

The Influence of Social Studies Learning Using the Questions Students Have and Drill and Practice Learning Methods on Student Learning Outcomes

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This research seeks to find out if there is a meaningful difference in learning results between students who utilize the Question Student Have method and those who utilize the Drill and Practice method at SMP Negeri 1 Jatisrono. This research is an experimental study employing a randomized pretest-posttest comparison group design. The study's population included grade VIII students from SMP Negeri 1 Jatisrono, with samples taken from two classes, specifically class VIII B and VIII C, chosen through purposive sampling methods. Data gathering was conducted via observation, documentation, pretest, and posttest. Data analysis consisted of prerequisite tests for normality and homogeneity, followed by hypothesis testing using an independent samples t-test. The findings revealed a notable difference in learning outcomes between students using the Question Student Have method and those using the Drill and Practice method. This is shown by the average pretest score of experimental class 1 being 72.51 and experimental class 2 being 68.83. In contrast, posttest data analysis showed the average score of experimental class 1 to be 79.75 and experimental class 2 to be 75.85. Hypothesis testing using the t-test at a significance level of 0.05 yielded a calculated t value $>$ t table ($2.93 > 1.99$), leading to the acceptance of H_a and rejection of H_0 . Therefore, it can be concluded that the learning results of students using the Question Student Have method are superior to those of students using the Drill and Practice method.

Keywords: Social Studies Learning, Questions Students Have Method, Drill and Practice Methods, Student Learning Outcomes

Penelitian ini bertujuan untuk mengetahui apakah terdapat perbedaan hasil belajar yang bermakna antara siswa yang menggunakan metode Question Student Have dengan siswa yang menggunakan metode Drill and Practice di SMP Negeri 1 Jatisrono. Penelitian ini merupakan penelitian eksperimen dengan desain randomized pretest-posttest comparison group design. Populasi penelitian ini adalah siswa kelas VIII SMP Negeri 1 Jatisrono, dengan sampel diambil dari dua kelas, yaitu kelas VIII B dan VIII C, yang dipilih melalui metode purposive sampling. Pengumpulan data dilakukan melalui observasi, dokumentasi, pretest, dan posttest. Analisis data meliputi uji prasyarat normalitas dan homogenitas, dilanjutkan dengan pengujian hipotesis menggunakan uji-t sampel independen. Hasil penelitian menunjukkan adanya perbedaan hasil belajar yang cukup signifikan antara siswa yang menggunakan metode Question Student Have dengan siswa yang menggunakan metode Drill and Practice. Hal ini ditunjukkan dengan nilai rata-rata pretest kelas eksperimen 1 sebesar 72,51 dan kelas eksperimen 2 sebesar 68,83. Sebaliknya, analisis data posttest menunjukkan skor rata-rata kelas eksperimen 1 sebesar 79,75 dan kelas eksperimen 2 sebesar 75,85. Pengujian hipotesis menggunakan uji-t pada taraf signifikansi 0,05 menghasilkan nilai t hitung $>$ t tabel ($2,93 > 1,99$), yang mengarah pada penerimaan H_a dan penolakan H_0 . Dengan demikian, dapat disimpulkan bahwa hasil belajar siswa yang menggunakan metode Question Student Have lebih unggul daripada siswa yang menggunakan metode Drill and Practice.

Kata Kunci: Pembelajaran IPS, Pertanyaan Siswa Memiliki Metode, Metode Latihan dan Praktik, Capaian Belajar Siswa

1. Introduction

Learning is a conscious process that individuals carry out to achieve behavior change as a result of experience and interaction with the environment. Along with the development of the times and the increasing complexity of living needs, efforts to improve the quality of education are becoming increasingly important. Humans always try

to improve the quality of life through a systematic teaching and learning process. This process involves not only the acquisition of knowledge, but also the formation of contextual attitudes and skills. This is in line with constructivist theory which states that knowledge is built through active interaction with the environment (Piaget, 1977);(Vygotsky, 1978).

