



Students Learning Activeness: An Experimental Study On The Effectiveness Of The Cooperative Learning Model Question Students Have

Nirwana^{*1}, Nurul Azizah², Zulhannan³, Listiyani Siti Romlah⁴, Zahra Rahmatika⁵
^{1,2,3,4,5}Universitas Islam Negeri Raden Intan Lampung, Indonesia
Email: nirwana89068@gmail.com, nurulazizah23@student.uns.ac.id, listiyani.siti@radenintan.ac.id, zahrarahma@radenintan.ac.id

Article Info	Abstract
Article History Received: 2024-11-11 Revised: 2024-12-23 Published: 2025-01-05 Keywords: <i>Akidah Akhlak;</i> <i>Cooperative Learning;</i> <i>Learning Activity;</i> <i>Question Students Have.</i>	Students learning activeness can be increased by implementing interactive learning models. This research was motivated by low learning activity. This research aims to determine the effectiveness of implementing the Question Students Have type cooperative learning model on students' learning activity at MTS Nurul Huda Pringsewu, especially in the subject of moral beliefs. This research uses a quantitative approach with a Quasi Experimental Design research type. The sampling technique uses simple random sampling. The results of the normality test for the experimental group where the sig value. 0.234 is greater than 0.05, indicating that the data is normally distributed. Meanwhile in the control group it was 0.391 where the sig value. greater than 0.05. The t test results show data where the sig value. 0.409 which means that the sig value. (2-tailed) greater than 0.05. so it can be concluded that H ₀ is accepted and H ₁ is rejected. so the results of this research show that the experimentation of the question students have learning model is not significant on students' learning activeness.

Artikel Info	Abstrak
Sejarah Artikel Diterima: 2024-11-11 Direvisi: 2024-12-23 Dipublikasi: 2025-01-05 Kata kunci: <i>Akidah Akhlak;</i> <i>Keaktifan Belajar;</i> <i>Model Pembelajaran</i> <i>Kooperatif;</i> <i>Question Students Have.</i>	Keaktifan belajar peserta didik dapat ditingkatkan dengan menerapkan model pembelajaran yang interaktif. Penelitian ini dilatar belakangi oleh rendahnya keaktifan belajar. Penelitian ini bertujuan untuk mengetahui sejauh mana efektivitas dari penerapan model pembelajaran kooperatif tipe Question Students Have terhadap keaktifan belajar peserta didik di MTS Nurul Huda Pringsewu khususnya pada mata pelajaran akidah akhlak. Penelitian ini menggunakan pendekatan kuantitatif dengan jenis penelitian Quasi Eksperiment Design. Teknik pengambilan sampel menggunakan simple random sampling. Hasil uji normalitas kelompok eksperimen dimana nilai sig. 0,234 lebih besar dari 0,05 sehingga menunjukkan bahwa data berdistribusi normal. Sedangkan pada kelompok kontrol yaitu 0,391 dimana nilai sig. lebih besar dari 0,05. Hasil uji t menunjukkan data dimana nilai sig. 0,409 yang berarti bahwa nilai sig. (2-tailed) lebih besar dari 0,05. Maka dapat disimpulkan bahwa H ₀ diterima dan H ₁ ditolak. Sehingga hasil dari penelitian ini menunjukkan bahwa eksperimentasi model pembelajaran question students have tidak signifikan terhadap keaktifan belajar peserta didik.

I. INTRODUCTION

The learning activeness of students refers to a state, behavior, or activity exhibited by students during the learning process. One of the fundamental components essential for achieving the objectives of the learning process is students' active participation during the learning process. However, students' learning activeness is often low due to several factors. Mental health is one of the factors that hinders students from fully participating in the learning process. The use of technology, methods, and learning models is crucial to making classroom learning more engaging, ensuring that students do not feel bored. The implementation of learning models by educators is expected to motivate and engage students, fostering enthusiasm and participation

in the learning process, ultimately achieving the learning objectives. Active students can be nurtured when teachers enhance student engagement in the learning process. Therefore, it is essential for teachers to select a suitable learning model.

