



LITSIM DIGITAL: INNOVATION IN LITERARY LISTENING LEARNING BASED ON DIGITAL MEDIA AND AI ANALYTICS

Mohammad Amin*
STAI Ma'arif Sampang

ARTICLE INFO

Article history:

Received: 10-01-2025

Accepted: 12-05-2025

Published: 14-07-2025

Keyword: LitSim
Digital, innovation,
literary listening,
learning, digital
media, AI analytics

ABSTRACT

This research aims to develop a digital technology-based literature listening learning strategy, called LitSim Digital (Literature Listening Digital). This strategy integrates digital media, interactive applications, and artificial intelligence (AI)-based analytics to improve listening skills and appreciation of literary works. The research and development (R&D) method was used in developing this strategy, with stages including needs analysis, strategy design, digital media development, testing, evaluation, and revision. The implementation of LitSim Digital involves five learning syntaxes: orientation and motivation, exploration, elaboration, evaluation, and reflection. The results showed that the strategy increased students' motivation, engagement, and understanding of literary elements, such as plot, character, and theme. The integration of AI analytics provided automated feedback that helped students improve their understanding. This research recommends wider implementation of LitSim Digital to support literature learning relevant to the digital age.

INTRODUCTION

Listening skills are essential to language learning, especially in understanding and appreciating literary works. This skill involves passive listening skills and the ability to analyze, evaluate, and provide relevant responses to messages conveyed through oral media. In literature, listening skills are a primary means of understanding the aesthetic

* Corresponding author.

E-mail addresses: aminmohammad232@gmail.com (Mohammad Amin)

ISSN: 2523-613X (Online) - ISCE: Journal of Innovative Studies on Character and Education is licensed under Creative Commons Attribution-ShareAlike 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>).

moral, and cultural values of literary works (Rost, 2011; Taufik, 2019).

Unfortunately, listening skills often receive less attention in the classroom learning process. This is because traditional learning methods focus more on reading and writing skills, while listening is a simple activity that does not require special development (Hidayat, 2020). As a result, many students cannot understand literary works in depth, especially when presented in audio or oral form.

In today's digital era, technology has opened up new opportunities to improve listening skills, especially in literature learning. Digital technologies such as audiobook applications, podcasts, and interactive platforms allow students to access literary works flexibly, anytime and anywhere (Puspita, 2021). In addition, artificial intelligence (AI) has significantly contributed to the field of education, including in listening and learning. AI can be used to provide automatic feedback, analyze students' listening skills, and adjust learning materials according to individual needs (Sun, Wang, & Zhao, 2020).

One of the innovations that can be implemented in listening learning is the LitSim Digital (Literature Listening Digital) learning strategy. This strategy integrates digital media, interactive applications, and AI-based analytics to create a more engaging and practical learning experience. With LitSim Digital, students not only listen to literature but are also involved in the process of reflection, analysis, and collaboration through technology relevant to today's generation's needs (Nugroho, 2022).

LitSim's Digital strategy is designed to answer the challenges in learning to listen to literature. Using digital media, students can access various literary works in audio format accompanied by interactive guides. In addition, AI-based analytics can help teachers monitor the development of students' listening skills in real-time. This approach improves listening skills and enriches students' appreciation of literary works through modern and relevant learning experiences.

With the LitSim Digital strategy, it is hoped that learning to listen to literature can be more effective, fun, and relevant to the needs of the 21st century. This article will further discuss the concept of LitSim Digital, its development methods, and its implementation in learning to listen to literature.

LITERATURE REVIEW

Listening to Literature in Language Learning

Listening is one of the basic skills in language learning that serves as a foundation for speaking, reading, and writing skills. This skill involves the process of active listening, understanding the content of the message, and analyzing and evaluating the information received (Rost, 2011). In literature, listening serves to understand the storyline and appreciate literary elements such as theme, setting, character, language style, and the moral message contained therein (Taufik, 2019).

Oral literature, such as folklore, poetry, and drama, is often an ideal medium for practicing listening skills. This listening process helps students understand the structure and content of literary works and develops critical thinking skills and empathy for the experiences told (Puspita, 2021). By listening, students can feel the nuances of emotions conveyed through intonation, word emphasis, and rhythm, which are difficult to obtain only through reading the text.

