

The Use of Quizwhizzer-Based Learning Media to Increase Class XI Students' Learning Interest in Economics Subjects at SMAN 1 Mandau

Ulfa Fitriani, Suarman, Mujiono

Economic Education FKIP Riau University, Pekanbaru, Indonesia

ulfa.fitriani5167@student.unri.ac.id, suarman@lecturer.unri.ac.id, mujiono@lecturer.unri.ac.id

corresponding author: ulfa.fitriani5167@student.unri.ac.id

ABSTRACT

The present study analyzes the differences in students' learning interests before and after using quizwhizzer-based learning media. This research was carried out at SMAN 1 Mandau in class XI in the economics group. The research uses an experimental method with the One Group Pretest-Posttest Design model. The data collection method uses a questionnaire, and the data analysis technique uses descriptive statistical analysis and difference tests (t-test). The research results show that there are differences in students' learning interests before and after using quizwhizzer-based learning media. This is proven by the pretest results of interest in learning of 67.63, where students were quite interested in participating in learning before using quizwhizzer-based learning media. Then, after using quizwhizzer-based learning media there was a change in students' interest in learning, which increased to 73.62, which means that learning media quizwhizzer-based can increase students' interest in learning. The results of the different tests (t-test) show that the t_{count} value obtained is 6,912 while the t_{table} value is 1,692, so the $t_{count} > t_{table}$ value so it can be concluded that there is a difference in students' learning interest before and after using quizwhizzer-based learning media. Thus, teachers are expected to be able to use this media during the learning process because quizwhizzer-based learning media can increase students' interest in learning. This research can be a reference for increasing students' interest in learning. And future researchers can use premium quizwhizzer-based learning media to obtain features more complete.

Keywords: *interest to learn, quizwhizzer-based learning media, economics subjects*

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INTRODUCTION

Information and communication technology develops along with globalization, so that in the field of education, technology makes it possible to carry out innovative teaching and learning processes. Akbar & Noviani (2019) stated that technology can have a positive impact that can attract students' interest in the learning process so as to create more effective and efficient learning. Learning media makes it easier for teachers to convey lesson material, one of which is economics. Economics is an abstract subject, this is what makes economic material sound difficult and boring for students to understand, so this requires variations in presenting the subject matter.

Based on the results of an interview with one of the economics teachers at SMAN 1 Mandau, the problem with the decline in interest in studying in class teacher and passive. To find out whether students have a high interest in learning or not, it can be seen through the indicators of interest in learning themselves. Indicators of learning interest are student interest, attention in learning, student involvement in learning activities and feelings of happiness Magdalena (2021). Characteristics of the decreasing interest in learning in class participate to ask or answer, while other students are busy with their own activities. This is because teachers still use ordinary learning media during lessons, so students do not show interest in following lessons. According to A. Septiani & Santi (2022), students who are said to be interested in learning are characterized by their following the lesson diligently compared to students who are less interested in learning. In line with Alam's (2018) opinion, when students have interest and interest in a lesson, they will focus greater attention on that lesson. One of the interests in question is the learning media presented, because if the

learning media presented is not interesting then students will not participate in the learning as well as possible. The use of simple learning media results in low student responses when learning. Maharani et al., (2018).

As technology develops nowadays, there is a lot of learning media available from various websites or applications, a teacher must be able to innovate and choose learning media to make it easier to convey the material. So, using learning media that is different from usual can be a support for increasing students' interest in learning during the learning process.

One learning media that can increase students' interest in learning is quizwhizzer-based learning media. According to Wahyuningsih et., al (2021), quizwhizzer learning media is an effective game website for use in the learning process, such as delivering learning material or as student practice. According to A. Septiani & Santi (2022), the quizwhizzer learning media can create fun learning because there are many animation features that make students interested in learning.