Active learning occurs when students feel engaged and curious, then work to solve the challenges or problems they are presented with. This requires students to ask questions, think critically, and seek solutions. For learning to take place, students must be actively engaged. A model that encourages students to become more engaged in learning can lead to a deeper understanding and better ability to remember and apply knowledge compared to conventional learning models. Active learning provides

students with the opportunity to ask questions, adjust their learning pace, and enhance engagement, motivation, and the application of knowledge learned in the classroom.

Based on the preliminary data collected by the author at MTS Nurul Huda Pringsewu on Thursday, October 10, 2024, which involved observations, documentation, questionnaire distribution, and interviews with the Aqidah Akhlak subject teacher and several students, several issues were identified. The problems identified include (1) Students are less active in the learning process, which is caused by the teacher still using a conventional teaching model (2) Lack of confidence in expressing opinions and asking questions when there are materials that have not been understood, (3) Keterbatasan sarana dan prasarana yang kurang memadai untuk pembelajaran yang interaktif seperti proyektor, Limited facilities and infrastructure that are inadequate for interactive learning, such as projectors and (4) Students are less motivated during the learning process, especially when the teacher presents the material. This is due to students having to divide their study time between school and the pesantren, so it is not uncommon for students to fall asleep during the learning process.



Figure 1.

Based on the results of the questionnaire distributed to students at MTS Nurul Huda Pringsewu, in accordance with the indicators of learning activeness according to Sudjana, the results show that the indicator with the highest score of 21 is when students search for information to solve the problems they face. The indicator with the lowest score of 14 is when students engage in group discussions according to the teacher's instructions, and when students have the opportunity to ask questions and complete tasks, which showed the smallest percentage. This indicates that there is a lack of student activeness in the learning process, such as during class discussions, and students' lack of confidence in expressing questions or sharing their hopes and desires. Overall, students'

learning activeness can be categorized as low, as several important indicators have not yet reached an optimal level. The low scores in certain aspects reflect the need for a more interactive learning model.

In this study, the author aims to provide a solution that addresses the issues previously discussed by incorporating interactive learning. One of the key factors supporting its success is the use of an appropriate learning model, which can make students more engaged with the lessons, more motivated to complete tasks, and better able to understand the material being taught. One model that can help students improve their learning activeness is the Question Students Have learning model. The Question Students Have model is a learning model that focuses on the active role of students in the learning process, with the aim of enhancing motivation, participation, engagement, and students' abilities in the classroom. The Question Students Have model is an active learning model that utilizes a technique of student participation through writing. This model will be more effective when combined with the discussion method. The Question Students Have learning model is expected to address the lack of student engagement. This is because the learning issues related to student activeness, particularly in terms of asking questions, are fundamentally addressed by this model, which is designed to explore students' needs and expectations as a foundation for maximizing the potential they possess.

The implementation of the Question Students Have learning model can enhance student learning engagement. This approach is highly effective when applied compared to other learning models, and it can motivate students to engage in learning, enabling them to better understand the material being taught as they become more active. Moreover, students can also develop their questioning skills, as this is a key element in the learning process. Based on the explanation, student learning activeness can be improved by using the Question Students Have learning model, as this model allows educators to easily understand students' needs and expectations. The application of this model is expected to enhance student engagement in the learning process, particularly in the Aqidah Akhlak subject at MTS Nurul Huda Pringsewu. The advantage of the Question Students Have model is that it can capture and focus students' attention, while also developing their courage

and skills in answering questions and expressing their opinions. This learning model is particularly helpful for students who lack confidence in asking questions and expressing their hopes and desires through writing.

The results of previous research conducted by earlier researchers on the implementation of the Question Students Have learning model reveal that there was indeed a significant increase in student learning engagement after educators applied the Question Students Have model. Although there have been many previous studies examining the experimentation of the Question Students Have learning model on student learning engagement, there are still limitations in its impact on overall student engagement, particularly within the scope of Islamic education at the Madrasah Tsanawiyah level, especially in the Aqidah Akhlak subject in grade VII. Many previous studies have only focused on general aspects, such as in the fields of Science and Mathematics.

Additionally, this study presents a novelty compared to previous research, as it was conducted in a formal school based on a pesantren, where students have a greater responsibility for their learning than students in other settings. In this study, students are able to develop their questioning skills, particularly during classroom discussions, which can support active learning. Furthermore, very few studies have examined this learning model within the field of Islamic education. Therefore, the aim of this study is to determine the extent of the impact that the application of the Question Students Have learning model has on student learning engagement in the Aqidah Akhlak subject, specifically at MTS Nurul Huda Pringsewu. This research is necessary because the author has investigated and examined the relationship arising from the experimentation of the Question Students Have learning model on student learning engagement.