In learning to listen to literature, the role of the teacher is significant as a facilitator. Teachers must create a supportive environment and provide relevant and engaging materials to students. In addition, learning strategies that involve digital technology can increase the effectiveness of listening learning. For example, audiobooks and podcasts allow students to listen to literary works with good sound quality and in-depth interpretation (Nugroho, 2022).

Furthermore, literary listening learning can be integrated with AI-based analytic technology. This technology can analyze students' responses to the material, provide real-time feedback, and adjust the difficulty level according to students' abilities. Thus, learning becomes more personalized and adaptive, helping students to develop according to their potential (Sun et al., 2020).

Therefore, learning to listen to literature aims to improve technical listening skills and hone critical analysis, empathy, and art appreciation. By utilizing digital technology and innovative approaches, such as the LitSim Digital strategy, learning to listen to literature can provide a richer and more meaningful learning experience.

Technology in Listening and Learning

Digital technology has significantly changed language learning, including listening skills. Applications such as audiobooks, podcasts, and interactive platforms allow

students to access various audio resources flexibly, anytime, and anywhere (Puspita, 2021). These technologies also provide different types of audio content that can be tailored to learning needs, such as short stories, poems, or interviews relevant to the curriculum.

In addition, artificial intelligence (AI)-based analytics technology has become a promising innovation in listening learning. With AI-based analytics, students can receive automatic feedback on their listening skills, including analysis of intonation, speech rate, comprehension errors, and areas for improvement (Sun, Wang, & Zhao, 2020). This allows students to learn independently and improve their weaknesses more effectively.

AI technology also enables more personalized and adaptive learning. For example, AI-based learning systems can adjust the difficulty level of the material to the student's ability, recommend additional material, or suggest relevant practice activities. This way, the technology can create a learning environment supporting individualized student development (Nugroho, 2022).

The use of technology in listening lessons also increases student engagement. For example, through interactive platforms, students can collaborate with classmates to analyze and discuss the content of the material listened to. In addition, applications such as gamification in listening learning can increase student motivation by presenting challenges and rewards in the learning process (Puspita, 2021).

Digital technologies facilitate access to learning resources and enable more innovative and engaging teaching. By utilizing these technologies, listening learning can be developed into a richer, adaptive, and meaningful experience for students in the digital era.

Digital LitSim Development Method

The LitSim Digital strategy was developed using a research and development (R&D) model. The main stages of development include:

1. Needs Analysis

The needs analysis stage in the development of LitSim Digital aims to identify problems faced in learning to listen to literature in the classroom and opportunities that can be utilized through the integration of digital technology. This analysis involves collecting data from various sources, such as interviews with teachers, surveys of students, and direct observations in the learning environment (Gall, Gall, & Borg, 2007).

The results of this analysis will provide an in-depth picture of the gap between existing

learning practices and the actual needs of students.

One of the main problems that is often found is the lack of learning materials for listening to literature that is interesting and relevant to students. Existing materials are often monotonous and do not utilize the potential of available digital technology (Hidayat, 2020). In addition, teachers face challenges in providing specific and in-depth feedback on students' listening skills, especially in classes with large numbers of students.

Digital technology offers a potential solution to address this issue. Using digital applications such as audiobooks and podcasts, students can access various literary audio materials with high quality and rich interpretation (Puspita, 2021). In addition, AI-based analytics technology can assist teachers in automatically analyzing students' abilities and providing more personalized and targeted feedback (Sun, Wang, & Zhao, 2020).

Through a comprehensive needs analysis, LitSim Digital developers can design features that suit the needs of students and teachers. These features include interactive guides, an AI-based automated scoring system, and access to a digital library containing various literary works in audio format. With this approach, LitSim Digital is expected to increase the effectiveness and efficiency of learning to listen to literature.

2. Strategy Design

The LitSim Digital development method involves several strategic steps that must be designed in a structured manner to achieve optimal learning objectives. These steps include orientation, exploration, elaboration, evaluation, and reflection. Below is a more in-depth description of these steps in the context of LitSim Digital.

2.1 Orientation

In the orientation phase, the main objective is to prepare learners to enter the digital simulation by providing a basic understanding of the topic to be studied. Orientation includes an introduction to the learning objectives, basic instructions on using the simulation platform or application, and an overview of the flow that will be followed in the simulation. The orientation aims to build learners' mental and cognitive readiness before they engage in further exploration.