Learning media has a very important role in making students understand the subject matter which will influence their interest in learning. Interest in learning is very important for students because it has an impact on students' attitudes and achievement. This opinion is supported by Alam (2018) in his research that interest in learning is very important during learning activities because with interest in learning, students' enthusiasm for learning will influence their achievement, because the interest in learning of class XI students in the economics group at SMAN 1 Mandau has decreased, so Research is needed on "Using *Quizwhizzer*-Based Learning Media to Increase Class XI Students' Interest in Learning in Economics Subjects at SMAN 1 Mandau".

LITERATURE REVIEW

Interest in learning is a preferred activity to support the smooth running of learning activities Dalimunthe (2021). Interest in learning includes students' feelings of interest, pleasure, attention and involvement in the learning process Sati et al., (2022). In line with Siregar et al., (2023), interest in learning occurs when the teacher's interest can attract students' attention to the lesson accompanied by a sense of curiosity to increase insight in studying a material. Interest in learning is the way a person chooses to think, absorb information, process and understand information and remember it as knowledge and skills through learning Akrim (2021).

Interest in learning is really needed in the learning process so that students can participate in learning optimally Reski (2021). To increase students' interest, teachers must be able to innovate in each learning process, so that students can absorb the material presented by the teacher with a happy heart. Prayuda et al., (2022); Ole & Makausi, (2022). One of the tools used to create interest in learning is using the quizwhizzer learning media Faijah Marhaeni et al., (2022). Based on this opinion, interest in learning in this research is an activity that supports the smooth running of learning activities. Interest in learning is really needed in the learning process so that students can participate in learning optimally.

According to Husna & Rowin (2023) factors that influence interest in learning consist of internal and external factors. Internal factors, namely interest in learning that originates from within students, such as psychological factors which have a role in learning, because when the teaching materials used are not interesting, students will not participate in learning seriously, this is because there is no interest for them, while factors external according to Sulistiyani et al., (2023), namely what happens from outside the student, such as the influence of the appearance of the learning media, if the appearance of the material being studied cannot attract the student's attention, then the student will not participate in learning optimally. According to Bahij & Santi (2017: 151) learning media can clarify the presentation of material that is not verbal (in oral or written form) and overcome the limitations of time, space and students' sensory abilities. In this research, the indicators of interest in learning are:

- 1) Interest, students who are interested in a lesson will follow the lesson without being asked.
- 2) Attention, students who are attentive in lessons will pay attention and listen to every explanation from the teacher.

- 3) Involvement, students will immediately involve themselves during the learning process if the student has an interest in learning.
- 4) Feelings of joy and high enthusiasm for following lessons.

According to Feranti (2023), one of the efforts that can be made to increase students' interest in learning is using learning media. One of the media that can be used in learning is quizwhizzer, which displays game features that make students interested in seeing it. Students' attention is focused on the learning media displayed in the game. If it is made as attractive as possible, their interest in learning will also increase. According to Supriyono (2018) learning media has an influential role in increasing students' interest in learning. According to the research results of Shofiya Launin et al., (2022), a teacher has innovation in choosing learning media to make it easier to convey the material, so it is hoped that using learning media that is different from usual can be a support for increasing students' interest in learning during the learning process.

Quizwhizzer-based learning media is an online platform that teachers use as a learning medium to increase students' interest in learning material. Quizwhizzer is used to stimulate thoughts, convey material, content, feelings, abilities and desires of students in learning Iskandar et al., (2023), so that this learning media can help teachers to create interesting and not boring learning Fajjah, Marhaeni, et al., (2022). Research by A. Septiani & Santi (2022) shows that quizwhizzer provides a solution as a flexible and narrative learning media because this media can convey learning material. The advantage of quizwhizzer is that teachers can display learning material in the form of questions that provide a way to understand questions and answer these questions, so that students have an understanding of the learning material. The features on quizwhizzer are expected to make students more interested in understanding the learning material.

