

## Improving the Skills of High School Teachers in Pinrang Regency in Utilizing Quizizz Application as Gamification-Based Interactive Learning Media

<sup>1\*</sup>Muhammad Ansarullah S. Tabbu, <sup>2</sup>Asri Ismail, <sup>3</sup>Akhmad Affandi,  
<sup>4</sup>Asham Bin Jamaluddin, <sup>5</sup>Nurdin, <sup>6</sup>Indrayani Simpuru

<sup>1234</sup>Universitas Negeri Makassar, Indonesia

<sup>5</sup>Universitas Terbuka, Indonesia

<sup>6</sup>Sekolah Tinggi Ilmu Ekonomi Tri Dharma Nusantara, Indonesia

Email: ansarullahstabbu@unm.ac.id

\*Corresponding author: Muhammad Ansarullah S. Tabbu<sup>1</sup>

Received : 15 Januari 2024  
Accepted: 16 Februari 2024  
Published : 25 Februari 2024

### ABSTRAK

Peran guru dalam menciptakan pembelajaran yang interaktif dan menarik sangat penting di era digital saat ini. Program Pengabdian Kepada Masyarakat (PKM) ini bertujuan untuk meningkatkan keterampilan guru-guru SMA di Kabupaten Pinrang dalam menggunakan aplikasi Quizizz sebagai media pembelajaran interaktif berbasis gamifikasi. Melalui pelatihan dan pendampingan, program ini berupaya mengatasi kendala keterbatasan keterampilan guru dalam memanfaatkan teknologi pembelajaran interaktif. Hasil observasi dan wawancara menunjukkan bahwa sebagian besar guru belum familiar dengan aplikasi Quizizz sehingga berdampak pada rendahnya motivasi dan hasil belajar siswa. PKM ini dilaksanakan melalui metode pelatihan dan pendampingan di Dinas Pendidikan Kabupaten Pinrang. Hasil pelatihan menunjukkan adanya peningkatan yang signifikan terhadap pemahaman dan keterampilan guru dalam menggunakan aplikasi tersebut, yang secara langsung meningkatkan kreativitas guru dan motivasi belajar siswa. Program ini diharapkan dapat meningkatkan kualitas pembelajaran dan memberikan dampak positif terhadap hasil belajar siswa di Kabupaten Pinrang.

**Keywords:** pembelajaran interaktif, gamifikasi, Quizizz, pengembangan keterampilan guru

### ABSTRACT

The role of teachers in creating interactive and interesting learning is very important in today's digital era. This Community Service Program (PKM) aims to improve the skills of high school teachers in Pinrang Regency in using the Quizizz application as a gamification-based interactive learning media. Through training and mentoring, this program seeks to overcome the obstacles of limited teacher skills in utilizing interactive learning technology. Observations and interviews show that most teachers are not familiar with the Quizizz application, which has an impact on low student motivation and learning outcomes. This PKM is implemented through training and mentoring methods at the Pinrang Regency Education Office. The training results show a significant increase in teachers' understanding and skills using the application, which directly improves teacher creativity and student learning motivation. This program is expected to improve the quality of learning and have a positive impact on student learning outcomes in Pinrang District.

**Keywords:** Interactive learning, gamification, Quizizz, teacher skill improvement

*This is an open access article under the CC BY-SA license*



## 1. INTRODUCTION

Teachers have an important role in creating an effective and interesting learning process for students. One essential aspect is the ability of teachers to diagnose students' learning difficulties (Wijaya et al., 2019). Understanding students' challenges allows teachers to design tailored lessons that address individual needs, ultimately enhancing the learning experience. The success of the learning process is closely tied to teachers' pedagogical competence and work spirit, which impact students' motivation and affective learning outcomes (Naziah et al., 2020; Tabbu, Syarif, et al., 2023). Teacher performance management is crucial for the successful implementation of student learning processes (Yansyah, 2022). Good teacher performance is defined by the ability to create a conducive learning environment that promotes student happiness and comfort, leading to enhanced learning outcomes (Hastuti et al., 2020). In addition to diagnostic practices, the use of audio-visual media can significantly impact student engagement and understanding, as noted by (Salamuddin & Simamora, 2023). The proficiency of teachers in utilizing interactive learning media and their overall motivation and performance significantly impact students' interest, engagement, and motivation in the learning process. Research by (Mukarromah & Wijayanti, 2021).