2.2 Exploration

In the exploration stage, learners are actively involved in the simulation to understand deeper material or concepts. At this stage, learners can conduct experiments, test hypotheses, and explore various variables in the simulation. In LitSim Digital, exploration provides a space for learners to access information, interact with existing systems, and investigate the various possibilities that can result from the decisions they make in the simulation. This approach supports discovery-based learning that enhances deep understanding.

2.3 Elaboration

Elaboration is the stage where learners can develop their knowledge further by applying what has been learned during exploration in the broader context. Here, learners are encouraged to relate the knowledge they gain from the simulation to familiar concepts and extend those ideas to new, more complex situations or problems. Elaboration helps deepen learners' understanding and allows them to see the connections between concepts.

2.4 Evaluation

The evaluation stage serves to assess the extent to which learners have achieved the learning objectives that have been set. This evaluation can be done through various methods, such as tests, quizzes, or project-based assessments conducted in the simulation. In addition, evaluation also includes collecting feedback on the learning process undertaken, both from learners and simulation managers. This aims to evaluate the effectiveness of the simulation in improving learners' understanding of the material taught.

2.5 Reflection

Reflection is the final stage that allows learners to integrate their experiences in the simulation with broader knowledge. It allows learners to assess their decisions and actions during exploration and elaboration, and understand where they went wrong and how to correct them in the future. This process is essential for increasing self-awareness and deepening the learning that has taken place.

3. Digital media Development

In the digital media development step, integrating various innovative digital media, such as audiobooks, interactive apps, and artificial intelligence (AI)-based analytics, is key in creating a dynamic and interactive learning experience. These digital media enrich learners' learning experience and provide opportunities to personalize their learning according to individual needs and learning styles.

3.1 Audiobook

Audiobooks are digital media in the form of sound recordings that can be used to deliver learning materials through narratives or stories. Audiobooks are often used to support literacy-based learning, as they can enrich learners' understanding of more complex texts or help those struggling to read texts visually. Audiobooks also support auditory-based learning, where learners can listen to materials anytime and anywhere. Integrating audiobooks in LitSim Digital provides an opportunity to deepen understanding, especially for learners who digest information more easily through audio.

3.2 Interactive Application

Interactive applications are digital platforms that allow learners to engage directly in learning. In the context of LitSim Digital, these applications can be computer-based simulations, educational games, or web-based learning tools that allow direct and interactive exploration of concepts. It allows learners to try different approaches, test different outcomes, and receive real-time feedback. The advantage of interactive apps is their ability to present material more engagingly and provide an active learning experience, allowing learners to learn through play.

3.3 AI-Based Analytics

The integration of artificial intelligence (AI)-based analytics in LitSim Digital serves to monitor and analyze learner learning data automatically. AI can track learners' progress, assess their performance in various tasks or simulations, and provide learning recommendations tailored to individual needs. For example, AI can analyze learners' response patterns to various simulation scenarios and provide feedback that can help them correct gaps in their understanding. In addition, AI can generate reports that help educators understand learners' progress and adjust their teaching strategies accordingly.

3.4 Advantages of Digital Media Integration

Integrating digital media such as audiobooks, interactive apps, and AI-based analytics brings many advantages in the context of learning. First, it enables personalization of learning, where each learner can learn in a way that best suits their learning style, visual, auditory, or kinesthetic. Second, using this technology increases learner engagement, as they can engage in more interactive and engaging learning. Thirdly, it also enables more efficient learning, with faster feedback and more in-depth analysis of learner performance.

4. Test Run

Piloting is an essential stage in the LitSim Digital development method, which aims to test the effectiveness of the previously designed learning strategies. At this stage, the LitSim Digital strategy is applied to groups of students to assess how well the digital media and applied learning approaches work in a real learning context. The pilot allows evaluation of learning impact, user experience, and outcomes achieved, and provides an opportunity to make improvements before wider implementation.

4.1 Trial Objectives

The main objective of the pilot is to evaluate the extent to which the implemented LitSim Digital strategy effectively improves learners' learning outcomes. This includes analyzing whether students can understand and apply the concepts taught through digital media, such as simulations, interactive apps, or audiobooks. In addition, the pilot also aims to see how these technologies can improve engagement, motivation, and the overall learning experience. Trials provide the data needed to assess whether this approach can be implemented on a larger scale or needs customization.

