



## **Development of Learning Media Kahoot! Based on Gamification in Basic Management Subjects Office and Business Services**

**Dini Amelia Devi\*, Durinda Puspasari**

Office Administration Education Study Program, Faculty of Economics and Business,  
Universitas Negeri Surabaya, Indonesia

\*Corresponding Author e-mail: [dini.22178@mhs.unesa.ac.id](mailto:dini.22178@mhs.unesa.ac.id)

**Abstract:** This study aims to analyze the development process, feasibility, and student responses to the development of Kahoot!-based gamification learning media. This research employed a Research and Development (R&D) design using the ADDIE model. The participants consisted of 20 students from Class X MPLB 1 at SMKN 2 Kediri. The research instruments included validation sheets for material and media experts as well as student response questionnaires. Data were analyzed using material and media expert validation analysis and student response analysis. The results showed that the material expert validation obtained a score of 91%, while the media expert validation reached 97%, both categorized as very good. The overall percentage of student responses to the Kahoot!-based gamification learning media was 97%, also classified as very good. Therefore, it can be concluded that the developed Kahoot!-based gamification learning media is highly suitable for use in the teaching and learning process for Class X MPLB students at SMKN 2 Kediri.

### **Article History**

Received: 05-08-2025

Revised: 19-09-2025

Accepted: 06-10-2025

Published: 25-10-2025

### **Key Words:**

Kahoot!; Learning Media;  
Gamification; Office  
Management and  
Business Services.

**How to Cite:** Amelia Devi, D., & Puspasari, D. (2025). Development of Learning Media Kahoot! Based on Gamification in Basic Management Subjects Office and Business Services. *Jurnal Paedagogy*, 12(4), 1313-1323. <https://doi.org/10.33394/jp.v12i4.17869>



<https://doi.org/10.33394/jp.v12i4.17869>

This is an open-access article under the [CC-BY-SA License](https://creativecommons.org/licenses/by-sa/4.0/).



## **Introduction**

Education is an effort to create a learning environment and learning process that makes students more active in developing their potential in order to acquire religious knowledge, attitude, personality, intelligence, noble character, and skills that are necessary for themselves and society (Rahman et al, 2022). Innovatively packaged education will help develop progress in the world of teaching and learning. Education and learning are interrelated, education is a process used to expand a person's knowledge of various things. Meanwhile, learning itself is used as an efficient means to support the educational process. Learning can be described as a communication activity that occurs in the interaction of teachers with students, aimed at conveying messages clearly and influencing comprehension (Afroni & Triana, 2018). Independent learning can be defined as an instructional process that requires innovation to be applied in learning activities. This serves to create a more interesting atmosphere and avoid boredom among students. Educational innovation is innovation or renewal in the field of education that is carried out to solve educational problems. It is used to create an educational system that can achieve the established educational objectives (Hafizhah, 2021). Based on research conducted by Rizal (2023), it is also explained that innovation in education can make the learning process better, more effective, more time-efficient, and in line with advances in science and technology. As the era of development progresses, science and technology play a role in helping with all of today's needs. Advancements in science and technology contribute greatly to progress in multiple fields



(Tria et al, 2023). Scientific and technological advancements, with their increasing complexity, offer opportunities for innovation in teaching and learning activities (Rahmah et al, 2025).

Using technology within the context of teaching and learning, it is possible to create new innovations, making it one of the developments that can improve learning effectiveness. Miasari et al (2022) explains that educational provides beneficial influence in educational activities, advancing them to a higher level at all levels, from elementary school to college. Innovations by using learning media, it is possible to implemented both offline and online. In the current era of development, science and technology play an important role in innovations in learning media. With science and technology, teachers can develop new online and offline learning media. Supported in the view of Haniko et al (2023) that the use of online learning media can be used as a way to deliver learning effectively and attractively. Maulani et al (2020) also explains use online media contributes to increasing student participation and making learning more enjoyable. Technological developments have given rise to various websites and applications, one of which is Kahoot!, which can be accessed via the web or an app with the help of the internet. Kahoot! is a simple but fun game that can be easily used for learning, evaluation, assignments, and entertainment in the classroom (Hapsari & Isroyati, 2021).