In this digital era, the utilization of technology in learning is becoming increasingly important to make the teaching and learning process more interactive and fun. Technology plays a pivotal role in transforming traditional educational practice (Tabbu et al., 2024; Tabbu et al., 2022). The impact of the digital era on education is profound, with technology marking a significant shift in how education is delivered and received due to global digitization. The rapid advancement of digital technologies has revolutionized educational practices, leading to the emergence of innovative teaching methods tailored to the characteristics of the digital age (Cabrera et al., 2020; Tabbu et al., 2023). The utilization of digital tools and platforms in education has transformed traditional teaching approaches, offering new avenues for interactive and student-centered learning experiences (Naidoo, 2020). Teachers play a pivotal role in adapting to the digital era by enhancing their digital competencies and incorporating technology effectively into their teaching practices (Mahmud et al., 2022).

One application that can be used to increase interactivity and student learning motivation is the Quizizz application. Quizizz has been recognized as a valuable e-learning medium that promotes student participation and motivation through game-based learning (Dhamayanti, 2021). By incorporating Quizizz into English e-classrooms, students perceive it as a fun and engaging tool that enhances their learning experience. The app, as a gamified learning medium, offers an engaging method to increase student participation and motivation to learn. (Hanif et al., 2022; Rahmadani et al., 2022; Setiyani et al., 2020). Furthermore, Quizizz has been instrumental in supporting learning assessment, critical thinking skills, and student concentration, engagement, and motivation across various subjects and educational levels (Adriyono et al., 2022; Lestari & Khairuna, 2022; Gusta et al., 2022). By utilizing Quizizz as an assessment and learning tool, teachers can create effective and enjoyable learning experiences that cater to students' diverse needs and preferences (Dewi, 2021; Fadhilawati et al., 2022).

However, the use of the Quizizz application is still constrained by the limited skills and knowledge of teachers, especially in Pinrang District. Teacher skills in using interactive learning media still need to be improved. This can be seen from the results of observations and interviews conducted on February 16, 2024. Most teachers admit that they are not familiar with the Quizizz application and have never used it in learning. The lack of teacher skills in using interactive learning media causes learning in the classroom to be less interesting and fun for students. This results in low student motivation, ineffective learning, and non-optimal learning outcomes.

Based on the situation analysis above, there are several problems faced by high school teachers in Pinrang Regency. First, the lack of knowledge and skills in using interactive learning media. Many teachers are not accustomed to using interactive learning technology, so they often return to traditional methods that are less interesting. Second, difficulties in creating and implementing learning that is interesting and fun for students. The lack of creativity and tools in creating interesting teaching materials makes the teaching and learning process less dynamic. Third, the lack of time to develop learning media. Teachers are often burdened with a high workload, so they have little time to explore and develop new learning methods. The direct impact of the above problems is ineffective learning, which not only affects the decline in the quality of student learning outcomes, but also the low motivation to learn among students.

Based on the situation analysis and partner problems above, it is concluded that high school teachers in Pinrang Regency need training and assistance in using gamification-based interactive learning media to improve the quality of learning in the classroom. This PKM program aims to provide solutions to these problems by providing training and assistance to high school teachers in Pinrang Regency in using the Quizizz application as a gamification-based interactive learning media. The objectives of this PKM program are 1) increasing the knowledge and skills of high school teachers in Pinrang Regency in using the Quizizz application as a

gamification-based interactive learning media, 2) helping high school teachers in Pinrang Regency in creating and implementing interesting and fun learning for students using the Quizizz application, 3) providing solutions for high school teachers in Pinrang Regency in developing effective and efficient learning media using the Quizizz application.