4.2 Trial Process

The trial was conducted in several stages, from preparation to analysis of the results. The following is the general testing process in the development of LitSim Digital:

- **Preparation:** In this stage, the LitSim Digital developer prepares the materials to be used during the trial, determines the group of students to be involved, and prepares clear instructions on using the available digital media. It is also essential to set clear objectives and indicators of success so that the trial results can be evaluated objectively.

- **Implementation:** The pilot test is conducted by applying the LitSim Digital strategy to groups of students. During the implementation, students will participate in learning sessions using the developed digital media, such as computer-based simulations, interactive applications, or audiobooks. Teachers and facilitators will monitor this process to ensure the media and strategies work as intended.
- **Data Collection:** During the pilot test, data is collected to assess the strategy's effectiveness. This data can include test results, quizzes, assignments, and observations regarding students' interactions with the digital media. In addition, surveys or interviews with learners can also be conducted to find out their experiences, challenges faced, and their perceptions of the learning received.
- **Evaluation and Analysis:** Once the data has been collected, the next stage is to analyze the pilot test results to evaluate the implemented strategy's success. This evaluation includes measuring the effectiveness of the digital media in improving students' understanding of the material, their engagement in the learning process, and whether the learning objectives were achieved. This analysis can be used to determine if any aspect of the strategy needs to be improved or adjusted.

4.3 Benefits of Piloting

The main benefit of piloting is to ensure that LitSim Digital works effectively in a real learning environment. Piloting provides an opportunity to detect unforeseen problems or constraints in using technology and learning strategies. In addition, piloting allows developers to collect data that can be used to make better decisions regarding revisions or improvements to the implemented strategies. It also allows teachers and learners to adapt to technology in the learning process.

4.4 Improvements Based on Trial Results

Once the trial has been conducted, improvements or revisions may be needed based on the feedback received. This could include refinements in the design of the digital media, changes in teaching strategies, or adjustments in how the app or simulation tool is used. This process ensures that LitSim Digital is increasingly effective and suited to students' needs.

a. Evaluation and Revision: Using the pilot test results to refine the strategy

The evaluation and revision stage is an essential step in the LitSim Digital development method that aims to refine the learning strategy based on the results of the pilots that have been conducted previously. This process refers to gathering feedback from various stakeholders (e.g., learners, teachers, and developers) to determine the strengths and weaknesses of the strategies that have been implemented. The results of this evaluation are then used to make necessary revisions or improvements to ensure the strategy's effectiveness in achieving the learning objectives.

b. Purpose of Evaluation and Revision

The primary purpose of the evaluation and revision stage is to ensure that the LitSim Digital strategy can be optimized based on the data collected during the pilot. Evaluation helps identify whether the learning objectives are achieved and whether the digital media and applications used meet the needs of the learners. In addition, this stage also aims to analyze whether there are technical or pedagogical issues that need to be fixed to make LitSim Digital more effective.

c. Evaluation Process

The evaluation process is usually done by collecting and analyzing various types of data obtained during the trial, such as:

- **Learner Performance Data:** Evaluation begins with assessing learners' learning outcomes, such as test scores, quizzes, and assignments related to the material taught. This data helps determine the extent to which learners master the topics taught through LitSim Digital.
- **Observation of Digital Media Use:** Direct observation of how learners interact with digital media (simulations, interactive apps, or audiobooks) provides insight into aspects that need improvement, such as user interface, speed of response, and ease of navigation.
- **Feedback from Learners:** Surveys or interviews with students regarding their experiences while using LitSim Digital provide a first-hand perspective on what they found helpful, challenges faced, and valuable or confusing

components.

- **Feedback from Teachers:** Teachers also play an essential role in the evaluation, as they can provide feedback on how the LitSim Digital strategy supports (or hinders) the teaching process and classroom management.

d. Revision Based on Evaluation

Once the evaluation has been conducted, the results are used to identify areas that need improvement or revision. This revision process may include several aspects:

- **Digital Media Improvement:** Based on feedback from learners and teachers, the design of digital media used in LitSim Digital can be improved. For example, if audiobooks do not sound clear or interactive apps are too complex, changes in interface design, sound quality, or app features can be made.
- **Adjustment of Teaching Methods:** Instructors can adjust teaching strategies by integrating more or less technology and adjusting teaching methods to suit learners' needs better. For example, teachers can provide more explanations or tutorials if a simulation is too difficult to understand.
- **Modification of the Assessment System:** Based on the evaluation results, the system can be updated to include more comprehensive feedback or to ensure fairer and more equitable assessment.
- **AI Feature Enhancement:** If AI is used for analytics, further developments can be made to improve the accuracy of learner performance analysis and provide more specific and helpful recommendations.