Kahoot! offers several features such as quizzes, polls, surveys, and innovation games, as well as a presentation feature that can be used with the templates provided (Fazriyah et al, 2020). Based on research conducted by Nuari et al (2025) said that learning media using Kahoot! can be considered very suitable for use in instructional activities, to enable its use as an alternative medium for student learning activities in understanding the material. Research conducted by Ayuningtiyas & Hajaroh (2024) also explains that Kahoot! help improving student learning result. Choosing Kahoot! as a learning medium is a strategic move that is highly appropriate to the characteristics of today's learners, because Kahoot! can provide students with a new experience. Technology is recognized as an innovation in the development of teaching and learning tools, one of which is gamification. Technology continues to evolve in line with modern developments and plays a role in keeping the learning process interesting and increasing student enthusiasm (Latief et al, 2024). Martdana & Atno (2025) in practice, gamification utilizes game mechanics, attractive visual design, and a game like mindset to create a more attractive and meaningful educational experience. According to Rahmatika et al (2020) gamification is a concept applied in business and education to increase motivation, curiosity, and enthusiasm for participation. Game mechanics in gamification can create an enjoyable experience that enhances player engagement in targeted real-world activities (Zhang, 2023). Wirani et al (2021) explaining statement indicates that gamification can be integrated into learning activities through multiple platforms such as Kahoot!. Therefore, it can be concluded that Kahoot! and gamification are interrelated. Kahoot! based on gamification can be utilized as a learning tool for students. Research that has been conducted by Hidayat et al (2023) explains that gamification based learning media can be utilized as a tool facilitating learning tool more interactive and supportive learning environment, enabling students to reach the desired educational objectives for students.

SMKN 2 Kediri accredited with an A rating, it is known as the favorite vocational school in Kediri city. One of its areas of expertise is Office Management and Business Services (MPLB), which consists of grades X, XI, and XII. There are 327 students in this program, with 108 students in grade X, 108 students in grade XI, and 111 students in grade



XII. In grade X, the major is called office management and business services (MPLB), while in grades XI and XII it is called office management (MPK). At class X, one of the compulsory subjects is the basics of office management and business services, which covers various elements of learning. This material equips students with insight into the world of work, including an understanding of current and future professional profiles. Despite its A accreditation, the school still faces challenges in increasing student engagement and active participation in learning. The researcher conducted preliminary studies through unstructured interviews with teachers of the subject of the basics of office management and business services. In the element of insight into the world of work in the field of office management and business services, teachers use powerpoint and handouts in their teaching. The method used is lecturing, so students tend to be less active. The one-way nature of lecturing means that students do not have the opportunity to discuss with the teacher. In addition, the use of PowerPoint encourages students to only read the material passively. Many students do not read independently if not directed by the teacher.

Interviews with X MPLB students revealed that they often feel bored during lessons. This boredom is particularly evident in lessons on the world of work in the field of office management and business services. Another problem is evident in the students' unsatisfactory learning outcomes. Based on daily tests, 75% of X MPLB 1 students received scores below the Minimum Passing Grade.

Based on these conditions, there is a need for interactive and technology-based learning innovations, such as Kahoot! gamification-based learning media, which can increase student engagement and understanding. The development of Kahoot! gamification based learning media is expected to be an innovation in the use of learning media by teachers, especially in the subject of office management basics for X MPLB students specializing in office management and business services at SMKN 2 Kediri. In addition research on this development, there has been no development of Kahoot! gamification-based learning media for the subjects of Fundamentals of Office Management and Business Services in vocational schools, especially at SMKN 2 Kediri. The development of gamification based learning media aims to be a tool that can support students in understanding the material presented by teachers in the classroom learning process. Based on this description, the researcher was interested in conducting research entitled Development Of Learning Media Kahoot! Based On Gamification In Basic Management Subjects Office And Business Services At SMKN 2 Kediri. The purpose of this research is (1) the process of developing Kahoot! gamification based learning media, (2) the feasibility of developing Kahoot! gamification based learning media, and (3) student responses to the development of Kahoot! gamification based learning media.