According to Wulandari et al., (2023) there are three functions of learning media, first as a tool used by teachers to clarify the material to be delivered, because without learning media the teacher's explanation of the material is abstract, secondly learning media as a means of interaction between participants students with this media, thirdly providing knowledge and stimulating student participation. In line with Anggraini's (2018) opinion, the function of learning media also makes it easier for teachers to receive and deliver material. According to Aghni (2018), there are two functions of learning media, the first is the communicative function where the learning media used can make it easier for teachers to communicate with students, the second is the individuality function, namely the use of learning media to meet the needs of each student who has different interests and learning styles. So, the main function of learning media, apart from being a teacher's aid, can also influence the learning atmosphere to attract students' interest in learning. The use of learning media provides students with a better understanding, because learning that is only monotonous will have a different understanding from students who learn by hearing and seeing.

According to Alfansyur & Mariyani (2019) the criteria for selecting learning media include:

- 1) Advanced technology by utilizing online platforms.
- 2) Ease of access.
- 3) Financing.
- 4) Interactive.
- 5) The newest learning media.
- 6) Facilities and Infrastructure.

Therefore, the use of learning media has the effect of helping teachers and students convey material or concepts effectively Dewi & Manuaba (2021). When a teacher determines a learning media, it must meet these criteria in order to attract students' interest and attention. Ahmad Fadillah & Bilda (2019). According to Susanto & Ismaya (2022), through the use of learning media, quizwhizzer-based learning media can be used to convey material. Because this learning media is able to support interaction in learning, especially between teachers and students so that students can learn and play at the same time A. Septiani & Santi (2022).

When using quizwhizzer, there are steps that must be taken to use the website. The steps for using quizwhizzer according to Wahyuningsih et al., (2021) are:

1. If the teacher doesn't have a quizwhizzer account, the teacher can register their account first on the following page: <https://quizwhizzer.com/>.
2. Then click Try it for free on the left side of the page.
3. Then a page appears that displays two options, namely: 1) want to play a game or 2) I want to create or host a game. Then the teacher chooses the second option, namely I want to creator host a game.
4. After that a new page will appear, if the teacher doesn't have an account, the teacher must enter some information in the form of username, email, password and confirm password, or the teacher can also use a Gmail account that is connected to Chrome, so if you already use that Gmail account teachers do not need to register by entering the information mentioned at the beginning.
5. If an account has been created, the quizwhizzer dashboard display will appear.
6. Then the teacher can create material or game-based questions on Quizzwhizzer. To create questions the teacher can press the Make a game button, then select the template that will be used and use the features as desired on the right side of the page such as board, questions, settings, and quality scores.
7. If the teacher has finished creating a learning game according to what is needed in the lesson, the teacher can click the finish button, then the game will appear in the your games section, in this section the teacher can start by pressing start.
8. Next a new page will appear, the teacher can determine the learning game that he wants to use directly.
9. After the teacher determines one of the game options, the teacher can press the go button.
10. Next, the game page will appear along with the link and game code. Here the teacher can copy the link/code available on Quizzwhizzer and share it with students.
11. After students receive the Quizwhizzer learning link/code from the teacher, they will go to the page: <https://app.Quizwhizzer.com/play>. Then students enter the five-digit code that the teacher has distributed. Next, students write their names, then click start and wait until the teacher presses the start button. After that, students can answer all the questions listed in the Quizzwhizzer application. If students have finished answering all the questions or time has run out, students can then see the scores and rankings obtained, and the teacher also gets the assessment results automatically in Excel Quizwhizzer and then provides the material results to students.
12. Teachers can see students' wrong answers via the QuizWhizzer Excel display. So, these questions can be used as evaluation material.
13. The teacher has full control in the ongoing quizwhizzer game. The teacher can pause or stop the game at any time if necessary, such as when a student cheats, the teacher can also remove or kick the student's account from the game.

METHOD

This research was conducted at SMAN 1 Mandau for the 2023/2024 academic year. This research uses an experimental method with the One Group Pretest-Posttest Design model. This research design only involved one class, namely the experimental class, by comparing the sample before the pretest treatment with the results of the sample after being given the posttest treatment. The data collection method used in this research is a questionnaire. The questionnaire in this study used a Likert scale. The analysis techniques used are descriptive statistical analysis and difference test analysis (t-test).