Social Science Education (IPS) has a strategic role in shaping students' understanding of the dynamics of society, culture, and the social environment. In it, learning methods play an important role in supporting the achievement of educational goals. The Questions Students Have and Drill and Practice methods are two approaches that can be used to increase student involvement and understanding of social studies subject matter. These two methods represent two different pedagogical approaches: constructivism, which emphasizes the active involvement of students, and behaviorism, which emphasizes reinforcement of behavior through repetition (Slavin, 2020).

At the junior high school (SMP) level, social studies subjects are directed to develop critical thinking skills, social skills, and awareness of social problems in the surrounding environment (Sutrisno & Nugraha, 2023). However, the effectiveness of learning is highly dependent on the methods applied by the teacher. In the field, a teacher-centered approach to lectures still dominates the learning process, resulting in low student engagement and negatively impacting learning outcomes (Rohman & Hidayati, 2022). This condition shows the need for more participatory and contextual learning method innovation. This is in line with John Dewey's (1938) thoughts on the importance of active student involvement in building the meaning of learning.

One relevant method to increase student participation is Questions Students Have, where students are given space to formulate questions based on the material learned (Supriadi, 2022). Research shows that this method can strengthen conceptual understanding while building learning independence (A. Martinez & Lee, 2021). In contrast, Drill and Practice focuses more on strengthening retention through repetitive exercises, which are very beneficial in mastering basic concepts and facts (X. Chen & Brown, 2021). Both have their own strengths in supporting the achievement of optimal learning outcomes: exploratory and repetitive (Skinner, 1954).

In the context of digital age learning that demands innovation, conventional methods such as lectures are starting to lose their appeal. The application of the Questions Students Have method has been proven to increase student motivation and activeness through direct involvement in the learning process. A case study conducted by (Sari, 2021) shows that students taught with this method experience an increase in understanding of up to 25% compared to those taught conventionally. These findings reinforce a principle in the theory of Self-Determination, which states that students' intrinsic motivation grows when they are given autonomy and a sense of involvement in learning (Deci & Ryan, 2000).

Meanwhile, Drill and Practice remains relevant, especially in strengthening long-term retention of teaching materials. Repetitive exercises allow students to review and re-establish understanding of the topics they have learned. (Rahmawati, 2020) research shows that students who learn using this approach obtain higher test scores than the control group. This approach is in accordance with behavioristic theory that emphasizes the importance of stimulus repetition in shaping learning behavior (Ormrod, 2020).

The success of learning is also influenced by the extent to which teachers are able to design a creative learning process that is in accordance with the needs of students. The concept of Pedagogical Content Knowledge (Shulman, 1987) emphasizes the importance of synergy between mastery of the material and the right teaching strategy. Teachers need to understand the characteristics of students and the material in order to be able to choose the most effective method. Although the two methods have been shown to be effective separately, studies that directly compare the two in social studies learning at the junior high school level are still very limited. Most previous studies only evaluated one method individually, without involving comparisons in the same research design (Lestari & Andini, 2020);(M. T. Wang, 2021). The absence of this comparative study creates a gap in the literature that needs to be answered through evidence-based studies (Slavin, 2002).

Innovation in the selection of learning methods is an urgent need for teachers. The right method can improve student learning outcomes by actively involving them in the learning process. Two-way interaction between teachers and students is an important component to foster a learning climate that supports the optimal development of students' potential. This principle is in line with a humanistic approach that places students as unique individuals who need to be personally facilitated (Rogers, 1983).

Junior High School Social Studies materials include an understanding of human relationships with their social environment, including topics such as social interactions, norms, values, and social institutions. Learning should ideally not only be theoretical, but also capable of stimulating high-level thinking skills and contextual problem-solving. This is in line with the demands of 21st century competencies that emphasize critical, collaborative, and communicative thinking skills (Trilling & Fadel, 2009).

Teachers are required to develop learning plans that are adaptive to the development of students. However, the reality in the field shows that the variety of methods used by teachers is still minimal. A monotonous approach often makes learning feel boring and less interesting for students. This has an impact on low participation and

learning outcomes, as revealed in (Gardner, 1993) study on the need for an approach that respects the diversity of students' learning styles.