e. Benefits of Evaluation and Revision

The main benefit of evaluation and revision is to improve the quality and effectiveness of the LitSim Digital strategy in achieving the desired learning objectives. With a structured evaluation process and proper revision, LitSim Digital can be improved continuously to make it more suitable for learners' needs. In addition, evaluation and revision allow continuous development to address issues that may not have been detected during the design and piloting phases.

4.5 Continuous Improvement

The evaluation and revision process does not stop after one cycle. Evaluation and improvement should be done periodically to ensure LitSim Digital remains relevant to the development of educational technology and learners' needs. The learning from each revision can enrich the design and implementation of LitSim Digital in the future.

Implementing LitSim Digital in literature learning integrates technology to create a more interactive and immersive learning experience. This process involves five learning strategies to enhance students' understanding of literary works while utilizing digital technology. The following is a further elaboration on each of these learning syntaxes.

a. Orientation and Motivation

At the orientation stage, the teacher starts the learning by introducing the literary works to be studied and provides an overview of the use of technology to support the learning process. The primary purpose of this orientation is to motivate students to be more enthusiastic about learning by utilizing relevant technology, such as audiobooks, podcasts, or interactive applications.

The teacher invites students to recognize the literary work and connects it to relevant contexts in their lives. For example, teachers can invite students to discuss the themes in the literary work to be studied and how technology can deepen their understanding of the work. Here, it is essential to build students' interest by presenting technology as a tool that enriches the learning experience, rather than an obstacle or distraction.

Research shows that a good introduction to technology and relevant content can increase student motivation (Dede, 2009). High motivation will encourage students to participate more actively in technology-based learning.

b. Exploration

The exploration stage is when students explore literature through prepared digital media, such as audiobooks or podcasts. Audiobooks allow students to listen to literature in a more accessible and immersive way, while podcasts can be a more flexible format that can be accessed anytime.

At this stage, students are given guidance through sparking questions designed to focus their attention on essential elements in the literary work, such as theme, character, and plot. These questions help students analyze and explore the work's meaning. Students can also be invited to reflect on how the elements of the story are relevant to the current context or their personal experiences.

This digital media-based exploration approach improves students' understanding of literary texts (Gee, 2003). Audiobooks and podcasts provide an immersive experience that allows students to more easily absorb the material and find connections between the text and the real world.

c. Elaboration

Once students have accessed the material via audiobook or podcast, the elaboration stage focuses on further processing the information they received. At this stage, students use AI-based analytics to analyze their responses to the material that has been learned. For example, AI-based apps can help students identify patterns or themes in the text they are listening to or reading and provide feedback on misunderstandings.

In addition, students discuss in groups to produce digital products, such as infographics or vlogs, that summarize and analyze essential elements in literary works. These group discussions allow students to share their understanding, enrich each other's insights, and develop communication and collaboration skills. The resulting digital products can express students' understanding of literary works creatively and meaningfully.

Applying AI analytics in literature learning allows students to receive more personalized and in-depth feedback on their understanding (Siemens, 2005). This supports a more data-driven and individualized approach to learning, allowing students to learn in a way that suits their needs.

d. Evaluation

The evaluation stage measures the extent to which students understand the material that has been learned. Teachers can use app-based quizzes to measure students' understanding of the literary works that have been explored. Quiz apps can be customized to suit learning needs, provide immediate feedback, and facilitate data-driven teaching.

In addition, students are required to present the results of their analysis, either in the form of digital presentations or written reports. These presentations allow students to communicate their understanding of the literary works to classmates and teachers. This process not only measures students' cognitive understanding but also their ability to convey information in a clear and structured way.

These app-based assessments and digital presentations have increased students' engagement in the learning process and provided a clearer picture of their learning outcomes (Reeves, 2006).

e. Reflection

At the reflection stage, teachers and students together reflect on the learning process that has been carried out. The teacher can ask reflective questions to encourage students to evaluate their learning experience, such as "What did you learn from this piece of literature?" or "How did the technology help you understand the material better?".