The learning process requires interactive and engaging media to stimulate students' interest, one of which is through the use of Kahoot!. Kahoot! is an application that provides game-based features in the form of online quizzes, which encourage competition among students during participation (Ayuningtiyas & Hajaroh, 2024). According to Bunyamin et al (2020) also explains that Kahoot! Media can be a learning variation in the classroom that makes students more enthusiastic. Permana (2021) also believes that Kahoot is a learning medium that serves to focus attention by ensuring that students concentrate on the teaching and learning process. Technological developments have given rise to innovations in learning media, one of which is gamification, which utilizes game elements to make learning more interesting and motivating. According to Rahmatika et al (2020) gamification is a concept applied in business and education to increase motivation, curiosity, and enthusiasm for



participation. Research from Fauziyah et al (2025) shows that the use of gamification can change students' learning styles from passive to more active and increase inclusivity in learning.

Rahmania et al (2023) stating that, in more detail, the concept of gamification utilizes game mechanics, aesthetics, and thinking patterns to attract, motivate, support learning, and solve problems. After understanding the role of Kahoot! and gamification as interactive learning media, it is also important to see how students respond in the context of their integration into the teaching learning process. Student responses are behaviors exhibited by students during instructional sessions that arise when the five senses are involved in observing and paying attention to an object, resulting in a reflex or response from the student (Arini & Lovisia, 2019). Supported by the opinion of Aisyah et al (2015) explained that student response is the acceptance, response, and activities undertaken by students through the use of particular teaching methods. This study contributes to the development of innovative learning media in vocational education. It applies gamification principles through the use of Kahoot! as an interactive platform. The implementation aims to enhance the effectiveness of learning media that can be utilized in the teaching and learning process.

### **Research Method**

Research on the development of Kahoot! gamification based learning media uses a Research and Development (R&D) method with the ADDIE model (Analysis, Design, Development, Implementation, Evaluation). According to Sugiyono (2023) research and development is a process or method used to validate and develop products. Cahyadi (2019) explains the ADDIE research development model, which consists of five stages: analysis, design, development, implementation, and evaluation. However, this research only reached the implementation stage. The evaluation stage was not carried out because it did not measure the effectiveness of the product. Permana et al (2023) explains that this model is structured and easy to use, with stages including analysis to determine student needs, design as a preliminary draft of the media, development to produce products in accordance with the material, implementation through classroom trials, and evaluation as the final stage to assess the success of the learning media. In accordance with the ADDIE model, learning media should be consulted with subject matter experts and media experts to obtain advice and input (Dewi & Puspitasari, 2018). This research involved 20 students from class X MPLB 1 of SMKN 2 Kediri, who were selected as the sample of the study. According to Sadiman (2014) the research was conducted with a limited sample of 10-20 students. Research instruments included expert validation sheets for materials and media, along with student response questionnaires. Expert validation criteria for materials and media in the development of Kahoot! gamification based learning media were assessed using a likert scale as follows:

**Table 1. Assessment Categories**

<b>Description</b>	<b>Score</b>
Very suitable	5
Conform	4
Quite	3
Inappropriate	2
Entirely unacceptable	1

Source: (Riduwan, 2018)



Criteria for assessing student responses for research on the development of Kahoot! gamification based learning media using the guttman scale are as follows:

**Table 2. Student Assessment Criteria**

Description	Score
Yes	1
No	0

Source: Riduwan (2018)

The data analysis techniques used were expert material and media validation analysis and student response questionnaire analysis. The calculations for analyzing expert material and media validation is as follows:

$$P\% = \frac{\text{total validation result score}}{\text{maximum score}} \times 100\%$$

Source: Riduwan (2018)

Analysis of student response questionnaires using the following calculations:

$$P\% = \frac{\text{total result score}}{\text{maximum score}} \times 100\%$$

Source: Riduwan (2018)

Based on the results of the data analysis, the percentage of Kahoot! gamification based learning media with interpretation criteria can be seen in Table 3 below:

**Table 3. Expert Validation Criteria**

Value/score	Criteria
0%-20%	Very Less
21%-40%	Less
41%-60%	Enough
61%-80%	Good
81%-100%	Very Good

Source: Riduwan (2018)

The learning media developed in this study is considered feasible if the percentage obtained is  $\geq 61\%$  with strong or very strong interpretation criteria.