Student learning outcomes are influenced by internal factors such as motivation, interests, and cognitive abilities, as well as external factors such as learning methods and the social environment. The ecological model of learning developed by (Bronfenbrenner, 1979) emphasizes the importance of interaction between individuals and environmental contexts in influencing learning outcomes. Therefore, the approach chosen by teachers should take into account the conditions of the classroom environment and the characteristics of the students.

The results of initial observations conducted at SMP Negeri 1 Jatisrono show that social studies learning is still teacher-centered, where teachers play a dominant role in delivering material. Student learning activities tend to be passive, with minimal opportunities to discuss, ask questions, or express opinions. This is not in line with an active learning approach that demands optimal cognitive and emotional engagement of learners (Bonwell & Eison, 1991). The lack of variation in teaching methods has the potential to reduce students' interest in learning, especially in social studies materials that require conceptual understanding and high-level thinking skills. In the context of the Independent Curriculum which emphasizes differentiation and active participation, this condition is a big challenge for teachers (Kurikulum Merdeka, 2022).

The dominance of the lecture method in social studies learning has implications for the limited number of meaningful learning interactions. Students become passive, not encouraged to develop curiosity, and reluctant to ask or answer the teacher's questions. This low participation has a direct impact on the understanding of concepts and the achievement of learning outcomes. Learning engagement is an important indicator of an effective academic process, as explained by engagement theory that emphasizes the importance of cognitive, affective, and behavioral involvement in supporting student success. Therefore, the use of methods that encourage active participation such as Questions Students Have and methods of strengthening concepts such as Drill and Practice are becoming increasingly relevant to be implemented.

Another problem found in grade VIII of SMP Negeri 1 Jatisrono is the presentation of dense and complex material in a limited time. Social studies material that is abstract and conceptual is difficult to understand if it is not presented with a contextual and interactive approach. In addition, external factors such as students' social environment and teachers' readiness to use innovative methods also affect learning effectiveness (Darling-Hammond, 2017). The unprecedentedness of the Questions Students Have or Drill and Practice methods by social studies teachers in the school is an indicator of limitations in the implementation of learning strategies based on scientific approaches. This emphasizes the need to strengthen teachers' competence in choosing and applying methods that are in accordance with the characteristics of the subject and the needs of students.

Based on the problems that have been described, this study aims to analyze the differences in learning outcomes of grade VIII students of SMP Negeri 1 Jatisrono who are taught by the Questions Students Have and Drill and Practice methods in social studies learning. This research is expected to fill the literature gap related to the comparison of the two methods in the context of social studies education at the junior high school level, which has rarely been studied directly in an experimental design. This study also contributes to evidence-based teaching practices, with the hope that it can be a reference for teachers in designing learning strategies that are in accordance with modern pedagogical principles. Through this approach, the social studies learning process can become more meaningful, participatory, and able to equip students with critical thinking skills and strong conceptual understanding.

Literature review

1. Question Student Have Learning Method

The Question Student Have learning method was created to teach students how to ask questions effectively. The Question Student Have learning method is a broader idea that covers all kinds of group activities, including those that are more teacher-led or teacher-directed. The Question Student Have method is a way to involve students in the learning process, encouraging them to ask questions about the material they are studying. Supriadi (2022) indicates that using this method can boost students' curiosity and their engagement in learning. In this study, students who learned through the Question Student Have method showed significant improvement in their critical and analytical thinking skills.

According to (Zaini, 2006) The steps in the Question Student Have learning method are as follows: 1) the teacher distributes pieces of paper to the students, 2) each student writes down one question related to the lesson material, 3) the student gives the paper containing the question to a friend in the class. On the left side, 4) when receiving paper from a friend next to him, students are asked to read the questions, 5) when the question paper is returned to its owner, students are asked to count the check marks on their paper, 6) respond to the questions, 8) the teacher collects all the papers, there is a big possibility that there are questions that you will answer at the next meeting.

2. Drill and Practice Learning Method

The Drill and Practice method is an approach that focuses on repetition and practice to strengthen students' understanding of basic concepts. In the context of social studies learning, this method can be used to help students

remember important facts, terms, and concepts related to the material being taught. Research shows that this method is effective in improving information retention and student learning outcomes (Hattie, 2009). In this way, students can more easily remember the information they have learned. Studied moment-facing exams or other assignments.