The implication of this study is the need for educators to use interactive learning models that support active student engagement, as this model encourages students to ask questions and increases their participation in the teaching and learning process. Students who actively ask questions tend to be more mentally and emotionally involved in the learning material. Furthermore, the question-based learning model helps to uncover students' needs and expectations, which can be expressed as problems or issues related to the lesson content.

This study is important to determine the extent to which this learning model can enhance student engagement at MTS Nurul Huda Pringsewu, as well as to contribute to the development of more effective learning models that align with students' characteristics. The findings of this study offer a new perspective on how educators can use the Question Students Have learning model to influence student engagement, enabling active learning where the focus is not solely on the educator. As a result, this study not only adds to the knowledge of the impact of the Question Students Have model on student learning engagement in the Aqidah Akhlak subject, but also serves as a reference for the author, researchers, and other educators to develop and modify interactive learning models.

II. METHOD

This study uses a quantitative approach. The quantitative approach is associated with numerical statistical calculations to analyze data obtained in the field, aiming for accurate and objective results. The research design used is a Quasi-Experimental Design with a Posttest Only Control Group Design. This type of research is used to observe the effect of a treatment or intervention on the subjects being studied. Additionally, the research variables used by the author are the independent variable, which is the Question Students Have learning model, and the dependent variable, which is learning engagement. The sampling technique used is simple random sampling, where every member of the population has an equal chance of being selected. After applying the simple random sampling technique, the sample chosen was class VII.3 as the experimental group using the Question Students Have model, and class VII.2 as the control group using the conventional model. The population of this study consists of all seventh-grade students at MTS Nurul Huda Pringsewu. This study was conducted during the odd semester of the 2024/2025 academic year at MTS Nurul Huda Pringsewu in the Aqidah Akhlak subject.

The instrument used in this study is a non-test instrument in the form of a Likert-scale questionnaire. The questionnaire used by the author is designed to measure student learning engagement based on the indicators of learning engagement that were applied. The learning engagement indicators according to Sudjana consist of 8 indicators. These indicators are (1) during the teaching and learning process,

students participate in completing their learning tasks, (2) students are willing to engage in problem-solving during learning activities, (3) students are willing to ask friends or the teacher when they do not understand the material or encounter difficulties, (4) students are willing to seek information needed to solve the problems they are facing, (5) students engage in group discussions according to the teacher's instructions, (6) students are able to assess their own abilities and the results they have achieved, (7) students practice solving problems or exercises, and (8) students have the opportunity to use or apply what they have learned in completing tasks or solving problems they encounter.

In this study, the instrument used is a questionnaire consisting of 24 questions. These questions will be distributed; however, before that, validation from a validator is required. After obtaining validation from the validator, the next step is to administer the 24 item questionnaire to a pilot class. The responses will then be tabulated and the validity of the questionnaire tested using SPSS. The results of the validity test showed that 13 out of the 24 questionnaire items were valid. These 13 items were then given to the experimental and control classes. To test the validity of an instrument, a validity test is conducted to determine whether the instrument is valid or not. The formula used for this is the Pearson product-moment correlation.

This study also uses a reliability test aimed at measuring the accuracy of the measurements. To determine the reliability level, the Cronbach's Alpha formula is used. The reliability results show a value of 0.669, which is considered reliable. The prerequisite tests used include the normality test, which measures whether the data is normally distributed or not. The normality test is conducted using the Liliefors test. Next, the test used is the homogeneity test, which determines whether the population variances are equal or not. The homogeneity test applied in this study is Bartlett's test. The hypothesis test used summarizes a clear and concise assumption about the relationship or influence between the independent variable and the dependent variable in a study. To test the hypothesis, this study uses the T-test, specifically the independent simple T-test.