RESULTS AND DISCUSSION

The results of the pretest descriptive analysis were carried out to describe students' interest in learning economics before being treated using quizwhizzer-based learning media. Data was obtained by distributing questionnaires to the sample. Based on the results of the descriptive analysis pretest that has been carried out, it shows that the position of students' interest in learning before using quizwhizzer-based learning media is in position 67.63, namely quite interested. This is due to the low interest and enthusiasm of students during the learning process in class using conventional learning media. The position of each student's interest in learning

before using quizwhizzer-based learning media can be seen in Table 1.

Table 1. Student Learning Interest Scale

Score	Student Interest Categories	Percentage
$20 \leq x \leq 36$	Not Interested	-
$37 \leq x \leq 52$	Less Interested	6%
$53 \leq x \leq 68$	Interested Enough	53%
$69 \leq x \leq 80$	Interested	29%
$85 \leq x \leq 100$	Very Interest	12%
TOTAL		100%

Based on Table 1, there are 34 students in class XI economics at SMAN 1 Mandau. There are 2 students (6%) who are not interested, 18 students (53%) are in the moderately interested category, 10 students (29%) are in the interested category, and 4 (12%) students are in the very interested category. The results of students' learning interest can be seen in Figure 1 below

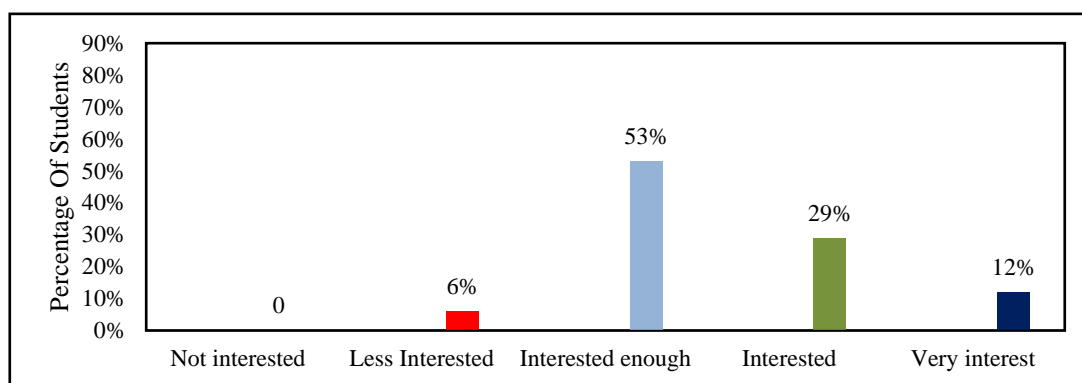


Figure 1. Graph Of Pretest Results Of Student Interest In Learning

During the research, there were differences in students' interest in learning after being given quizwhizzer-based learning media. These differences can be seen based on the results of the posttest questionnaire analysis that has been given. Based on the results of the posttest questionnaire, there was a difference in students' interest in learning, namely an increase in interest in learning for class The results of the posttest analysis of the percentage and the average score of the percentage of interest in learning, it is evident that the interest in learning of class are in the interested category. This means that quizwhizzer-based learning media can increase students' interest in learning during the learning process. The position of each student's interest in learning before using quizwhizzer-based learning media can be seen in Table 2.

Table 2. Student Learning Interest Scale

Score	Student Interest Categories	Percentage
$20 \leq x \leq 36$	Not Interested	-
$37 \leq x \leq 52$	Less Interested	3%
$53 \leq x \leq 68$	Interested Enough	38%
$69 \leq x \leq 84$	Interested	41%
$85 \leq x \leq 100$	Very Interest	18%
TOTAL		100%

Based on Table 2, there are 34 students in class XI economics at SMAN 1 Mandau. There is 1 student (3%) who is not interested, 13 students (38%) who are quite interested, 14 students (41%) who are in the

interested category and 6 students (18%) who are in the very interested category using quizwhizzer-based learning media during the learning process. After carrying out the posttest, students' interest in learning economics can be categorized in Figure 2.