This community partnership program is expected to help high school teachers in Pinrang Regency in creating more interesting and fun learning for students, so as to improve the quality of learning and student learning outcomes. In addition, this activity is expected to contribute to the achievement of the Main Performance Indicators (IKU) of Higher Education, namely 1) students have an off-campus learning experience of at least 6 credits (IKU 2); 2) increasing the percentage of lecturers who carry out tridarma activities in this case working as practitioners in the industrial world (IKU 3); 3) increasing the number of research outputs per lecturer that receive international recognition or are used by industry / society/ government (IKU 5).

This community partnership program is one of the efforts to improve the quality of education in Indonesia. By improving teacher skills in using interactive learning media, it is hoped that it can create a more effective and enjoyable learning process for students. The focus of this service includes increasing the knowledge and skills of high school teachers in Pinrang Regency in using the Quizizz application as a gamification-based interactive learning media, assisting high school teachers in Pinrang Regency in creating and implementing interesting and fun learning for students using the Quizizz application, and assisting the development of effective and efficient learning media using the Quizizz application.

## **2. METHODS**

This community partnership program will be implemented using training and mentoring methods. The training will be conducted in one day at the Pinrang District Education Office Hall.

### **2.1 Preparation Stage**

#### **a. Formation of Implementation Team**

A community partnership program implementation team was formed consisting of lecturers in the field of learning media and high school teachers in Pinrang Regency.

#### **b. Development of Community Partnership Program**

The implementation team will compile a community partnership program consisting of background, objectives, outcomes, implementation methods, implementation team, implementation schedule, and expected impact.

#### **c. Coordination with Partners**

The community partnership program implementation team will coordinate with partners, namely high school teachers in Pinrang Regency, to discuss the community partnership program and get input from partners.

#### **d. Preparation of Training Materials**

The community partnership program implementation team will prepare training materials that include training materials, training modules, and teaching aids.

#### **e. Socialization of the Community Partnership Program**

The community partnership program implementation team will conduct socialization of the community partnership program to high school teachers in Pinrang Regency.

### **2.2 Implementation Stage**

#### **a. Quizizz Application Training**

The community partnership program implementation team will carry out Quizizz application training to high school teachers in Pinrang Regency. The training will be conducted in one day at the Pinrang District Education Office Hall. The training materials include:

1. Introduction to the Quizizz application
2. How to create and use various types of questions in Quizizz
3. Gamification-based interactive learning strategies using Quizizz
4. Learning evaluation using Quizizz

#### **b. Assistance in Using the Quizizz Application**

The community partnership program implementation team will provide assistance to high school teachers in Pinrang Regency in using the Quizizz application in their respective classes. Mentoring will be carried out for two months through periodic meetings and online communication.

This will be done among others;

1. Providing examples of interesting and fun learning using Quizizz

2. Assisting teachers in developing lesson plans that use Quizizz
3. Providing input and advice to teachers in implementing learning using Quizizz
4. Providing tips and tricks in developing learning media using Quizizz
5. Assist teachers in finding learning resources that can be used with Quizizz

**c. Monitoring and Evaluation**

The community partnership program implementation team will conduct monitoring and evaluation of the implementation of the community partnership program. Monitoring will be carried out periodically to determine the progress of the community partnership program, and the evaluation will be carried out at the end of the community partnership program to determine the effectiveness of the community partnership program.

**2.3 Reporting/Evaluation Stage**

**a. Preparation of the Community Partnership Program Report**

The implementation team of the community partnership program will compile a report on the community partnership program containing background, objectives, outputs, implementation methods, implementation team, implementation schedule, monitoring and evaluation results, and conclusions.

**b. Results Seminar of the Community Partnership Program**

The implementation team of the community partnership program will conduct a seminar on the results of the community partnership program to present the results of the community partnership program.