## Result and Discussion

### 1) The Development Process

This research is a development study (R&D) that uses the ADDIE model. Its goal is to check if learning media for the basics of MPLB is practical and to look at how students react to using Kahoot! with gamification based Kahoot! through five stages of development, such as:

#### 1. Analysis

The early phase of the research was carried out by identifying students' learning needs and problems in the classroom through interviews with teachers and students in the subject of Fundamentals of Office Management and Business Services. The results showed that teachers still used media such as powerpoint, handouts, and lectures, while students tended to be passive, lacked initiative in reading, and many of them scored below the minimum passing grade. Novela et al (2024) demonstrated that using digital learning tools makes students more excited and eager to learn new things. Researchers collected references to improve the quality of gamification based Kahoot! media on job profile material with the support of lesson plans as a reference. Thus, the development of this interactive learning media is presented and then

students are not passive and are motivated in learning activities (Wardani & Puspasari, 2022).

## 2. Design

The design stage was carried out by compiling materials and quiz questions in accordance with the learning objectives, then entering them into Kahoot! to create an interactive and engaging learning experience. At this stage, the researchers also discussed with subject teachers to tailor the media customized for students' preferences of students so that the material would be easier to understand. Bunyamin et al (2020) found that Kahoot! media can be used in different way. The steps for using Kahoot! are arranged systematically so that they are easy to understand and increase student enthusiasm. Thus, the design of learning media products depends on the selection of sounds, characters, and backgrounds that are tailored to needs and developed based on creativity in product creation (Rosanti & Puspasari, 2022).

## 3. Development

The development stage was carried out to develop learning media through consultation with the supervising lecturer and teacher in charge of the basic office management and business services subject. This stage involved development using platforms or applications that can be accessed via smartphones and laptops. Additionally, a guideline was developed that outlines the procedures for using Kahoot! so students can easily understand about the process and also access platform. The Kahoot! learning media, which is gamification based, is supported by animations, images, and sound. Below is an image about Kahoot! learning media based on gamification:



**Figure 1. Screen display in classic mode for students**



**Figure 2. Screen display in classic mode for teacher**



**Figure 3. Screen display in Innovation mode for students**



**Figure 4. Screen display in Innovation mode for teacher**



**Figure 5. How to use Kahoot!**

#### 4. Implementation

The implementation phase involved including two subject matter experts and two media experts to assess suitability of the content, design, and appearance, and was conducted through trials with 20 students in class X MPLB 1. During this implementation stage, the subject matter validators suggested adding material on business opportunities and digital jobs, while the media validators suggested using the application in a location with stable internet and assessed that this media was suitable for the subjects of basic office management and business services. Student responses were also positive; they suggested a longer completion time and liked the interesting features of this learning media.

#### 5. Evaluation

The evaluation stage is used as a tool used to measure student achievement related to learning media developed by research. The research did not carry out the evaluation stage because it did not include measuring the effectiveness of the product.

##### 2) The Feasibility

This step aims to evaluate the quality of learning media by looking at how well the content is created, how well the media is designed, and how students respond to it. The results show that the experts who evaluated the material gave a score of 91%, while the experts who evaluated the media gave a score of 97%. Both scores are within a very good range. These high scores indicate that Kahoot! gamification-based learning media is not only well-made in terms of content and design, but also helps students stay engaged and motivated. This is achieved through the quiz format, competitive aspects, and instant feedback, all of which are part of gamification that makes the learning process more enjoyable and satisfying. Overall, this learning media is considered to be of high quality, as shown in Tables 4 and 5 below:

**Table 5 Material Expert Assessment**

Expert Validator	Percentage	Criteria
Material Expert 1	92.5%	Very Good
Material Expert 2	90%	Very Good
Average	91%	Very Good

Source : Data processed by research (2025)

**Table 6 Material Expert Assessment**

Expert Validator	Percentage	Criteria
Media Expert 1	96%	Very Good
Media Expert 2	98%	Very Good
Average	97%	Very Good

Source : Data processed by research (2025)