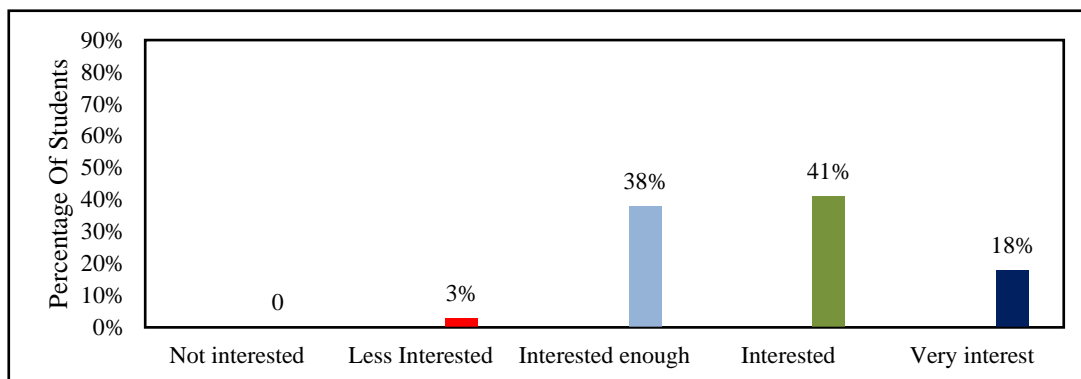


Figure 2. Graph of Posttest Results of Student Interest In Learning

The results of the analysis of the student interest questionnaire sample showed that the average percentage of the student interest questionnaire after using quizwhizzer-based learning media was 80%, which is in the high category. Then the percentage indicators of student interest in learning include the student interest indicator which obtained. Percentage result of 82%, the attention indicator with a percentage result of 77%, the student involvement indicator 82%, and the feeling of happiness indicator with a percentage result of 79%. The results of student interest in learning obtained can be seen in Table 3.

Table 3. Results of Analysis of Class XI Economics Students' Learning Interest Questionnaire

o	Indicator	ory	Categ	Percentage
	Student Interest		82%	High
	Attention		77%	High
	Student Engagement		82%	High
	Feeling happy		79%	High
	Average		80%	High

The hypothesis in this research is "there is a difference in students' learning interest before and after using quizwhizzer-based learning media". The technique used to test the hypothesis uses different test analysis, it is known that the pretest average is 67.63 while the posttest average is 73.61. This means that there is an increase in students' interest in learning before and after using quizwhizzer-based learning media. The average difference between pretest and posttest (Gain d) is 5.98, which is in the high category. The lowest pretest result obtained before using quizwhizzer-based learning media was 48.00, and the highest pretest result obtained was 91.33. Then the lowest posttest result after using quizwhizzer-based learning media was 50.67 and the highest posttest result was 100.00.

The results of data analysis using the difference test (t-test), show that the tcount value is 6,126 at the level (0.05) with dk = N-1, the ttable is 1,692, so it is known that tcount > ttable. This shows that H0 is rejected and H1 is accepted, meaning that there is a difference in students' learning interest before and after using quizwhizzer-based learning media. It can be concluded that the use of quizwhizzer-based learning media is able to increase the learning interest of class XI economics group 3 students in economics subjects.

CONCLUSIONS AND RECOMMENDATION

There are differences in students' learning interest before and after using quizwhizzer-based learning media. This is proven by the results of the pretest questionnaire of 67.63, where students were quite interested in participating in learning before using quizwhizzer-based learning media, then after using quizwhizzer-based learning media there was a change in students' interest in learning, increasing to 73.61, which means that quizwhizzer-based learning media was able to increase interest in learning. The results of the different test (t-test) show that the tcount value obtained is 6.912 while the ttable value is 1.692, so the tcount > ttable value so that H0 is accepted and H1 is rejected which can be concluded that there is a difference in students' learning interest before and after using quizwhizzer-based learning media.

The results of this research provide recommendations for learning media that students like. One of them is quizwhizzer-based learning media which can help students understand learning material. Therefore, suggestions that can be given are as follows:

- 1) Teachers can use quizwhizzer-based learning media as one of the media that can be used in the subsequent learning process according to the material and needs of students.
- 2) It is hoped that the results of this research can be used as one of the many pieces of information in increasing students' interest in learning.
- 3) Researchers experience limited costs in this research so it is hoped that future researchers will use premium quizwhizzer-based learning media, because the features obtained are more complete than regular quizwhizzer.