**2.4 Partner Participation in Community Partnership Program**

Partners in this community partnership program are high school teachers in Pinrang Regency. Partner participation is very important for the success of this partnership program. Some forms of partner participation include participating in initial data collection, providing input on the community partnership program, participating in Quizizz application training, applying the Quizizz application in class, participating in mentoring, and providing input and suggestions. The form of partner participation above is expected to help the Community partnership program implementation team in achieving the program objectives of the community partnership program, namely increasing the knowledge and skills of high school teachers in Pinrang Regency in using the Quizizz application as a gamification-based interactive learning media. With good cooperation between the community partnership program implementation team and partners, it is hoped that this community partnership program can run successfully and achieve the expected goals.

### 3. RESULTS AND DISCUSSION

**3.1 Quizizz App Training**



**Figure 1. Quizizz App Training**



**Figure 2. Group Photo Session**

The Quizizz application training was held on March 2, 2024 at the Pinrang District Education Office Hall. The training was attended by 50 high school teachers in Pinrang District. During the training, the teachers were introduced to various basic and advanced features of the app, including how to create and use different types of engaging and interactive questions. They were also taught strategies for integrating the game in their learning curriculum as well as learning evaluation techniques using the tool. Evaluation of the training sessions showed

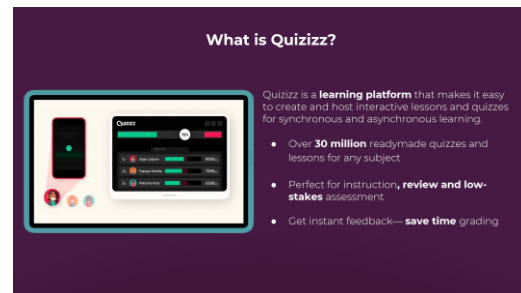


that the majority of participants, 90% of them, claimed to have a very good understanding of the material presented and felt more competent in using the app in their teaching practice. The training materials include:

