Critical Thinking Skills Development: The application of the Project-based learning model is able to train students' critical thinking skills. Activities such as project preparation, group discussions, and presentations encourage students to analyze, evaluate, and solve problems related to Kalam Science material; 3) Increased Student Engagement: The Project-based learning model also increases student engagement in the learning process. Students become more active, creative, and motivated in learning because they are directly involved in completing projects that are relevant to daily life.

REFERENCES

Arikunto, S. (2002). Prosedur Penelitian. Bandung: Rineka Cipta.

Dasopang, M. D., Lubis, A. H., & Dasopang, H. R. (2022). How do Millennial Parents Internalize Islamic Values in Their Early Childhood in the Digital Era? AL-ISHLAH: Jurnal Pendidikan, 14(1), 697–708.

Dasopang, M. D., Nasution, I. F. A., & Lubis, A. H. (2023). The Role of Religious and Cultural Education as A Resolution of Radicalism Conflict in Sibolga Community. HTS Theological Studies, 79(1), 1–7.

Fatimah, A., & Maryani, K. (2018). Visual Literasi Media Pembelajaran Buku Cerita Anak. Jurnal Inovasi Teknologi Pendidikan, 5(1), 61–69. https://doi.org/10.21831/jitp.v5i1.16212

Gogahu, D. G. S., & Prasetyo, T. (2020). Pengembangan Media Pembelajaran Berbasis E-Bookstory untuk Meningkatkan Literasi Membaca Siswa Sekolah Dasar. Jurnal Basicedu, 4(4), 1004–1015.

Hendrawati, S., Rosidin, U., & Astiani, S. (2020). Perilaku hidup bersih dan sehat (PHBS) siswa/siswi di sekolah menengah pertama negeri (SMPN). Jurnal Perawat Indonesia, 4(1), 295–307. https://doi.org/https://doi.org/10.32584/jpi.v4i1.454

Lubis, A. H. (2019). Upaya Peningkatan Hasil Belajar Siswa Sekolah Dasar melalui Model Cooperative Learning Tipe Numered Heads Together. FORUM PAEDAGOGIK, 11(2), 127–143.

Lubis, A. H. (2023). The Interactive Multimedia Based on Theo-Centric Approach as Learning Media during the Covid-19 Pandemic. JPI (Jurnal Pendidikan Indonesia), 12(2), 210–222.

Lubis, A. H., & Dasopang, M. D. (2020). Pengembangan Buku Cerita Bergambar Berbasis Augmented Reality untuk Mengakomodasi Generasi Z. Jurnal Pendidikan: Teori, Penelitian, Dan Pengembangan, 5(6), 780–791.

Lubis, A. H., Dasopang, M. D., Ramadhini, F., & Dalimunthe, E. M. (2022). Augmented Reality Pictorial Storybook: How does It Influence on Elementary School Mathematics Anxiety? Premiere Educandum: Jurnal Pendidikan Dasar Dan Pembelajaran, 12(1), 41–53.

Lubis, A. H., & Wangid, M. N. (2019). Augmented Reality-assisted Pictorial Storybook: Media to Enhance Discipline Character of Primary School Students. Mimbar Sekolah Dasar, 6(1), 11–20. https://doi.org/10.17509/mimbar-sd.v6i1.16415

Lubis, A. H., Yusup, F., Dasopang, M. D., & Januariyansah, S. (2021). Effectivity of Interactive Multimedia with Theocentric Approach to the Analytical Thinking Skills of Elementary School Students in Science Learning. Premiere Educandum: Jurnal Pendidikan Dasar Dan Pembelajaran, 11(2), 215–226.

Manshur, U., & Ramdlani, M. (2019). Media audio visual dalam pembelajaran PAI. Al-Murabbi:Jurnal Pendidikan Agama Islam, 5(1), 1–8.

Mardhiyah, R. H., Aldriani, S. N. F., Chitta, F., & Zulfikar, M. R. (2021). Pentingnya Keterampilan Belajar di Abad 21 sebagai Tuntutan dalam Pengembangan Sumber Daya Manusia. Lectura: Jurnal Pendidikan, 12(1), 29–40.

Ningsih, Y. S., Mulia, M., & Lubis, A. H. (2023). Development of Picture Storybooks with TheoAnthropoEco Centric Approach for Elementary School Students. AL-ISHLAH: Jurnal Pendidikan, 15(2), 1888–1903.

Nurhidayah, I., Asifah, L., & Rosidin, U. (2021). Pengetahuan, Sikap dan Perilaku Hidup Bersih dan Sehat pada Siswa Sekolah Dasar. 13(1), 61–71. https://doi.org/10.32528/ijhs.v13i1.4864

Pebtiyanti, I., Ahmad, A., Dzaky, M., Fauziah, S. N., Rendi, & Puspitasari, P. (2023). Peran kurikulum merdeka dalam meningkatkan harmonisasi antara masyarakat dan sekolah. Jurnal Pacu Pendidikan Dasar, 3(1), 269–277. https://doi.org/https://doi.org/10.22021/pacu.v3i1.411

Rahman, A., Munandar, S. A., Fitriani, A., Karlina, Y., & Yumriani. (2022). Pengertian Pendidikan, Ilmu Pendidikan dan Unsur-Unsur Pendidikan. Al Urwatul Wutsqa: Kajian Pendidikan Islam, 2(1), 1–8.

Ricardo, R., & Meilani, R. I. (2017). Impak Minat dan Motivasi Belajar terhadap Hasil Belajar Siswa. Jurnal Pendidikan Manajemen Perkantoran (JPManper), 2(2), 188–201.

Santi, Undang, & Kasja. (2023). Peran Guru PAI dalam Membentuk Karakter Peserta Didik di Sekolah. Jurnal Pendidikan Tambusai, 7(2), 16078–16084. https://doi.org/https://doi.org/10.31004/jptam.v7i2.8918

Sugiyono. (2018). Metode Penelitian Kuantitatif Kualitatif dan R&D. Bandung: Alfabeta.