One example of the application of the Drill and Practice method in social studies learning is by using quizzes or repeated practice questions. For example, after studying the topic of Indonesian history, students can be given practice questions that cover various aspects of the material. According to data obtained from research by (H. Wang & Li, 2020), students who routinely take practice questions show a significant increase in learning outcomes compared to students who do not do the practice. This shows that repetition material can help students understand and remember information better.

In addition, technology can be utilized to implement the Drill and Practice method more effectively. The use of learning applications that provide interactive exercises can increase students' motivation to learn. A study by (X. Chen & Brown, 2021) showed that students who used technology-based learning applications in their practice had better learning outcomes and were more involved in the learning process. By utilizing technology, teachers can provide variations in the practice methods used, so that students do not feel bored and remain motivated.

However, it is important to remember that the Drill and Practice method should not be used excessively. Too much repetition without deep understanding can cause students to feel bored and lose interest in learning. Therefore, teachers need to combine this method with other more interactive approaches, such as Question Student Have, to create balance in the learning process. Research by Smith and Brown (2022) shows that a combination of Drill and Practice and interactive methods can produce better learning outcomes than using one method alone.

Overall, the Drill and Practice method has great potential in improving student learning outcomes in social studies. With structured repetition and consistent practice, students can master the basic concepts needed to better understand the material. However, it is important for teachers to apply this method wisely and combine it with other learning approaches to achieve optimal results.

2. Method

This research employed a quasi-experimental design using a pretest-posttest comparison group. The study aimed to examine whether there is a significant difference in student learning outcomes between those taught using the Questions Students Have method and those taught using the Drill and Practice method at SMP Negeri 1 Jatisrono.

The research involved two eighth-grade classes selected through purposive sampling: Class VIII B as Experimental Group 1 (treated with the Questions Students Have method) and Class VIII C as Experimental Group 2 (treated with the Drill and Practice method). Each class received learning treatments over the same period, covering the same material content.

In Experimental Group 1, the Questions Students Have method was applied. In this approach, students were encouraged to formulate questions related to the lesson material. The teacher acted as a facilitator by providing a draft outline of the material and guiding students in discussion. This method was intended to stimulate critical thinking, creativity, and active engagement. The learning environment promoted student participation, peer discussion, and confidence in expressing ideas.

In Experimental Group 2, the Drill and Practice method was implemented. Students were given structured problem sets to solve repeatedly, focusing on mastering key concepts through repetition and practice. The teacher guided students by presenting problems and supporting their understanding through continuous practice. This method aimed to improve students' recall ability and comprehension through repetition-based activities.

Pretests and posttests were administered to both groups to measure learning outcomes. The tests were constructed based on the curriculum objectives and validated by experts to ensure reliability and relevance.

3. Results & Discussion

Result

Preliminary analysis shows that the average pretest score for Experiment Class 1 (Questions Students Have) is 72.51, while Experimental Class 2 (Drill and Practice) reaches 68.83 see figure 1:

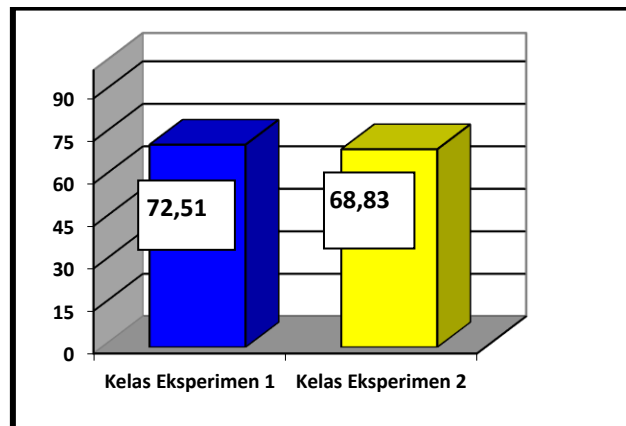


Figure 1. Bar Chart Average Initial Ability of Students

The homogeneity test on the pretest data ($p > 0.05$) indicated that the two groups had uniform variance, so that the students' initial abilities could be considered comparable. After treatment, the average posttest score in Experimental Class 1 increased to 79.75, while Experimental Class 2 reached 75.85 (see Figure 2);