**a. Introduction to the Quizizz app**

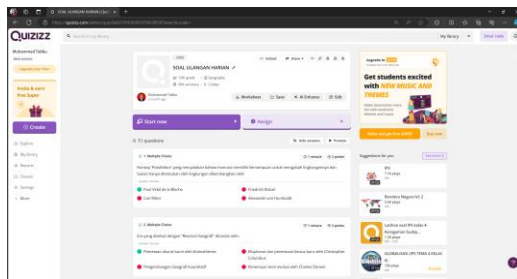


**Figure 1. Introduction to the Quizizz app**

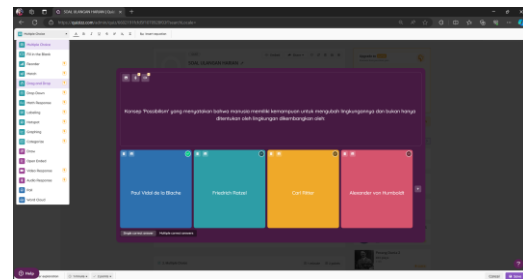


**Figure 2. Introduction to the Quizizz app**

**b. How to create and use different question types in Quizizz**

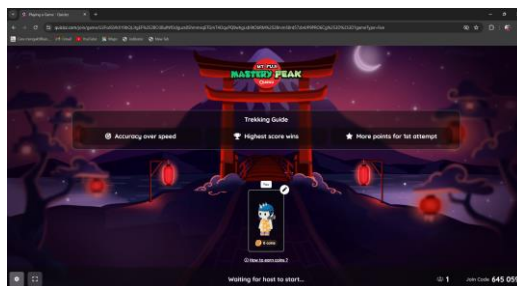


**Figure 3. Platform of Quizizz**

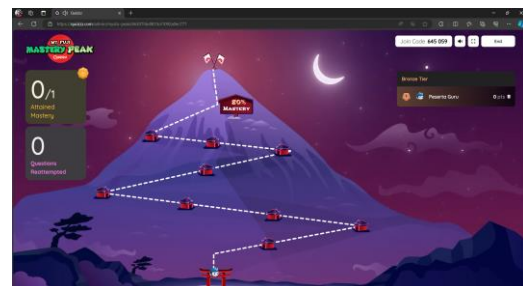


**Figure 4. How to create and use different question types in Quizizz**

**c. Gamification-based interactive learning strategy using Quizizz**

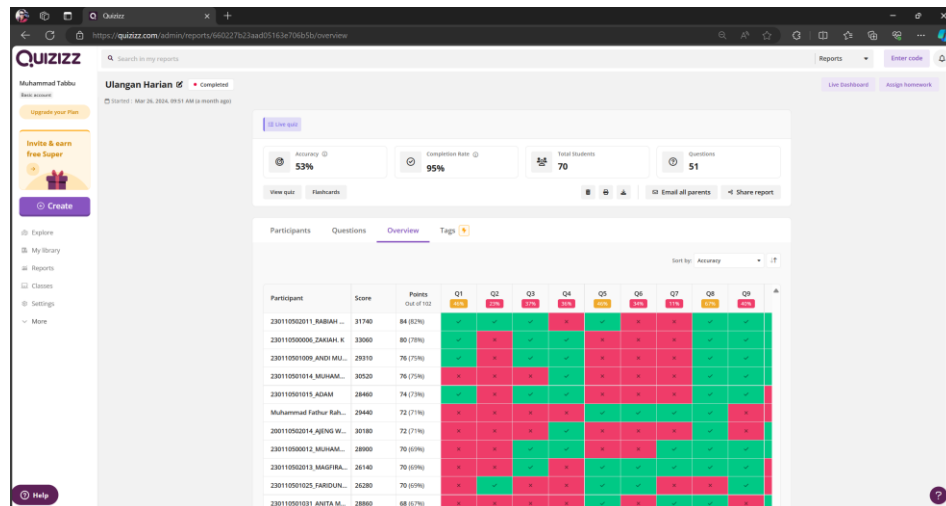


**Figure 5. Gamification-based interactive learning strategy using Quizizz**



**Figure 6. Gamification-based interactive learning strategy using Quizizz**

**d. Evaluation of learning using Quizizz**



**Figure 7. Rekap Hasil Evaluasi Pembelajaran**

The above training evaluation was conducted by giving questionnaires to the trainees to determine the effectiveness of the training. The results of the training evaluation can be seen in the following table

**Table 1.** The results of the training evaluation

No.	Indicators	Very good	Good	Simply	Less Good
1	Understanding of training materials	45 person (90%)	5 person (10%)	0 person (0%)	0 person (0%)
2	Ability to use the Quizizz app	40 person (80%)	10 person (20%)	0 person (0%)	0 person (0%)
3	Ability to create questions in Quizizz	35 person (70%)	15 person (30%)	0 person (0%)	0 person (0%)
4	Ability to implement learning using Quizizz	30 person (60%)	20 person (40%)	0 person (0%)	0 person (0%)
5	Ability to evaluate learning using Quizizz	25 person (50%)	25 person (50%)	0 person (0%)	0 person (0%)

Based on the results of the training evaluation, it can be concluded that most of the training participants (90%) understood the training material well and were able to use the Quizizz application to create and implement interesting and fun learning for students.

### 3.2 Assistance in Using the Quizizz Application

Assistance in using the Quizizz application was carried out for two months, from March to April 2024. Assistance is carried out through periodic meetings and online communication. The Community partnership program implementation team provides guidance and advice to teachers in using the Quizizz application in their respective classes. The results of the evaluation of assistance in using the Quizizz application can be seen in the following table.

**Table 2.** The results of the evaluation of assistance in using the Quizizz application

No.	Indicators	Very good	Good	Simply	Less Good
1	Frequency of use of Quizizz app in class	40 person (80%)	10 person (20%)	0 person (0%)	0 person (0%)

2	Creativity in making questions in Quizizz	35 person (70%)	15 person (30%)	0 person (0%)	0 person (0%)
3	Effectiveness of learning by using Quizizz	30 person (60%)	20 person (40%)	0 person (0%)	0 person (0%)
4	Effectiveness of learning evaluation using Quizizz	25 person (50%)	25 person (50%)	0 person (0%)	0 person (0%)
5	Student motivation in learning using Quizizz	45 person (90%)	5 person (10%)	0 person (0%)	0 person (0%)

Based on the results of the mentoring evaluation, it can be concluded that most teachers have used the Quizizz application in their classes well. Teachers have been able to create various types of questions that are creative and interesting for students, and have used the Quizizz application to evaluate learning effectively. This has an impact on increasing student learning motivation.

