

# THE EFFECTIVENESS OF THE USE OF DIGITAL MEDIA IN INDONESIA LANGUAGE LEARNING IN SECONDARY SCHOOLS

Oleh:

M. Iqbal Tawakkal

Email: [miqbal.tawakkal@unugiri.ac.id](mailto:miqbal.tawakkal@unugiri.ac.id)

Djoko Apriono

Email: [djoko.apriono1/@gmail.com](mailto:djoko.apriono1/@gmail.com)

*Abstract*The integration of digital media in education has transformed the way students engage with learning materials, particularly in language instruction. This study aims to analyze the effectiveness of using digital media in the teaching of Indonesian language at the secondary school level. Employing a quantitative descriptive approach, data were collected through surveys and observations in several junior and senior high schools. The results indicate that the use of digital media, such as interactive applications, online learning platforms, and multimedia resources, significantly enhances student motivation, participation, and comprehension. Moreover, digital media supports differentiated instruction, allowing teachers to accommodate various learning styles. However, challenges such as limited access to technology and lack of digital literacy among teachers still hinder optimal implementation. This study concludes that digital media is an effective tool in Indonesian language learning at secondary schools when supported by adequate infrastructure and teacher readiness.

## INTRODUCTION

The development of information and communication technology has driven significant transformation in the world of education, especially in the language learning process. Digital media is one of the alternatives to effective learning strategies because it can accommodate various learning styles of students, facilitate collaborative learning, and provide access to richer and more interactive learning resources. In Indonesian language learning, the use of digital media such as videos, learning applications, social media, and online platforms has opened up a wide space for innovation, both in terms of teachers and students (Yulianti, Riansi, & Sultoni, 2024).

Various studies show that digital media is able to increase learning motivation, student involvement, and learning outcomes in language learning. Ndruru (2025) found that the use of digital technology in the

teaching of exposition texts significantly improves students' writing skills. This is reinforced by Kusuma, Mardiana, and Saifulloh (2024) who show that the use of YouTube media in teaching Indonesian pronunciation is able to increase phonological accuracy and students' confidence.

In addition to having a cognitive impact, digital media also affects the affective aspects of students. Makodamayanti, Nirmala, and Kepirianto (2020) stated that the use of multimedia in learning can reduce students' anxiety and create a more pleasant learning atmosphere. Furthermore, the use of social media such as Instagram and TikTok in the context of language learning is also increasingly common, especially because of its ability to bridge formal learning with language practices that occur outside the classroom (Ilmita, Setyaningsih, & Putra, 2025; Fauziah & Sutrisno, 2025).

A study by Bu'ulolo et al. (2023) revealed that the use of social media indirectly enriches students' vocabulary and language creativity, although on the other hand it can raise concerns about the use of non-standard language. Therefore, the role of teachers is very important in guiding the use of digital media so that it remains in accordance with the goals of good and correct Indonesian learning.

The use of mobile devices in language learning, otherwise known as mobile-assisted language learning (MALL), has also proven effective. Subiyakto, Erlina, and Sugiarti (2021) show that students are greatly helped by language learning applications that allow them to learn anytime and anywhere. Similarly, Mursyidin, Wahyudi, and Ahmala (2024) emphasize the importance of interactivity in digital applications as the key to success in technology-based language learning.

However, the effectiveness of the use of digital media also depends on the readiness of infrastructure, teacher competence in technology, and students' digital literacy. Yuliarti et al. (2024) and Ndruru (2025) highlight challenges in the form of limited internet access, lack of teacher training, and potential learning disruptions due to digital multitasking. Research by Kraushaar and Novak (2010) and Wood et al. (2012) shows that multitasking during the learning process can interfere with concentration and significantly reduce learning outcomes.

The Merdeka Curriculum provides a great opportunity to integrate digital media in learning in a more flexible and contextual manner. Irawan, Suwarso, and Khoiruman (2025) show that the integration of social media in language learning is able to significantly increase student participation and creativity.

Based on the description above, this article aims to examine the effectiveness of the use of digital media in Indonesian learning at the secondary school level. The focus of the study includes the types of digital media used, their influence on the cognitive, affective, and behavioral dimensions of students, as well as relevant implementation challenges and strategies.