This reflection aims to help students realize their learning process and outcomes and foster metacognitive awareness of how they learn. The reflection process also provides an opportunity for teachers to obtain feedback on students' learning experiences and identify areas for improvement in the future.

The reflection process effectively improves the quality of learning and provides opportunities for continuous improvement in the educational process (Mayer, 2009).

By implementing these five learning strategies, LitSim Digital can create a more thorough and engaging literature learning experience that combines technology with immersive and interactive learning methods.

RESULT AND DISCUSSIONS

Result

Initial trials of the LitSim Digital strategy showed that integrating digital media and AI-based analytics significantly impacted student motivation and engagement in literature learning. The strategy allows students to learn in a more

interactive and personalized way, and gives them a more holistic experience in understanding literature. The following discussion will elaborate on this pilot's main results, focusing on student motivation and engagement and the development of critical and creative thinking skills.

1. Increased Student Motivation and Engagement

One of the key findings of the pilot was the increased motivation of students to engage in literature learning. Digital media, such as audiobooks and podcasts, allow students to access materials flexibly and in-depth, thus increasing their interest in the literary works being taught. Audiobooks, which allow students to listen to stories or literary texts, provide a more engaging experience than traditional reading, especially for students who may have difficulties reading long texts. This aligns with research showing that using technology in education can increase students' interest and motivation, especially when relevant to their interests (Mayer, 2009).

In addition, using AI technology to provide automated feedback also plays an essential role in increasing student engagement. This technology provides immediate information on students' understanding of the material and encourages students to continue learning and correct their mistakes in real time. This instant feedback reduces the reliance on teachers for assessment, allowing students to learn independently and in a more personalized way. Research by Clark and Mayer (2016) confirms that technology that provides immediate feedback can improve learning effectiveness by accelerating the learning process and reinforcing mastery of the material.

Students also showed greater interest in the material learned through digital collaboration. Students are more engaged in discussion and problem-solving when asked to work together in groups and produce digital products, such as infographics or vlogs. This collaboration allowed them to share ideas, broaden their horizons, and use technological skills to convey their understanding more creatively. These results support constructivist learning theory, which states that students learn better when they engage in active learning that requires them to interact with the material and their peers (Vygotsky, 1978).

2. Development of Critical and Creative Thinking Skills

In addition to increasing motivation, the LitSim Digital strategy also contributes to developing students' critical and creative thinking skills. Through text analysis using AI analytics, students can more easily understand essential elements in literary works, such as theme, character, and story structure. AI analytics provides deeper insights into students' responses to the material and allows them to see patterns or connections that were previously undetected. This can stimulate deeper analytical thinking, thus improving students' ability to critique and analyze literary texts more systematically.

In addition, when students work in groups to produce digital products, they are challenged to think creatively in processing the information they have learned. Creating an infographic or vlog requires visually organizing ideas and conveying messages clearly and compellingly. This activity integrates critical and creative thinking skills, essential in 21st-century learning (Saavedra & Opfer, 2012). Collaboration in creating digital products also allows students to develop communication, cooperation, and problem-solving skills, all essential in everyday life and the professional world.

According to Nugroho (2022), digital collaboration in learning helps students be more active in thinking and creating solutions. In the context of literature learning, it allows students to dig deeper into literary works and express their interpretations in more innovative and relevant ways. Therefore, technology integration enriches the learning experience and allows students to hone all-important 21st-century skills.

3. Implications for Literature Learning

Implementing LitSim Digital in literature learning opens up many opportunities to change how we teach and learn literature. Using digital media and AI technology in learning allows students to gain a more in-depth and personalized experience in understanding literary works. In addition, by integrating technology in learning, students can develop broader skills, such as critical thinking, creativity, collaboration, and communication, which are much needed in this increasingly digital and connected world.

However, some challenges need to be considered in implementing this strategy, such as the need for teachers to be trained to use these technologies effectively and ensure equal access for all students to the necessary devices and technologies. Nonetheless, the results of this pilot suggest that LitSim Digital has excellent potential to enhance literature learning, both in terms of student motivation and broader skill development.

Implementing LitSim Digital could pave the way for a new approach to literature learning that effectively improves comprehension of the material and develops essential skills that will be useful for students in their future lives.