Similar to research conducted by Potutu et al (2024) explaining the media expert gave a validation score of 85%, the material expert scored 83%, the teacher rated 85%, and the



average student response was 97.81% shows that gamification-based learning media consistently receives positive acceptance from students. Other research results conducted by Sulistiawati et al (2023) explaining that the results of the media and material experts obtained an average of 95% in the excellent category, and the questionnaire results obtained an average score of 93% exert influence based on user response assessments. However, unlike previous studies Fahrurrozi & Rahmawati (2021) this study focused on developing an instrument model that uses Kahoot as an evaluation tool, which showed expert media validation results of 86% (very feasible), student assessment of 82% (very good), and an average student test score of 80%. With this research about Development Of Learning Media Kahoot! Based On Gamification In Basic Management Subjects Office And Business Services At SMKN 2 Kediri contributing to the development of learning media that can be used and applied in schools, because the results of expert validation of the material and media, as well as student responses, have a positive impact on the teaching and learning process.

### **3) Student Response**

The limited trial conducted in this study involved 20 randomly selected students from class X MPLB 1. Student response questionnaires were distributed with several indicators of response, reaction, and confidence adapted from Faryanti (2016). Students were given a questionnaire consisting of 15 questions from the three aspects using a guttman scale with Yes or No answers (Riduwan, 2018). The percentage of student responses showed a score of 97% in the “very good” category. The positive response rate of 97% not only demonstrates the suitability of the media, but also the powerful impact of media Kahoot! based on gamification on students' attitudes and confidence in the subject. Learning about job profiles in the present and future using Kahoot! gamification based learning media received positive responses from students. This is consistent with the results of the study Putri & Puspasari (2023) which shows that the questionnaire responses obtained an average score of 96.17% with a very good interpretation criterion. Research conducted by Sulistyawati et al,( 2021) also explains that the results of the student response questionnaire to the developed media reached an average of 87.6%, which is categorized as a good response if this media is applied in learning. Research conducted by Indianti et al (2023) it also shows the results of student response questionnaires during small group tests and field tests, obtaining scores of 91.4% and 93.8% with an average student score during field tests of 86, which is a very acceptable result. Therefore, the Development Of Learning Media Kahoot! Based On Gamification In Basic Management Subjects Office And Business Services At SMKN 2 Kediri is highly suitable for use as a learning media by students at SMKN 2 Kediri.

### **Conclusion**

The results showed that the percentage of the material expert validation results was 91%, and the media expert validation results were 97% with very good. The overall percentage of student responses to the Kahoot gamification based learning media was 97%, meeting the criteria of very good. Therefore, the research findings conclude that the development of Kahoot! gamification based learning media is highly suitable for use in the teaching and learning process in the X MPLB class at SMKN 2 Kediri.

### **Recommendation**

Learning media is recommended as a follow-up, teachers are encouraged to be more creative in combining technology-based learning media such as Kahoot! based on





gamification in order to increase student enthusiasm and activity during learning. Teachers must also regularly evaluate the performance of these media and adjust their use according to the nature of the students and the material being taught. In addition, the next researchers are encouraged to create and test gamification media in various subject areas and educational levels, and to examine in greater depth its impact on learning achievement, learning enthusiasm, and student engagement levels.