## **METHOD**

This study uses a **descriptive quantitative approach** with the aim of determining the effectiveness of the use of digital media in Indonesian learning at the secondary school level. This design was chosen because it is suitable to describe phenomena that occur systematically, factually, and accurately regarding the facts, properties, and relationships between the phenomena being studied (Sugiyono, 2021).

### **1. Research Subject and Location**

The subjects in this study are Indonesian students and teachers in three secondary schools (two junior high schools and one high school) who have implemented digital media in the learning process. The school where the research is located is selected by purposive sampling with the following criteria:

- 1) have actively used digital media in Indonesian learning,
- 2) have basic technological infrastructure such as LCD, internet, and computers, and
- 3) Indonesian teachers who are willing to be research respondents.

The number of respondents in this study consisted of 120 students and 6 Indonesian teachers.

### **2. Research Instruments**

The main instrument in this study is a questionnaire which is prepared based on indicators of learning effectiveness according to the theory of Kemp & Dayton (1985), which includes the following aspects:

- 1) Cognitive (improvement of material understanding),
- 2) Affective (interest and motivation to learn), and

- 3) Psychomotor/behavioral (active participation and involvement in tasks).

The questionnaire consisted of 25 statements using a Likert scale of 1–5 (strongly disagree to strongly agree). The validity of the instrument was tested through expert judgement and content validity tests, while reliability was tested using Cronbach's Alpha, with a value of >0.7 considered reliable. In addition to the questionnaire, semi-structured interview guidelines for teachers are also used, aiming to strengthen quantitative data and explore teachers' experience in designing and implementing digital media in learning.

### **3. Data Collection Procedure**

Data collection is carried out in three stages:

**First stage:** Coordination with school principals and teachers for research socialization and implementation approval.

**Second stage:** Distribution of online questionnaires using Google Form to students after they have participated in at least 3 times of Indonesian learning based on digital media.

**Third stage:** Online interview via Zoom/WhatsApp Call with the Indonesian teacher concerned.

### **4. Data Analysis Techniques**

The data from the questionnaire results were analyzed in a quantitative descriptive manner by calculating **the average score** of each aspect of effectiveness. The scores are then categorized using the following intervals:

4.21–5.00 = Highly Effective

3.41–4.20 = Effective

2.61–3.40 = Quite Effective

1.81–2.60 = Less Effective

1.00–1.80 = Ineffective

Interview data was analyzed using data reduction, data presentation, and conclusion drawing techniques (Miles & Huberman, 1994), to reveal teachers' views on the effectiveness and challenges of using digital media.

## **5. Research Ethics**

This research was carried out by paying attention to ethical principles, including: informed consent, confidentiality of respondent identities, and the use of data only for academic purposes. Each participant was given an explanation of the research objectives and was given the freedom to participate or decline.

## **DISCUSSION**

The results of the study show that the use of digital media in Indonesian learning in secondary schools is relatively **effective** based on the average questionnaire score in the range of 3.41-4.20. The highest score was found in the affective aspect, followed by the cognitive and psychomotor aspects. These findings corroborate previous studies that have stated that digital media is not only able to improve students' understanding of the material, but also motivate them to be more active and involved in the learning process (Yuliarti et al., 2024; Makodamayanti et al., 2020).

### **1) Cognitive Aspect: Improved Material Comprehension**

Students find it easier to understand Indonesian materials, such as text structure, linguistic rules, and the use of punctuation, when learning is delivered through digital media such as learning videos, infographics, and interactive applications. This is in line with the results of Ndruru's (2025) research which shows that digital media supports the visualization of abstract concepts and increases students' information absorption in exposition text learning. With more interesting and varied delivery, students tend not to get bored easily, and are more focused on following the flow of the material.

In addition, the presence of interactive features in digital media—such as online quizzes, simulations, and self-reflection—allows teachers to measure students' understanding directly. This process helps teachers conduct formative evaluations and develop advanced learning strategies.

### **2) Affective Aspect: Increases Interest and Motivation to Learn**

Digital media has also been proven to be effective in increasing students' interest and motivation in learning Indonesian. The majority of students stated that the use of media such as short videos, audio narratives, and social media in learning made them more enthusiastic and did not feel bored. These findings are in line with the research of Ilmita et al. (2025)

and Fauziah & Sutrisno (2025), which shows that digital media-based learning is in line with today's digital habits of adolescents, thereby creating a more meaningful learning experience.