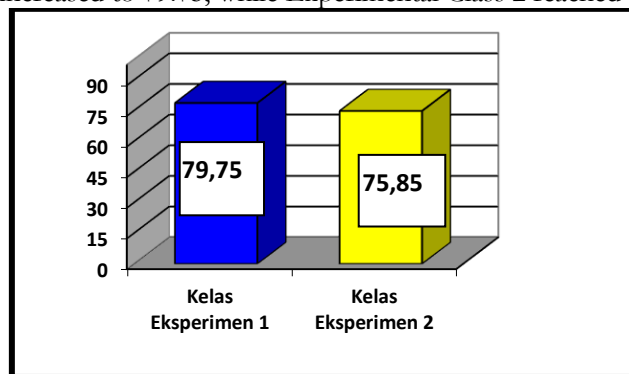


Figure 2. Bar Chart Average Student Learning Outcome Test

The re-homogeneity test on the posttest value again showed the same variance ($p > 0.05$). The standard gain calculation reveals that Experimental Class 1 recorded an increase of 0.249, while Experimental Class 2 was only 0.165 (see Figure 3).

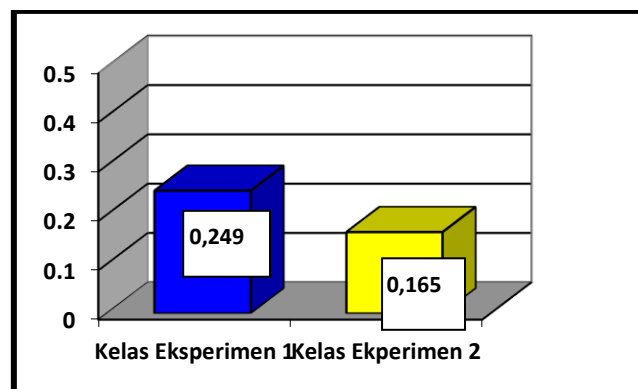


Figure 3. Bar Chart of Average Standard Gain Results

Normality and homogeneity tests on gain scores (both $p > 0.05$) ensured the data were feasible for parametric analysis. Finally, the independent samples t-test showed a t count of $> t$ table with $p < 0.05$, which means that the difference in the improvement in learning outcomes of the two classes was statistically significant. Thus, the Questions Students Have method has been proven to produce a higher increase in learning outcomes than the Drill and Practice method.

Discussion

The Difference Between Questions Students Have and Drill and Practice Methods

The results showed that students who were taught using the Questions Students Have method showed a higher increase in learning outcomes than students who used the Drill and Practice method. These findings are in line with the theory put forward by (R. Martinez & Lee, 2021), which states that question-based methods, such as Questions Students Have, are effective in increasing student engagement in the learning process. By encouraging students to ask questions and think critically, this method helps them understand the material more deeply.

In contrast, while Drill and Practice is effective in strengthening mastery of basic material through repetitive exercise, this approach focuses more on strengthening memory and engages students less in critical thinking, as described by (Y. Chen & Brown, 2021). With this method, students repeat more of the information that already exists without being given room for deeper exploration.

The addition of (Hattie, 2009) theory in her book *Visible Learning* further strengthens that techniques that optimize students' active engagement, such as Questions Students Have, are very effective in improving students' understanding and critical thinking skills. Based on these findings, it can be concluded that methods that involve students' interaction with the material, such as Questions Students Have, are more effective in improving learning outcomes compared to more passive methods such as Drill and Practice.

The Effect of Combining the Questions Students Have and Drill and Practice Methods

This study also found that the combination of the Questions Students Have and Drill and Practice methods can have a significant impact on student learning outcomes. This supports previous research by (Smith, J., Johnson, L., & Brown, 2019), which showed that a combination of different learning methods yields greater benefits compared to using a single method alone. This combination caters to a variety of student learning styles, both those who are more active in asking questions and those who need repeated practice to strengthen understanding.