III. RESULT AND DISCUSSION

A. Result

This study was conducted at MTS Nurul Huda Pringsewu. The research was carried out using various data collection techniques, including the distribution of a learning engagement questionnaire based on the engagement indicators according to Sudjana, which was then tested for validity and reliability. To test the validity of the instrument, SPSS was used with the criteria $R_{hit} > R_{table}$ with $\alpha = 5\%$ (0,05) meaning the instrument is considered valid however if $R_{hit} < R_{table}$ the instrument is considered invalid. Based on the results of the validity test, it was found that 13 out of the 24 questionnaire items were valid. The following presents the reliability test data used in the study.

Table 1. Reliability Test Results

Reliability Statistics	
Cronbach's Alpha	N of Items
.669	24

Based on the results of the reliability test obtained from the Cronbach's Alpha value $R_{hit} > R_{table}$ the instrument is considered reliable. The results show a value of 0.669 indicating that the instrument can be considered reliable.

1. Normality test

Normality testing is used to determine and measure whether the data obtained follows a normal distribution, and whether the data comes from a population that is normally distributed. Data is considered normally distributed if the significance value (sig.) > 0.05 . The normality test used in this study is the Liliefors test. The description of the results of the learning activity test of the seventh-grade students at MTS Nurul Huda Pringsewu is presented in the following table 1:

Table 1. Description of the normality test results for the learning activity of seventh-grade students at MTS Nurul Huda Pringsewu.

Keaktifan Belajar	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
1	,145	25	,106	,940	25	,224
2	,155	25	,122	,869	25	,381

a. Lilliefors Significance Correction

Based on the results of the data test using the Shapiro-Wilk test, the experimental group showed a result of 0.234 where the significance value is greater than 0.05 indicating that the data is normally distributed. In contrast, the control group showed a result of 0.391 where the significance value is also greater than 0.05. Therefore, it can be concluded that the data is normally distributed, with a significance value greater than 0.05.

2. Homogeneity test

Homogeneity test is a test used to determine whether the variances of the data distribution are the same (homogeneous) or not the same (heterogeneous). The data is considered homogeneous if the significance value (sig.) is greater than 0.05. The homogeneity test used in this study is the Bartlett's test. The description of the results of the student activity test in class VII at MTS Nurul Huda Pringsewu is presented in the following table 2.

Table 2 Description of the results of the homogeneity test on student learning activity in class VII at MTS Nurul Huda Pringsewu

Keaktifan Belajar	Based on	Levene Statistic	df1	df2	Sig.
		Mean	,252	1	48
Median	,232	1	48	,632	
Median and with adjusted df	,232	1	43,318	,632	
Trimmed mean	,256	1	48	,615	

Description of the results of the homogeneity test on the learning activity of class VII students at MTS Nurul Huda Pringsewu. Based on the table, the results of the homogeneity test show a significance value of > 0.05, with a sig (2-tailed) value of 0.618. Therefore, it can be concluded that the learning activity data of class VII

students at MTS Nurul Huda Pringsewu is homogeneous.

3. Hypothesis Test

In this hypothesis test, the test conducted is the T-Test. The T-Test aims to determine whether the independent variable has an effect on the dependent variable. To test the hypothesis, the Independent Simple T Test is used. The description of the hypothesis test results using the T-Test on the learning activity of seventh-grade students at MTS Nurul Huda Pringsewu is presented in the following table 3:

Table 3 Description of the hypothesis test results using the T-Test on the learning activity of seventh-grade students at MTS Nurul Huda Pringsewu

Keaktifan Belajar	Equal variances assumed	Levene's Test for Equality of Variances		t-Test for Equality of Means		95% Confidence Interval of the Difference				
		F	Sig.	t	df	Mean Difference	Std. Error Difference	Lower	Upper	
Keaktifan Belajar	Equal variances assumed	,252	,618	,832	48	,409	1,2800	1,5377	-1,8118	4,3718
	Equal variances not assumed			,832	48,913	,409	1,2800	1,5377	-1,8144	4,3744

Based on Table 3, the results of the T-Test using SPSS show that the calculated t value is sig. 0.409, which means that the sig. (2-tailed) value of 0.409 is greater than 0.05. This indicates that there is no effectiveness of the cooperative learning model of the Question Students Have type on the learning activity of students at MTS Nurul Huda Pringsewu.