### 3.3 Monitoring and Evaluation

Monitoring and evaluation of the community partnership program is carried out periodically to determine the progress of the community partnership program and the effectiveness of the community partnership program. Monitoring was conducted through observations and interviews with high school teachers in Pinrang Regency, while evaluation was conducted through questionnaires to teachers and students.

The monitoring and evaluation results show that the program has achieved its objectives well. High school teachers in Pinrang Regency have gained new knowledge and skills about using the Quizizz application as a gamification-based interactive learning media. Teachers have been able to use the Quizizz application to create and implement learning that is interesting and fun for students. This has an impact on increasing student learning outcomes and student learning motivation.

## 4. CONCLUSIONS AND SUGGESTIONS

This Community partnership program has proven to be effective in improving the skills of high school teachers in Pinrang Regency in utilizing the Quizizz application as a gamification-based interactive learning media. This can be seen from the results of training, mentoring, and monitoring and evaluation carried out.

The success of this community partnership program can be attributed to several factors including, high teacher motivation to learn and apply the Quizizz application, intensive assistance from the implementation team of the community partnership program, support from the school and the Pinrang Regency Education Office, and ease of use of the Quizizz application.

This community partnership program provides several benefits for teachers and students, namely increasing teachers' knowledge and skills in using interactive learning media, assisting teachers in creating and implementing interesting and enjoyable learning for students, improving student learning outcomes, and increasing student learning motivation.

## REFERENCES

- Adriyono, U., Pargito, N., & Rohman, F. (2022). Study Assessment, Quisses, and Critical Thinking Skill of Elementary School Students. *Asian Journal of Educational Technology*. <https://doi.org/10.53402/ajet.v1i3.33>
- Cabrera, A. F., González, M. E. P., Belmonte, J. L., & Robles, A. S. (2020). Educational Potentials of Flipped Learning in Intercultural Education as a Transversal Resource in Adolescents. *Religions*. <https://doi.org/10.3390/rel11010053>
- Dewi, N. N. (2021). EFL Students' Perspective on the Use of Quizizz as Online Learning Media During COVID-19 Pandemic. *Studies in Learning and Teaching*. <https://doi.org/10.46627/silet.v2i2.76>
- Dhamayanti, F. I. (2021). EFL Students' Perception and Motivation Toward Quizizz as E-Learning Media in English E-Classroom. *Education of English as a Foreign Language*. <https://doi.org/10.21776/ub.educafl.2021.004.02.03>
- Fadhilawati, D., Khan, A., Rachmawati, D. L., & Mansur, M. (2022). Tackling and Handling Students' Grammar