## References

- Afroni, & Triana. (2018). *Komunikasi Pembelajaran Berbasis Al-Qur'an*. 07(02), 157–178. <https://doi.org/10.30868/ei.v7i2.264>
- Aisyah, Ruqiah Ganda Putri Panjaitan, R. M. (2015). Respon Siswa Terhadap Media E-Comic Bilingual Sub Materi Bagian-Bagian Darah. *Journal Pendidikan Dan Pembelajaran Khatulistiwa*, 5(3), 1–10. <https://doi.org/10.26418/jppk.v5i3.14301>
- Ariani, D. P., & Puspasari, D. (2022). Pengembangan Media Pembelajaran Interaktif Berbasis Power Live Quiz pada Materi Mail Handling di SMKN 10 Surabaya. *Jurnal Pendidikan Tambusai*, 6(2), 114800–114815. <https://doi.org/10.31004/jptam.v6i2.4759>
- Ayuningtias, V., & Hajaroh, S. (2024). Pengembangan Media Interaktif Kahoot Dalam Meningkatkan Motivasi Belajar Pada Mata Pelajaran Fiqih. *Al-Mau'izhoh: Jurnal Pendidikan Agama Islam*, 6(1), 829–838. <https://doi.org/10.31949/am.v6i1.9587>
- Bunyamin, A. C., Juita, D. R., & Syalsiah, N. (2020). Penggunaan Kahoot Sebagai Media Pembelajaran Berbasis Permainan Sebagai Bentuk Variasi Pembelajaran. *Gunahumas*, 3(1), 43–50. <https://doi.org/10.17509/ghm.v3i1.28388>
- Cahyadi, R. A. H. (2019). Pengembangan Bahan Ajar Berbasis Addie Model: Addie Model-Based Teaching Material Development. *Halaqa: Islamic Education Journal*, 3(1), 35–42. <https://doi.org/10.21070/halaqa.v3i1.2124>
- Dewi, K., & Puspitasari, D. (2018). Pengembangan Media Pembelajaran Diorama Pada Mata Pelajaran Administrasi Humas Dan Keprotokolan Kelas Xi Apk 3 Smk Adhikawacana Surabaya. *Jurnal Pendidikan Administrasi Perkantoran*, 6(2). <https://ejournal.unesa.ac.id/index.php/JPAPUNESA/article/view/25798>
- Faryanti, H. (2016). Respon siswa terhadap Film Animasi Zat Aditif. *Artikel Penelitian*, 1(1), 1-14
- Fahrurrozi, M., & Rahmawati, S. N. L. (2021). Pengembangan Model Instrumen Evaluasi Menggunakan Aplikasi Kahoot Pada Pembelajaran Ekonomi. *JURNAL PROFIT: Kajian Pendidikan Ekonomi Dan Ilmu Ekonomi*, 8(1), 1–10. <https://doi.org/10.36706/jp.v8i1.13090>
- Fazriyah, N., Saraswati, A., Permana, J., & Indriani, R. (2020). Penggunaan Aplikasi Kahoot Pada Pembelajaran Media Dan Sumber Pembelajaran SD. *Jurnal Ilmiah PGSD STKIP Subang*, 6(1), 139–147. <https://doi.org/10.36989/didaktik.v6i1.119>
- Hafizhah, Z. (2021). Inovasi Pendidikan Era Revolusi Industri 4.0. *Seri Publikasi Pembelajaran*, 1(2), 01–09. <https://doi.org/10.31219/osf.io/ag4ph>
- Haniko, P., Mayliza, R., Lubis, S., Sappaile, B. I., Hanim, S. A., & Farlina, B. F. (2023). Pemanfaatan Media Pembelajaran Online Untuk Memudahkan Guru Dalam Penyampaian Materi Dalam Pembelajaran. *Community Development Journal*, 4(2), 2862–2868. <https://doi.org/10.31004/cdj.v4i2.14856>
- Hapsari, F. S., & Isroyati. (2021). Pemanfaatan Media Pembelajaran Berbasis Teknologi Kahoot dalam Meningkatkan Kemampuan Tata Bahasa Mahasiswa Pada Masa Pandemi Covid-19. *Jurnal Pendidikan : Riset Dan Konseptual*, 5(1), 43–50.



[https://doi.org/10.28926/riset\\_konseptual.v5i1.314](https://doi.org/10.28926/riset_konseptual.v5i1.314)