B. Discussion

Cooperative learning is a teaching method that involves students in learning and working together in heterogeneous groups with the goal of achieving active learning and optimal learning outcomes through social interaction. Cooperative learning will be more effective if students are directly involved in the learning process. Educators play an important role in designing and developing learning programs that focus on empowering these skills. The application of learning models is essential to ensure that students can be directly engaged in the learning process. One of the learning models that can be used is the Question Students Have model. This model helps students develop the ability to ask questions,

stimulating the thinking process of learners through those questions.

Good questioning skills stimulate students' curiosity, develop their interest, and encourage them to ask questions and become accustomed to answering open-ended questions. This helps enhance students' learning engagement. According to the results of the research that has been conducted by Shows results of an improvement resulting from the implementation of the cooperative learning model, specifically the Question Students Have model. Overall, the five studies indicate that the Question Students Have model can enhance student engagement, interaction, and participation, although not all of these studies demonstrate a significant impact concerning the interaction between this model and academic ability as well as student learning engagement.

The results of this study show that the cooperative learning model, specifically the Question Students Have type, does not have a significant effect on student learning engagement in the subject of Akidah Akhlak at MTS Nurul Huda Pringsewu. This study differs from previous research, particularly in the aspect of examining student learning engagement in the subject of Akidah Akhlak at MTS Nurul Huda Pringsewu. This research was conducted in a formal school based on a pesantren (Islamic boarding school). Therefore, this study is expected to contribute to the improvement of the learning model used in the school and provide an alternative that educators can use to promote active learning in the classroom. This is reflected in the results of the independent simple t-test, which showed a significance value of 0.409, meaning that the sig. (2-tailed) value is greater than 0.05. Hence, it can be concluded that H_0 is accepted H_1 is rejected.

The results of this study indicate that the experimentation with the Question Students Have learning model does not have a significant impact on student learning engagement. However, this study still provides important contributions to the understanding of the application of the cooperative learning model Question Students Have within the context of learning at MTS Nurul Huda Pringsewu. The lack of significant results could be attributed to various factors, such as inconsistent application of the model, time limitations, or other external factors that

affect student engagement. This study suggests the need for further modifications in the implementation of other cooperative learning models, as well as considering other factors that may influence student engagement, such as student motivation, classroom environment, and the active involvement of educators in the learning process. Therefore, even though this study did not yield significant results, these findings can serve as a foundation for future research focused on improving student learning engagement, or on utilizing learning models that more effectively support student engagement at MTS Nurul Huda Pringsewu.

IV. CONCLUSION AND SUGGESTION

A. Conclusion

Education is one of the basic human needs for personal development and interaction with the surrounding society, which proves that every individual is required to pursue education. The use of technology, methods, and learning models is crucial to energize classroom learning, so students do not feel bored. With the learning model used by the educator, it is hoped that it will motivate and engage students. One of the supporting factors for its success is the appropriate learning model. However, this study has not been able to demonstrate the effectiveness of the Question Students Have model on student engagement.

The use of a learning model should be tailored to the students' conditions. Therefore, educators are required to choose a learning model that can actively engage students in the learning process. This is consistent with the results of the t-test, which show data where the sig. value is 0.409, meaning the sig. (2-tailed) value is greater than 0.05. It can be concluded that H_0 is accepted and H_1 is rejected. Therefore, the results of this study indicate that the experimentation with the Question Students Have learning model does not significantly affect student engagement. Although no effectiveness was found in this study, it has provided a new innovation related to the implementation of the Question Students Have model on student engagement in MTS Nurul Huda Pringsewu, particularly in the Akidah Akhlak subject at a pesantren-based school.

The findings of the research conducted by The findings of this research show an

improvement in students' learning outcomes. The study indicates that the use of the cooperative learning model with the Question Students Have (QSH) method has a significant impact on students' mathematics learning outcomes. This is evidenced by a significant difference in learning results, demonstrating the effectiveness of the QSH model in enhancing students' understanding and mathematical skills. Furthermore, the combination of the TPSQ model with QSH has been proven effective as it supports student interaction, increases learning independence, and has a greater positive impact compared to conventional methods. The QSH model helps students become more active in the learning process, improving their memory retention and makes learning more relevant to students' needs. These studies were successful because the developed learning model was able to significantly improve students' learning outcomes compared to conventional learning models. This success is supported by statistical analysis that shows the positive impact of the model used

Based on the research conducted, it was found that the implementation of the cooperative learning model using the Question Students Have (QSH) method did not yield significant results in terms of students' learning engagement. This may be due to some students not being accustomed to the Question Students Have method, which requires courage and active participation in asking questions and engaging in discussions. Additionally, there may have been a lack of time for students to adapt to the new learning model. Furthermore, the increase in learning engagement might have been more influenced by internal factors (personal motivation) rather than the applied learning model. The results of the study show that the cooperative learning model using Question Students Have did not significantly impact students' learning engagement. This highlights the need for a more targeted implementation approach and possible combinations with other models to achieve more effective results.