In the context of learning psychology, students' intrinsic motivation can be increased if learning is presented in a fun approach and in accordance with their interests. Digital media allows Indonesian learning to be associated with real contexts, such as creating descriptive texts about the surrounding environment or writing narrative texts based on personal experiences, which are then presented through digital platforms.

### **3) Psychomotor Aspects: Active Participation and Involvement**

The active participation of students in learning has also increased, as can be seen from their enthusiasm in working on project-based assignments using digital media. For example, students are asked to create a speech text presentation video, text structure infographics, or record a poetry reading through an app. These activities encourage students to take an active role, collaborate, and utilize their creativity, which indirectly also develops 21st-century skills, such as collaboration, communication, and digital literacy.

These findings are supported by Irawan et al. (2025), who state that digital media encourages active student involvement in project-based learning. When digital media is used appropriately, students become not only passive recipients of information, but also creators of learning content that can be shared and evaluated collaboratively.

### **4) Challenges in Implementation**

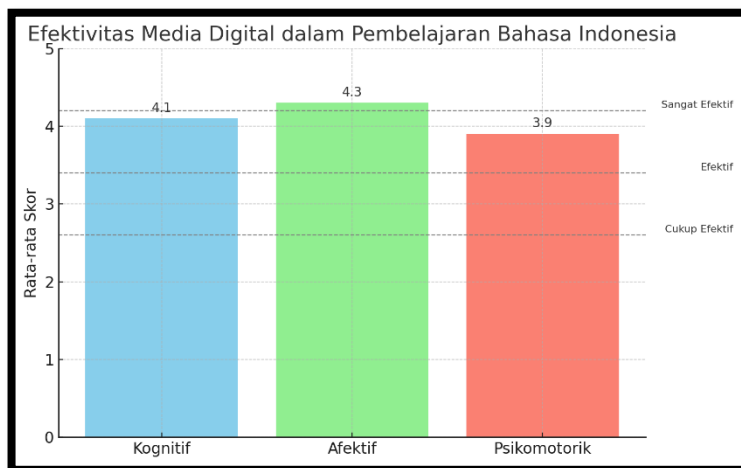
Although generally effective, the application of digital media in secondary schools still faces various challenges. One of them is the inequality of access to technology. Not all students have adequate devices and internet networks to follow digital learning optimally. In addition, teachers' competencies in managing digital media also vary. Some teachers stated that they still had difficulties in designing digital-based learning content that was effective and in accordance with the curriculum.

The results of in-depth interviews show that continuous training is needed for teachers in the field of digital literacy and technology-based learning design. Without adequate policy and infrastructure support, the effectiveness of digital media risks not being optimal, and can even

widen the learning gap between students (Yuliarti et al., 2024; Bu'ulolo et al., 2023).

### 5) Learning Implications

These findings provide several important implications for the development of Indonesian learning in secondary schools. First, teachers need to integrate digital media not only as a complement, but as an integral part of learning planning. Second, schools need to encourage policies that support the procurement of tools and teacher training. Third, it is important to develop digital local content that is contextual, based on Indonesian culture, and supports the strengthening of students' character.



Here is a bar graph that shows the average digital media effectiveness score based on three aspects: Cognitive, Affective, and Psychomotor.

Effectiveness Aspects	Average Score	Effectiveness Category
Cognitive	4.1	Effective
Affective	4.3	Highly Effective
Psychomotorics	3.9	Effective

## CONCLUSION

The conclusion in this study shows that the use of digital media in Indonesian learning at the secondary school level has a fairly high level of effectiveness. This is reflected in the increase in student motivation and interest, strengthening material understanding, and increasing students' active participation in the learning process. Digital media such as educational videos, interactive quizzes, learning apps, and social media have been proven to create a more enjoyable learning atmosphere and are relevant to students' digital lives today.

The use of digital media also expands the space for teachers to move in delivering material creatively and adaptively. Teachers not only play the role of material presenters, but also facilitators and designers of learning who are able to integrate technology with the right pedagogical approach. Meanwhile, students have the opportunity to become active and independent learners through interactive, flexible, and real-life context-based media.