- Hidayat, I., Supriani, A., Setiawan, A., & Lubis, A. (2023). Implementasi aplikasi kahoot sebagai media pembelajaran interaktif dengan siswa SMP negeri 1 Kunto Darussalam. *Journal on Education*, 6(1), 6933–6942. <https://doi.org/10.31004/joe.v6i1.3924>
- Indianti, R. N. K., Leksono, I. P., & Rusmawati, R. D. (2023). Pengembangan media Busy Book model Addie Sebagai pembelajaran motorik dan kreativitas pada anak usia dini. *STAND: Journal Sports Teaching and Development*, 4(2), 89-99. <https://doi.org/10.36456/j-stand.v4i2.9015>
- Martdana, R. A., & Atno. (2025). Gamifikasi dalam Pembelajaran Sejarah : Analisis Literatur Terhadap Dampaknya pada Motivasi dan Keterlibatan Belajar Siswa. *Edukasiana: Jurnal Inovasi Pendidikan*, 4(2), 327–335. <https://doi.org/10.56916/ejip.v4i2.1148>
- Maulani.M.R, Supriady, & Noviana, R. (2020). Implementasi-Learning Untukmeningkatkan Partisipasi Siswa Dalam Pembelajaransehingga Lebih Interaktif Dan Menyenangkan. *Jurnal Ilmiah Teknologi Informasi Terapan*, 7(1), 28–35. <https://doi.org/10.33197/jitter.vol7.iss1.2020.489>
- Miasari, R. S., Indar, C., Pratiwi, P., Purwoto, P., Salsabila, U. H., Amalia, U., & Romli, S. (2022). Teknologi Pendidikan Sebagai Jembatan Reformasi Pembelajaran Di Indonesia Lebih Maju. *Jurnal Manajemen Pendidikan Al Hadi*, 2(1), 53–61. <https://doi.org/10.31602/jmpd.v2i1.6390>
- Novela, D., Suriani, A., & Nisa, S. (2024). Implementasi Pembelajaran Inovatif melalui Media Digital di Sekolah Dasar. *Journal of Practice Learning and Educational Development*, 4(2), 100–105. <https://doi.org/10.58737/jpled.v4i2.283>
- Nuari, P. A., Fuldiartman, & Dewi, F. (2025). Pengembangan Media Pembelajaran Berbasis Game Based Learning Berbantuan Kahoot pada Materi Struktur Atom. *Jurnal Pengabdian Masyarakat Dan Riset Pendidikan*, 3(4), 3380–3389. <https://doi.org/10.31004/jerkin.v3i4.770>
- Permana, N. S. (2021). Implementasi Aplikasi Kahoot Sebagai Media Pembelajaran Berbasis Game Dalam Pelajaran Pendidikan Agama Katolik. *Jurnal Pendidikan Agama Katolik*, 21(2), 128–135. <https://doi.org/10.34150/jpak.v21i2.334>
- Permana, R. A., Husein, H., & Sahara, S. (2023). Kahoot berbasis Game Based Learning terhadap Hasil Pembelajaran Sekolah Dasar dengan Model Addie. *Jurnal Komputer Antartika*, 1(4), 209–213. <https://doi.org/10.70052/jka.v1i4.226>
- Potutu, S. D., Maryati, S., & Yusuf, D. (2024). Development of E-Earning Learning Media Based on the Kahoot Application in Geography Subjects. *Jurnal Pendidikan Mandala*, 9(3), 827–831. <http://dx.doi.org/10.58258/jupe.v9i3.7469>
- Putri, A. E., & Puspasari, D. (2023). Pengembangan Media Pembelajaran Interaktif Mentimeterpada Mata Pelajaran Administrasi Umum. *Jurnal Pendidikan Tembusai*, 7(2). <https://doi.org/10.31004/jptam.v7i2.8079>
- Rahmah, S., Soviana, E., & Fitriyana. (2025). Peran Teknologi Di Dunia Pendidikan Dalam Meningkatkan Kualitas Pembelajaran. *Jurnal Multidisiplin Ilmu Akademik*, 2(1), 409–418. <https://doi.org/10.61722/jmia.v2i1.3365>
- Rahman, A., Munandar, S. A., Fitriani, A., Karlina, Y., & Yumriani. (2022). Pengertian Pendidikan, Ilmu Pendidikan dan Unsur-Unsur Pendidikan. *Al Urwatul Wutsqa: Kajian Pendidikan Islam*, 2(1), 1–8.
- Rahmania, S., Soraya, I., & Hamdani, A. S. (2023). Pemanfaatan Gamification Quizizz Terhadap Motivasi Belajar Siswa Pada Mata Pelajaran Pendidikan Agama Islam. *Tadbir: Jurnal Manajemen Pendidikan Islam*, 11(2), 114–133.