- Mastery on Passive Voices in a Higher Education: Quizizz Application Power. *Veles Voice of English Language Education Society*. <https://doi.org/10.29408/veles.v6i2.5661>
- Gusta, W., Sawitri, E., & Zakirman, Z. (2022). New Ways to Improve Student Material Understanding Using Quizizz During the Covid-19 Pandemic. *Al-Ishlah Jurnal Pendidikan*. <https://doi.org/10.35445/alishlah.v14i3.1083>
- Hanif, M. A., Ningamah, B. R., & Izzah, F. N. (2022). The Use of Quizizz Application on Islamic Education (PAI) Learning in the New Normal Era. *Insania Jurnal Pemikiran Alternatif Kependidikan*. <https://doi.org/10.24090/insania.v27i2.6918>
- Hastuti, K. P., Angriani, P., & ... (2020). Meningkatkan Keterampilan Menulis Karya Ilmiah Mahasiswa Geografi melalui Pembelajaran Berbasis SETS (Science, Environment, Technology, Society). ... *Pendidikan Geografi*. <http://e-journal.hamzanwadi.ac.id/index.php/gdk/article/view/2642>
- Lestari, A. I., & Khairuna, K. (2022). Development of Quizizz-Based Learning Media on Digestive System Materials in Class Xi. *Edubiotik Jurnal Pendidikan Biologi Dan Terapan*. <https://doi.org/10.33503/ebio.v7i02.2100>
- Mahmud, M. E., Baharun, H., Asykur, M., & Rochmatin, Z. (2022). Increasing Teacher Professionalism Through Change Management in Madrasah: Kurt Lewin's Perspective. *Southeast Asian Journal of Islamic Education*. <https://doi.org/10.21093/sajie.v5i1.5330>
- Mukarromah, U., & Wijayanti, W. (2021). Implementation of the Online Learning at Vocational High School During Covid-19: Between Obligations and Barriers. *Jurnal Pendidikan Vokasi*. <https://doi.org/10.21831/jpv.v11i1.37110>
- Naidoo, J. (2020). Postgraduate Mathematics Education Students' Experiences of Using Digital Platforms for Learning Within the COVID-19 Pandemic Era. *Pythagoras*. <https://doi.org/10.4102/pythagoras.v41i1.568>
- Naziah, R., Caska, C., Nas, S., & Indrawati, H. (2020). The Effects of Contextual Learning and Teacher's Work Spirit on Learning Motivation and Its Impact on Affective Learning Outcomes. *Journal of Educational Sciences*. <https://doi.org/10.31258/jes.4.1.p.30-43>
- Rahmadani, N., Rahman, F., & Swastina, L. (2022). Students' Satisfaction and Motivation in Learning Grammar Mediated by Quizizz. *International Journal Corner of Educational Research*. <https://doi.org/10.54012/ijcer.v1i2.100>
- Salamuddin, S., & Simamora, E. R. (2023). Using Audio Visual Media to Improve Muhadatsah Learning for Class VII Students at MTS Negeri 1 Tapanuli Tengah. *Istawa Jurnal Pendidikan Islam*. <https://doi.org/10.24269/ijpi.v7i2.5428>
- Setiyani, S., Fitriyani, N., & Sagita, L. (2020). Improving Student's Mathematical Problem Solving Skills Through Quizizz. *Jramathedu (Journal of Research and Advances in Mathematics Education)*. <https://doi.org/10.23917/jramathedu.v5i3.10696>
- Tabbu, M. A. S., Syarif, E., Jamaluddin, A. Bin, & Makassar, U. N. (2024). Virtual Reality-assisted Smart Teaching Model to Enhance Climate Literacy and Participation In Climate Change Mitigation And Adaptation Of Secondary School Students '. *Jurnal MediaTIK*, 7(1), 68–74
- Tabbu, M. A. S., Mannan, A., & Haris. (2022). Pelatihan Aplikasi ArcGIS 10.8 Sebagai Penunjang Pembelajaran Sistem Informasi Geografi Bagi Guru Geografi Sma Di Kabupaten Pangkajene Dan Kepulauan. 3(3), 1881–1887.
- Tabbu, M. A. S., Aliman, M., Mannan, A., & Azhim, M. I. (2023). Efektivitas Augmented Reality Geography Games (ARGG) dalam Meningkatkan Kemampuan Berpikir Spasial Pada Siswa Sekolah Menengah Atas. 22(1), 64–74.
- Tabbu, M. A. S., Syarif, E., & Meliyana R., S. M. (2023). Blended Problem Based Learning : Bagaimana Pengaruhnya Terhadap Kemampuan Berpikir Kritis Mahasiswa dalam Pembelajaran Geografi ? 6(3), 138–143.
- Wijaya, A., Retnawati, H., Setyaningrum, W., Aoyama, K., & Sugiman, S. (2019). Diagnosing Students' Learning Difficulties in the Eyes of Indonesian Mathematics Teachers. *Journal on Mathematics Education*. <https://doi.org/10.22342/jme.10.3.7798.357-364>
- Yansyah, M. (2022). Effectiveness of Teacher Performance Management in the Implementation of Student Learning. *Journal Corner of Education Linguistics and Literature*. <https://doi.org/10.54012/jcell.v1i4.46>