However, this effectiveness still faces a number of challenges, such as limited technological infrastructure, access gaps between students, and variations in teachers' digital competencies. These challenges can hinder the optimal application of digital media in learning. Therefore, the effectiveness of digital media needs to be supported by a technologically ready educational ecosystem, human resources, and institutional policies.

### 1. Practical Implications

**For Teachers:** Continuous training is needed in the development of digital literacy skills and technology-based learning design. Teachers need to be equipped with the ability to select, adapt, and evaluate digital media in accordance with the characteristics of students and the goals of learning Indonesian.



**For Schools:** It is necessary to provide supporting infrastructure such as a stable internet connection, adequate digital devices, and learning spaces that support technology-based learning. Schools also need to make policies that encourage the use of digital media in a creative, responsible, and ethical manner.

**For Students:** It is necessary to instill an understanding of the wise and productive use of digital media. Indonesian learning can be a vehicle to build digital literacy awareness, critical thinking skills, and good communication skills.

**For Content Developers:** Collaboration between educators, technology developers, and language experts is needed to create digital learning content that is contextual, engaging, and in accordance with the national curriculum and Indonesian cultural values.

## 2. Follow-up Suggestions

For further research, it is recommended to conduct a more in-depth study using a **mixed approach** in order to obtain a more comprehensive picture related to the impact of digital media cognitively, affectively, and psychomotorically. Research can also focus on the effectiveness of certain digital media (e.g. podcasts, augmented reality, or AI tutors) as well as on specific language skills (argumentative writing, formal speaking, etc.). In addition, it is also important to explore differences in effectiveness based on school level, geographical area, or social background of students to formulate education policies that are more inclusive and responsive to technological developments.

## REFERENCE

- Bu'ulolo, Y., Hasibuan, M. H., & Gulo, E. F. (2023). The influence of technology on the development of Indonesian language among youth. *Journal of Education and Technology Research*, 10(2), 483–490. <https://doi.org/10.55637/jr.10.2.10052.483-490>
- Fauziah, A., & Sutrisno, D. (2025). High school students' perceptions of using social media in learning English: A quantitative study.

- Journal of English Language Teaching and Learning*, 3(1), 23–34.  
<https://doi.org/10.12928/tefl.v3i1.974>
- Ilmita, A. N., Setyaningsih, E., & Putra, K. A. (2025). Indonesian EFL learners' English language learning and use in social media: A case study. *Journal of English Studies*, 9(2), 758–781.  
<https://doi.org/10.31258/jes.9.2.p.758-781>
- Irawan, D. H., Suwarso, S., & Khoiruman, M. A. (2025). Leveraging social media to enhance English language learning effectiveness. *Al-Ishlah: Journal of Education*, 17(1), 67–75.  
<https://doi.org/10.35445/alishlah.v17i1.5722>
- Kraushaar, J. M., & Novak, D. C. (2010). Examining the effects of student multitasking with laptops during the lecture. *Journal of Information Systems Education*, 21(2), 241–251.
- Kusuma, S., Mardiana, W., & Saifulloh, A. I. (2024). Integrating digital media in language education: A study on YouTube's effectiveness in pronunciation instruction. *Phonology: Scientific Journal of Language and Literature*, 2(2), 89–99.  
<https://doi.org/10.61132/fonologi.v2i2.972>
- Makodamayanti, S., Nirmala, D., & Kepirianto, C. (2020). The use of digital media as a strategy for lowering anxiety in learning English as a foreign language. *Culturalistics: Journal of Cultural, Literary, and Linguistic Studies*, 4(1), 1–9.  
<https://doi.org/10.14710/culturalistics.v4i1.8187>
- Mursyidin, M. G., Wahyudi, K. P., & Ahmala, M. (2024). Utilization of digital application as English learning media. *Journal of Educational Innovation*, 12(1), 34–45.
- Ndruru, M. (2025). Utilizing digital technology in Indonesian language education to enhance students' ability to compose expository texts. *Kohesi: Jurnal Kajian Bahasa dan Kemasyarakatan*, 5(2), 112–125. <https://doi.org/10.57094/kohesi.v5i2.2561>
- Subiyakto, A., Erlina, N., & Sugiarti, Y. (2021). Assessing mobile learning system performance in Indonesia. *Journal of Educational Technology*, 13(2), 98–110.
- Wood, E., Zivcakova, L., Gentile, P., Archer, K., & De Pasquale, D. (2012). Examining the impact of off-task multitasking with technology on real-time classroom learning. *Computers & Education*, 58(1), 365–374.
- Yuliarti, Y., Riansi, E. S., & Sultoni, A. (2024). The role of digital media in Indonesian language learning: Cognitive, emotional, and behavioral dimensions. *Geram: Journal of Indonesian Language and*

*Literature Education*, 6(1), 15–27.