Although this study did not succeed in showing a significant increase, it provides an understanding that the impact of a learning model on student engagement is not always easily predictable and can be influenced by various other factors. Some factors that may have affected this outcome include students'

lack of understanding of the applied model, time constraints for implementing the model, or other external factors such as student motivation and the classroom environment. Overall, while this study did not show the expected results, its findings still provide valuable insights into the limitations of the cooperative learning model implementation and lay the foundation for further research to more deeply identify other factors that affect students' learning engagement.

B. Suggestion

The discussion related to this research is still very limited and requires a lot of input, suggestions for future authors are to study it more deeply and comprehensively about Keaktifan Belajar Peserta Didik Bagaimana Eksperimentasi Model Pembelajaran Kooperatif Tipe *Question Students Have?*

REFERENCESS

- Abidin, A. M. (2019). Kreativitas Guru Menggunakan Model Pembelajaran Dalam Meningkatkan Hasil Belajar Siswa. *Didaktika*,11(2),225.
- Agus Kurniawan, D., & Ika Sandi Pratiwi, N. (2021). Investigation of Learning Activity in Secondary School. *Jurnal Pendidikan Indonesia (JPI)*,10(2),2-8.
- Anjarwati, F. (2023). Manfaat Implementasi Model Pembelajaran Esperiental Learning Untuk Anak Usia Dini. *Jurnal Benua Etam Ramah Anak Usia Dini*, 1(2), 39-48.
- Asy'ari, & Rahimah, N. (2021). Pembelajaran Kooperatif Tipe Think Pair Square dengan Meetode Questtion Student Have Terhadap Hasil Belajar siswa Kelas VIII SMPN Kota Banjarbaru. *Pendidikan Kimia PPs UNM*, 1(1), 91-99.
- Bachtiar, I., & Ahmad, B. (2019). Keefektifan Pembelajaran Keterampilan Bertanya dengan Metode Question Student Have Siswa Kelas VII SMP Negeri 1 Sinjai. *Manazhim*,1(2),104116.
- Bahri, A., Azis, A. A., & Amin, N. F. (2012). The Effect of Applying Active Learning Strategy Question Student Have (QSH) and Academic Competence Toward Cognitive Learning Outcome of Class VIII Students At SMP Negeri 2 Camba. *Jurnal Sainsmat*, I(1), 41-51.