<https://doi.org/10.30603/tjmpi.v11i2.3714>

- Rahmatika, A. K., Pradana, F., & Bachtiar, F. A. (2020). Pengembangan Sistem Pembelajaran HTML dan CSS dengan Konsep Gamification berbasis Web. *Jurnal Pengembangan Teknologi Informasi Dan Ilmu Komputer*, 4(8), 2655–2663. <https://j-ptiik.ub.ac.id/index.php/j-ptiik/article/view/7738>
- Riduwan. (2018). *Skala Pengukuran Variabel-Variabel Penelitian*. Alfabeta.
- Rizal, A. S. (2023). Inovasi Pembelajaran untuk Meningkatkan Hasil Belajar Siswa di Era Digital. *Jurnal Kajian Keislaman Dan Pendidikan*, 14(1). <https://doi.org/10.53915/jurnalkeislamandanpendidikan.v14i1.329>
- Rosanti, A. A., & Puspasari, D. (2022). Pengembangan Media Pembelajaran Interaktif Game Visual Novel pada Materi Penyelenggaraan Rapat Teleconference di SMK IPIEMS Surabaya. *Jurnal Pendidikan Dan Konseling*, 4(5), 1444–1457. <https://doi.org/10.31004/jpdk.v4i5.6792>
- Sadiman. (2014). *Media Pendidikan: Pengertian, pengembangan, Dan Pemanfaatan*. Jakarta: PT Raja Grafindo Persada.
- Sugiyono. (2023). *Metode Penelitian Kuantitatif Kualitatif dan R&D* (M. Dr. Ir. Sutopo. S.Pd (ed.); Cetakan Ke). ALFABET BANDUNG.
- Sulistiawati, Mulyati, T., & Furnamasari, Y. F. (2023). Pengembangan Bahan Ajar Media Kahoot Untuk Pembelajaran PPKN Materi Keberagaman Kelas IV Sekolah Dasar. *Jurnal Bintang Pendidikan Indonesia (JUBPI)*, 1(4), 144–156. <https://doi.org/10.55606/jubpi.v1i4.2018>
- Sulistiyawati, E., Faizah, L., Ifatun, N., & Putra4, I. G. (2021). Pengembangan Media Pembelajaran Berbasis Stem Rumah Hidrolik Di Tinjau Dari Hasil Belajar Dan Respon Siswa Terhadap Matematika. *Jurnal Focus ACTION Of Research Mathematic*, 3(2), 125–138. <https://doi.org/10.30762/factor-m.v3i2.2611>
- Tria, R. I., Faiza, P. M., Moly, S., Rizky, O., & Siti, F. (2023). Analisis Hasil Pengaruh Perkembangan Iptek Terhadap Hasil Belajar Siswa SD/MI. *Multidisciplinary Journal of Social Sciences*, 01(02), 97–110. <https://doi.org/10.62668/hypothesis.v2i01.645>
- Arini, W., & Lovisia, E. (2019). Respon Siswa Terhadap Media Pembelajaran Alat Pirolisis Sampah Plastik Berbasis Lingkungan Di Smp Kabupaten Musi Rawas. *Thabiea: Journal of Natural Science Teaching*, 2(2), 95-104. <https://doi.org/10.21043/thabiea.v2i2.5950>
- Wardani, K. K., & Puspasari, D. (2022). Pengembangan Media Pembelajaran Interaktif Berbasis Articulate Storyline pada Materi Komunikasi Telepon dalam Bahasa Inggris di SMK IPIEMS Surabaya. *Jurnal Teknologi Pendidikan: Jurnal Penelitian Dan Pengembangan Pembelajaran*, 7(1), 1–12. <https://doi.org/10.33394/jtp.v7i1.5005>
- Wirani, Y., Nabarian, T., & Romadhon, M. S. (2021). Evaluation of continued use on Kahoot! As a gamification-based learning platform from the perspective of Indonesia students. *Procedia Computer Science*, 197(2021), 545–556. <https://doi.org/10.1016/j.procs.2021.12.172>
- Latief, H. Y., Lukitasari, N., & Budiawan, Y. S. (2024). Implementasi Aplikasi Kahoot Dalam Pembelajaran Teks Cerpen. *Jurnal Pembahsi (Pembelajaran Bahasa Dan Sastra Indonesia)*, 14(2), 125-136. <https://doi.org/10.31851/pembahsi.V14i2.15981>
- Zhang, Q. (2023). Investigating the Effects of Gamification and Ludicization on Learning Achievement and Motivation: An Empirical Study Employing Kahoot! and Habitica. *International Journal of Technology-Enhanced Education (IJTEE)*, 2(1), 1-19. <https://doi.org/10.4018/IJTEE.326127>