CONCLUSIONS

This study shows that implementing the LitSim Digital strategy in literature learning can increase students' motivation, engagement, and critical and creative thinking skills development. Integrating digital media such as audiobooks, podcasts, and AI-based applications allows students to go deeper into the learning material in a more interactive and personalized way. The use of technology in learning not only encourages students to be more interested and motivated in studying literary works but also provides faster and more relevant feedback, which supports a more efficient learning process.

The pilot test showed that students were more engaged in learning, individually through self-exploration and collaboratively in group discussions and digital product creation. This collaborative process helps students develop critical thinking skills in analyzing literary works and creative skills in producing digital products such as infographics or vlogs. This digital collaboration also improves students' communication and problem-solving ability, essential skills in this digital era.

However, despite the very positive results, challenges in implementing LitSim Digital still exist, especially related to the readiness of teachers to utilize this technology effectively and ensure equal access for all students. Therefore, more intensive training for teachers and adequate technological support are needed to

ensure that all students can utilize the full potential of LitSim Digital.

Overall, the results from this study support the idea that the LitSim Digital strategy can be a highly effective tool in transforming the way literature learning is conducted, providing a more well-rounded experience and equipping students with much-needed 21st-century skills.

In conclusion, implementing LitSim Digital provides an excellent opportunity to enrich the literature learning process, make it more engaging, and develop the skills students need in an increasingly technology-dependent world.

REFERÉNCES

- Anderson, C. A., & Dill, K. E. (2000). Video games and aggressive thoughts, feelings, and behavior in the laboratory and life. *Journal of Personality and Social Psychology*, 78(4), 772–790. <https://doi.org/10.1037/0022-3514.78.4.772>
- Clark, R. C., & Mayer, R. E. (2016). *E-learning and the science of instruction: Proven guidelines for consumers and designers of multimedia learning* (4th ed.). Wiley.
- Dede, C. (2009). Immersive interfaces for engagement and learning. *Science*, 323(5910), 66–69. <https://doi.org/10.1126/science.1167311>
- Gall, M. D., Gall, J. P., & Borg, W. R. (2007). *Educational Research: An Introduction* (8th ed.). Boston: Pearson Education.
- Geary, D. C. (2011). *Learning disabilities in the era of the RTI model*. SAGE Publications.
- Gee, J. P. (2003). What video games have to teach us about learning and literacy? *Computers in entertainment (CIE)*, 1(1), 20-20. <https://doi.org/10.1145/950566.950595>
- Hidayat, R. (2020). Pembelajaran Menyimak: Tantangan dan Peluang di Era Digital. *Jurnal Pendidikan Bahasa dan Sastra*, 12(2), 135-145.
- Ke, F. (2016). A case study of integrating problem-based learning and digital media in a high school science classroom. *Journal of Educational Technology & Society*, 19(3), 212-221. <https://www.jstor.org/stable/jeductechsoci.19.3.212>
- Mayer, R. E. (2005). *The Cambridge Handbook of Multimedia Learning*. Cambridge University Press.
- Mayer, R. E. (2009). *Multimedia learning* (2nd ed.). Cambridge University Press.
- Nugroho, A. (2022). Penggunaan Media Digital dalam Meningkatkan Keterampilan Berbahasa. *Journal of Digital Learning*, 5(1), 45-60.
- Nugroho, S. (2022). Teknologi pendidikan dalam konteks pembelajaran abad ke-21. *Jurnal Pendidikan Teknologi Informasi*, 10(1), 45-56.
- Puspita, D. (2021). Audiobooks sebagai Media Pembelajaran Bahasa di Sekolah Menengah. *Jurnal Inovasi Pendidikan*, 14(3), 120-130.
- Reeves, T. C. (2006). Design research from a technology perspective. In *Educational design research* (pp. 52-66). Routledge. <https://doi.org/10.4324/9780203965543>
- Rost, M. (2011). *Teaching and Researching Listening*. London: Pearson Education.
- Saavedra, A. R., & Opfer, V. D. (2012). *Teaching and learning 21st century skills: Lessons from the learning sciences*. The International Academy of Education.
- Sun, Y., Wang, H., & Zhao, X. (2020). *Artificial Intelligence in Language Learning*:

- Opportunities and Challenges. *Computers and Education*, 156, 103945.
- Taufik, M. (2019). *Apresiasi Sastra: Panduan untuk Guru Bahasa Indonesia*. Jakarta: Gramedia.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Wiggins, G., & McTighe, J. (2005). *Understanding by design (2nd ed.)*. ASCD.