<https://doi.org/10.25299/geram.2024.21000>

*adrasah Studies*, 1(1), 128–135.

### Reference

- Kemp, J. E., & Dayton, D. K. (1985). *Planning and Producing Instructional Media*. Harper & Row.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative Data Analysis: An Expanded Sourcebook* (2nd ed.). Sage Publications.
- Sugiyono. (2021). *Quantitative, Qualitative, and R&D Research Methods*. Alfabet.

### Bibliography

- Bu'ulolo, Y., Hasibuan, M. H., & Gulo, E. F. (2023). The influence of technology on the development of Indonesian language among youth. *Journal of Education and Technology Research*, 10(2), 483–490.  
<https://doi.org/10.55637/jr.10.2.10052.483-490>
- Fauziah, A., & Sutrisno, D. (2025). High school students' perceptions of using social media in learning English: A quantitative study. *Journal of English Language Teaching and Learning*, 3(1), 23–34.  
<https://doi.org/10.12928/tefl.v3i1.974>
- Ilmita, A. N., Setyaningsih, E., & Putra, K. A. (2025). Indonesian EFL learners' English language learning and use in social media: A case study. *Journal of English Studies*, 9(2), 758–781.  
<https://doi.org/10.31258/jes.9.2.p.758-781>
- Irawan, D. H., Suwarso, S., & Khoiruman, M. A. (2025). Leveraging social media to enhance English language learning effectiveness. *Al-Ishlah: Journal of Education*, 17(1), 67–75.  
<https://doi.org/10.35445/alishlah.v17i1.5722>
- Kemp, J. E., & Dayton, D. K. (1985). *Planning and producing instructional media*. Harper & Row.
- Kraushaar, J. M., & Novak, D. C. (2010). Examining the effects of student multitasking with laptops during the lecture. *Journal of Information Systems Education*, 21(2), 241–251.
- Kusuma, S., Mardiana, W., & Saifulloh, A. I. (2024). Integrating digital media in language education: A study on YouTube's effectiveness in pronunciation instruction. *Phonology: Scientific Journal of Language and Literature*, 2(2), 89–99.  
<https://doi.org/10.61132/fonologi.v2i2.972>
- Makodamayanti, S., Nirmala, D., & Kepirianto, C. (2020). The use of digital media as a strategy for lowering anxiety in learning

- English as a foreign language. *Culturalistics: Journal of Cultural, Literary, and Linguistic Studies*, 4(1), 1–9.  
<https://doi.org/10.14710/culturalistics.v4i1.8187>
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Sage Publications.
- Mursyidin, M. G., Wahyudi, K. P., & Ahmala, M. (2024). Utilization of digital application as English learning media. *Journal of Educational Innovation*, 12(1), 34–45.
- Ndruru, M. (2025). Utilizing digital technology in Indonesian language education to enhance students' ability to compose expository texts. *Kohesi: Jurnal Kajian Bahasa dan Kemasyarakatan*, 5(2), 112–125. <https://doi.org/10.57094/kohesi.v5i2.2561>
- Subiyakto, A., Erlina, N., & Sugiarti, Y. (2021). Assessing mobile learning system performance in Indonesia. *Journal of Educational Technology*, 13(2), 98–110.
- Sugiyono. (2021). *Quantitative, qualitative, and R&D research methods*. Alfabet.
- Wood, E., Zivcakova, L., Gentile, P., Archer, K., & De Pasquale, D. (2012). Examining the impact of off-task multitasking with technology on real-time classroom learning. *Computers & Education*, 58(1), 365–374.
- Yuliarti, Y., Riansi, E. S., & Sultoni, A. (2024). The role of digital media in Indonesian language learning: Cognitive, emotional, and behavioral dimensions. *Geram: Journal of Indonesian Language and Literature Education*, 6(1), 15–27.  
<https://doi.org/10.25299/geram.2024.21000>