The combination of these methods allows students to benefit from both approaches: Questions Students Have gives students the opportunity to dig deeper into the material through questions and discussions, while Drill and Practice strengthens their understanding through repetitive exercises that improve memory and mastery of basic concepts. Through active interaction and repetitive practice, students not only gain a better conceptual understanding, but also strengthen their ability to remember and apply knowledge practically.

In line with (Vygotsky, 1978) theory of scaffolding, the merging of these two methods can be seen as a form of scaffolding, in which the teacher provides support through questions and repetitive exercises to help students build knowledge in a more structured way. In the Questions Students Have session, students can learn from each other's experiences through questions and answers, which are then reinforced through repeated exercises with the Drill and Practice method. Thus, the combination of these two methods allows students not only to deepen their understanding, but also to improve their social and academic skills simultaneously, as described by (C. Martinez, 2022).

Student Involvement in the Learning Process

Students' engagement in the learning process increases significantly when they are given the opportunity to ask questions and discuss, as applied in the Questions Students Have method. These findings are in line with (Supardi et al., 2021) theory regarding active learning, which states that students' active involvement in activities such as asking questions and discussing can improve their understanding of the material. Research by (Smith, J., Johnson, L., & Brown, 2019) also confirms that methods that encourage active interaction between students and the material are more effective in improving learning outcomes.

In addition, the Self-Determination theory put forward by (Deci & Ryan, 2000) adds an important dimension that students' intrinsic motivation, which arises when they feel more engaged and active in learning, plays a major role in their academic success. By providing opportunities for students to ask questions and participate in discussions, this method not only improves their understanding of the material, but also strengthens their intrinsic motivation, which in turn results in better learning outcomes.

Lesson Planning by Teachers

Careful planning and effective learning management greatly determine the successful implementation of these two methods. Teachers need to design learning activities that can effectively integrate the Questions Students Have and Drill and Practice methods to maximize student learning outcomes. (Cui, B., Jiao, W., Gui, S., Li, Y., & Fang, 2025) emphasize that good planning allows teachers to manage time and resources more efficiently, so that students can make optimal use of both methods.

This is in line with (Shulman, 1987) theory of Pedagogical Content Knowledge (PCK), which shows that teachers need to have a deep understanding of the material and how to teach it effectively, taking into account the

needs of the students and the context of teaching. The addition of (Kellogg & Barker, 2022) theory of Teaching and Learning Strategies provides further explanation of the importance of flexible planning in combining various learning methods. According to Kellogg, a good learning strategy can create a dynamic classroom atmosphere and support student engagement, which contributes to the achievement of better learning outcomes.

The Influence of the Use of Technology in Learning

With the development of technology in education, there is great potential to integrate technology in these two learning methods, especially Drill and Practice. The use of apps or digital devices in Drill and Practice allows students to access repetitive exercises in a more interactive and fun way. Research by (Tan & Lee, 2022) shows that the use of digital applications in Drill and Practice learning increases the effectiveness of the method by providing instant feedback and a more personalized learning experience.

In addition, digital learning platforms that support the Questions Students Have method allow students to ask questions and interact more freely, even outside the classroom. Research by (Wei, 2023) shows that the use of technology in interactive learning increases student engagement, especially in distance learning or blended learning. Therefore, technology not only strengthens the Drill and Practice method by providing more varied repetitive exercises, but also expands the space for interaction in the Questions Students Have method, thus enriching the student learning experience.

4. Conclusion

Based on the results of the research and data analysis, it can be concluded that there is a significant difference in learning outcomes between students who are taught using the Questions Students Have method and students who are taught using the Drill and Practice method in social studies learning at SMP Negeri 1 Jatisrono. Students who were treated with the Questions Students Have method showed a higher improvement in learning outcomes compared to those taught using the Drill and Practice method, as evidenced by the results of the t-test ($t_{count} = 2.93 > t_{table} = 1.99$, $p < 0.05$). The Questions Students Have method has been shown to be more effective in increasing students' active engagement, critical thinking skills, and intrinsic motivation because it provides space for students to ask questions and explore the material. Meanwhile, the Drill and Practice method remains instrumental in strengthening material retention through repetitive exercises, although its contribution to the development of students' conceptual understanding is relatively lower.

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