- Depita, T. (2024). Pemanfaatan Teknologi Dalam Pembelajaran Aktif (Active Learning) Untuk Meningkatkan Interaksi dan Keterlibatan Siswa. *Tarqiyatuna: Jurnal Pendidikan Agama Islam Dan Madrasah Ibtidaiyah*, 3(1), 5564.
- Efendi, I. (2020). Peningkatan Keaktifan Belajar Dengan Strategi Question Students Have Pada Mata Pelajaran Matematika Kelas Vi.B Sdn 14 Sitiung. *Dharmas Education Journal (DE_Journal)*, 1(2), 143153.
- Eman Nataliano Busa. (2023). Faktor Yang Mempengaruhi Kurangnya Keaktifan Peserta Didik Dalam Kegiatan Pembelajaran Di Kelas. *Jurnal Sosial Humaniora Dan Pendidikan*, 2(2), 114122.
- Erlina, E. (2020). Penerapan Metode Question Student Have Dalam Upaya Peningkatan Keaktifan Dan Hasil Belajar Siswa Pada Pembelajaran Konsep Virus Di Man 4 Pidie. *Jurnal Sosial Humaniora Sigli*, 2(1), 88–100.
- Farida Payon, F., Andrian, D., & Mardikarini, S. (2021). Factors Influencing Study Activeness Of Students Studying In Grade III. *Jurnal Ilmiah Kontekstual*, 2(02), 53-60.
- Fathor Rozi, Fajri, Z., & Putri Intan Nuraini, Y. (2024). Penggunaan Metode Question Student Have Dalam Meningkatkan Keaktifan Belajar. *Jurnal Pendidikan*, 10(1), 2548–4419.
- Hamidi, D. R. (2024). Strategi Pembelajaran; Questions Student Have ; Keaktifan Belajar, Peserta Didik. *Jurnal Pendidikan Islam Mutta'alamiin*, 1(2), 61–73.
- Harahap, A. R., & Nugraheni, A. S. (2021). Pengembangan Model Pembelajaran Questions Students Have Pada Pembelajaran Ips Di Sd/Mi. *Nizhamiyah*, 11(2), 26–38.
- Hariyani, S., Yunita Army Wahyuningtias, & Riski NurIstiqomah Dinnullah. (2020). Penerapan Strategi Question Students Have (Qsh) Terhadap Prestasi Belajar. *Rainsteks : Jurnal Terapan Sains & Teknologi*, 2(2), 136–146.
- Hartikainen, S., Rintala, H., Pylväs, L., & Nokelainen, P. (2019). The concept of active learning and the measurement of learning Results: A review of studies in engineering higher education. *Education Sciences*, 9(4), 912.
- Herranen, J., & Aksela, M. (2019). Student-question-based inquiry in science education. *Studies in Science Education*, 55(1), 136.
- Istiqomah, A., Yasin, M., & Hartati, S. (2024). Metode Question Students Have dalam Meningkatkan Hasil Belajar Aqidah Akhlak di Kelas IX MTs Hidayatul Muhtadiin Desa Sidoharjo Kecamatan Jati Agung Lampung Selatan. *Journal on Education*, 06(02), 12345–12351.
- Jesionkowska, J., Wild, F., & Deval, Y. (2020). Active learning augmented reality for steam education—a case study. *Education Sciences*, 10(8), 1–15.
- Khoirotnun, N., & Rohmah, U. (2024). Improving Students' English Speaking Skills Through the Question Student Have Strategy. *Ancolt International Proseeding on Language Teaching*, 1(1), 1–12.
- Kusnadi, E., & Mariam, S. (2023). Student Have Question Type Active Learning Model to Improve Cognitive and Affective Learning Outcomes in Citizenship Education in Sma Manggala. *Baltic Journal OF Law & Politic A Journal of Vytautas Magnus University*, 16(3), 272-278
- Miyato, M. (2023). The Application of the Question Students Have (QSH) Strategy to Enhance Students' Learning Results in Mathematics at Grade VI SDN 07 Tiumang. *Tofedu: The Future of Education Journal*, 2(2), 391396.
- Murillo-Zamorano, L. R., López Sánchez, J. Á., Godoy-Caballero, A. L., & Bueno Muñoz, C. (2021). Gamification and active learning in higher education: is it possible to match digital society, academia and students' interests? *International Journal of Educational Technology in Higher Education*, 18(1).
- Nababan Damayanti, Riana Rambe Alva Heike, & Wati Sitorus Dina Lisa. (2023). Pengaruh Model Pembelajaran Kooperatif Dalam Kegiatan Belajar Mengajar Di Dalam Kelas. *Jurnal Ilmiah Multidisiplin*, 1(1), 259–264.