REFERENCES

- Aghni, R. I. (2018). Fungsi Dan Jenis Media Pembelajaran Dalam Pembelajaran Akuntansi. *Jurnal Pendidikan Akuntansi Indonesia*, 16(1). <https://doi.org/10.21831/jpai.v16i1.20173>
- Ahmad Fadillah, & Bilda, W. (2019). Pengembangan Video Pembelajaran Berbantuan Aplikasi Sparkoll Videoscribe. *Jurnal Gantang*, 4(2), 177–182. <https://doi.org/10.31629/jg.v4i2.1369>
- Akbar, A., & Noviani, N. (2019). Tantangan dan Solusi dalam Perkembangan Teknologi Pendidikan di Indonesia. *Prosiding Seminar Nasional Pendidikan Program Pascasarjana Universitas PGRI Palembang*, 2(1), 18–25.
- Akrim, A. (2022). *Strategi Peningkatan Daya Minat Belajar Siswa (Belajar Pai Mencetak Karakter Siswa)*. Aksaqila Jabfung
- Alam, Y. (2018). Dampak Minat Belajar Terhadap Prestasi Belajar Siswa Pada SMK PGRI 1 Palembang. *MOTIVASI: Jurnal Manajemen Dan Bisnis*, 3(2), 573–591.
- Alfansyur, A., & Mariyani, M. (2019). Pemanfaatan Media Berbasis Ict “Kahoot” Dalam Pembelajaran Ppkn Untuk Meningkatkan Motivasi Belajar Siswa. *Bhineka Tunggal Ika: Kajian Teori Dan Praktik Pendidikan PKn*, 6(2), 208–216. <https://doi.org/10.36706/jbti.v6i2.10118>
- Anggraini, R. H. (2018). Implementasi Klasifikasi Media dalam Pembelajaran. *Universitas Muhammadiyah Sidoarjo*, 1(1), 221.
- Bahij, A. AL, & Santi, A. U. P. (2018). Pengembangan Pembelajaran IPA SD. *In Fakultas Ilmu Pendidikan UMJ*.
- Dalimunthe, H. A. (2021). Faktor-faktor yang mempengaruhi minat belajar matematika pada anak usia dini (6-10 tahun) Komunitas Kampung Aur. *Jurnal Social Library*, 1(2), 49–53. <https://doi.org/10.51849/sl.v1i2.34>
- Dewi, N. L. P. S., & Manuaba, I. B. S. (2021). Pengembangan Media Pembelajaran Powerpoint Interaktif Pada Mata Pelajaran IPA Siswa Kelas VI SD. *Jurnal Penelitian Dan Pengembangan Pendidikan*, 5(1), 76–83.
- Faijah, N., Marhaeni, N. H., Mercu, U., & Yogyakarta, B. (2022). Students' Responses to QuizWhizzer Educational Game to Strengthen Mathematical Concept Understanding Ability. 4(2), 94–104.