- Nurhaswinda, N. (2021). Penerapan Metode Question Student Have Untuk Meningkatkan Aktivitas Belajar Peserta Didik. *El-Ibtidaiy:Journal of Primary Education*, 4(1), 44.
- Nurkolis. (2021). The Effect of Active Learning Approach on Elementary School Students' Achievement in Mathematics and Science. *Jurnal Ilmiah Pendidikan Dasar*, 7(1), 55–70.
- Oktaviana, Fransyska Nuzula; Fradani, Ayis Crusma; Stevani, F. (2020). Eksperimentasi Model Pembelajaran Active Learning Tipe Question Students Have (QSH) Terhadap Hasil Belajar. *Jurnal Pendidikan Edutama*, 25–50.
- Pokhrel, S. (2024). Pengaruh Kesehatan Mental Terhadap Indeks Prestasi Kumulatif pada Mahasiswa. *Journal of Comprehensive Science*, 15(1), 37–48.
- Ramirez, G. M., Collazos, C. A., & Moreira, F. (2019). All-Learning: The state of the art of the models and the methodologies educational with ICT. *Telematics and Informatics*, 35(4), 944–953.
- Ramli, R., & Akram, M. (2021). Penerapan Metode Pembelajaran Question Student Have Terhadap Minat Belajar Pendidikan Agama Islam Pada Peserta Didik Kelas XI SMA Muhammadiyah Parepare. *Jurnal Al-Ibrah*, X(0^o), 40.
- Ronald, J. (2019). The Influence Of Active Learning Models With The Question Method Students Have Regarding Learning Outcomes Economics Of Class XI IPS Students At SMA Negeri 7 and SMA Negeri 8 Padang. *Economica Journal of Economic and Economic Education*, 3(2).
- Rusdiana, Y. T., Husna, H., & Heryati, H. (2022). Pengaruh Model Pembelajaran Question Student Have (Qsh) Terhadap Hasil Belajar Sejarah Siswa Kelas Xi Ips Di Sma Negeri 3 Palembang Tahun Ajaran 2017/2018. *Jurnal Artefak*, 9(1), 85.
- Sakinah, A. P., Destiana, A., Prim, D., & Sari, I. P. (2023). Keaktifan Belajar. *Nautical: Jurnal Ilmiah Multidisiplin*, 2(4), 226–231.
- Sakti, W., Irianto, G., Widiyaningtyas, T., Afnan, M., Syah, A. I., Hadi, A. A., Fuadi, A., & Malang, U. N. (2023). Implementasi Model Pembelajaran Kooperatif pada Mata Pelajaran Fiqih di Madrasah Tsanawiyah Negeri 6 Sragen. *Bulletin of Community Engagement*, 3(2), 2019–2024.
- Sari, E. R., Yusnan, M., & Matje, I. (2022). Peran Guru Dalam Meningkatkan Keaktifan Belajar Siswa Melalui Media Pembelajaran. *Jurnal Eduscience*, 9(2), 583–591.
- Saria, J., & Abdurrahman. (2020). Pengaruh Model Pembelajaran Kooperatif Dengan Metode Question Student Have Terhadap Hasil Belajar Matematika Siswa. *Aksiomatrik Jurnal*, 8(3).
- Setiadi, I., & Elmawati, D. (2019). Discovery Learning Method for Training Critical Thinking Skills of Students. *European Journal of Education Studies*, 6(3), 11–22.
- Simamora, R. E., Saragih, S., & Hasratuddin, H. (2019). Improving Students' Mathematical Problem Solving Ability and Self-Efficacy through Guided Discovery Learning in Local Culture Context. *International Electronic Journal of Mathematics Education*, 14(1), 672.
- Supena, I., Darmuki, A., & Hariyadi, A. (2021). The influence of 4C (constructive, critical, creativity, collaborative) learning model on students' learning outcomes. *International Journal of Instruction*, 14(3), 873–892.
- Supriadin. (2022). Peningkatan Hasil Belajar Mata Pelajaran SKI m Melalui Penerapan Strategi Question Students Have Penelitian Tindakan Pada Siswa Kelas VIII MTs N 2 Lombok Timur. *El-Hikmah Jurnal Kajian Dan Penelitian Pendidikan Islam*, 16(2), 207–221.
- Suryana, D., Yulia, R., & Safrizal. (2021). Model of Questioning Skill Teacher for Developing Critical Thinking Skill in Early Childhood Education in West Sumatra, Indonesia. *Educational Sciences: Theory and Practice*, 21(2), 101114.
- Uli, S. S. (2018). Analisis Keefektifan Penerapan Metode Question Student Have Dalam Pembelajaran IPA. *Al-Minhaj: Jurnal Pendidikan Islam*, 1(1), 76–93.

Wiliawanto, W., Bernard, M., Akbar, P., & Sugandi, A.I.(2019).PenerapanStrategiPembelajaran AktifQuestionStudentHavUntukMeningkatkanKemampuanBerpikirKritisMatematik Siswa SMK. *Jurnal Cendekia: Jurnal Pendidikan Matematika*, 3 (1), 139–148.