- Feranti, N. (2021). Upaya Guru Dalam Meningkatkan Minat Belajar Siswa. *Al-Ihtirafiah: Jurnal Ilmiah Pendidikan Guru Madrasah Ibtidaiyah*, 54. <https://doi.org/10.47498/ihtirafiah.v1i01.598>
- Gusmania, Y., & Wulandari, T. (2018). Efektivitas penggunaan media pembelajaran berbasis video terhadap pemahaman konsep matematis siswa. *Pythagoras*, 7(1), 61–67. <https://doi.org/10.33373/PYTHAGORAS.V7I1.1196>
- Husna, A., & Rowin, I. A. (2023). Penggunaan Media Kartu untuk Meningkatkan Minat Belajar Bahasa Arab siswa kelas VII MTs N Tanjunganom Nganjuk. 1(1), 49–70.
- Iskandar, S., Rosmana, P. S., Fazriyah, A., Febriyano, A., & Rosyada, A. A. (2023). Pengembangan Media Pembelajaran QuizWhizzer dan Kinemaster untuk Meningkatkan Motivasi Belajar Siswa di Sekolah Dasar. *Journal on Education*, 5(2), 3339–3345. <https://doi.org/10.31004/joe.v5i2.991>
- Magdalena, I. (2021). *Perkembangan Peserta Didik Sekolah Dasar*. CV Jejak (Jejak Publisher)
- Maharani, M., Supriadi, N., & Widiyastuti, R. (2018). Media Pembelajaran Matematika Berbasis Kartun untuk Menurunkan Kecemasan Siswa. *Desimal: Jurnal Matematika*, 1(1), 101. <https://doi.org/10.24042/djm.v1i1.2036>
- Ole, A. A., & Makausi, T. D. (2022). Hubungan Kreativitas Mengajar Guru dan Minat Belajar Siswa. *Journal on Education*, 5(1), 961–968. <https://doi.org/10.31004/joe.v5i1.699>
- Prayuda, I. C., Agung, P., Mashari, A., & Kunci, K. (2022). Pengaruh Teknik Ice Breaking Terhadap Minat Belajar Peserta Didik Kelas II SD Negeri 21 Negeri Katon Kabupaten Pesawaran. 4(1), 1–5.
- Reski, N. (2021). Tingkat Minat Belajar Siswa Kelas IX SMPN 11 Kota Sungai Penuh. *Jurnal Inovasi Penelitian*, 1(11), 2485–2490.
- Sati, S., Setiana, D., & Amelia, A. N. (2021). Implementasi Pembelajaran E-Learning Terhadap Minat Belajar Peserta Didik di Masa Pandemi Covid-19. *Jurnal Basicedu*, 6(1), 51–57. <https://doi.org/10.31004/basicedu.v6i1.1899>
- Septiani, A., & Santi, A. U. P. (2022). Pengaruh Aplikasi Quizwhizzer Terhadap Minat Belajar Siswa Kelas IV pada Materi Sumber Energi. *Seminar Nasional Penelitian LPPM UMJ*.
- Shofiya Launin, Wahyu Nugroho, & Angga Setiawan. (2022). Pengaruh Media Game Online Wordwall Untuk Meningkatkan Minat Belajar Siswa Kelas IV. *JUPEIS: Jurnal Pendidikan Dan Ilmu Sosial*, 1(3), 216–223. <https://doi.org/10.55784/jupeis.vol1.iss3.176>
- Siregar, A., Fitri, A., Assingkily, R., Handayani Nasution, R., & Amalia, S. (2023). Bimbingan Kelompok untuk Mengembangkan Minat Belajar. *Mimbar Kampus: Jurnal Pendidikan dan Agama Islam*. 22(1), 181–191. <https://doi.org/10.17467/mk.v22i1.2282>
- Sulistiyan, P. S., Huliatusnisa, Y., & Magdalena, I. (2023). Peran guru dalam meningkatkan minat belajar siswa kelas III di SDN keboncau IV kecamatan teluknaga kabupaten tangerang. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 08 (9), 1778–1790.
- Supriyono. (2018). Pentingnya Media Pembelajaran Untuk Meningkatkan Minat Belajar Siswa. *Pendidikan Dasar*, II, 43–48.
- Susanto, D. A., & Ismaya, E. A. (2022). Pemanfaatan Aplikasi Quizwhizzer Pada PTM Terbatas Muatan Pelajaran IPS Bagi Siswa Kelas VI SDN 2 Tuko. *Cokroaminoto Journal of Primary Education*, 5(1), 104–110. <https://doi.org/10.30605/cjpe.512022.1583>
- Wahyuningsih, F., Dyah Woroharsi, R. P., Saksono, L., & Imam Samsul, S. (2021). Utilization of QuizWhizzer Educational Game Applications as Learning Evaluation Media. *Advances in Engineering Research*, 209(Ijcse), 148–152. www.quizwhizzer.com.