

Research Article

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# Digital Textbooks in Drama Education: Improving Accessibility and Quality of Literature Learning through Integration of Local Wisdom

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## Abstract

**Objectives.** Drama learning is still dominated by the use of conventional textbooks. For this reason, the purpose of this research is to explore the development of digital textbooks, with cultural orientation and local wisdom.

**Materials/methods.** The research method follows research and development procedures. Data was collected through tests, student questionnaires, and in-depth interviews. Data were analyzed using independent tests and Pearson correlation testing. This method allows for the validation of locally-based learning designs through an iterative cycle involving lecturers and art practitioners. Data reliability is maintained through triangulation of sources and techniques to improve the accuracy and depth of findings.

**Results.** The results of the t-test showed that the experimental class had increased the average score from 65 to 90, significantly different from the control class,  $t = 9.23$ ,  $p < 0.001$ , Cohen  $d = 1.51$ . In addition, Pearson's correlation analysis showed a strong positive relationship  $r = 0.82$ ,  $p < 0.001$  between student engagement and understanding of local culture. These findings also show a significant improvement in students' affective and psychomotor aspects, which is shown through increased participation in discussions and staging activities. Thematic analysis of in-depth interviews reinforces the quantitative results by showing that students feel more connected to the material due to the relevant cultural context.

**Conclusion.** This study confirms that digital books based on local creativity can increase the effectiveness of drama learning, both in terms of outcomes and culture. Its implications are that culture-based e-learning policies are important to develop in theatre education.



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## 1. Introduction

In the context of digital transformation in the world of education, a new paradigm has emerged in learning, especially in the fields of literature and drama. As is widely known that, advances in information technology have shifted conventional print-based methods into dynamic, interactive, and adaptive learning models that are in accordance with the characteristics of the digital native generation (Avdiu & Holzinger, 2022; Lestari et al., 2022). In the context of drama education in higher education, especially in Indonesia, the traditional approach with print textbooks gradually faces challenges related to accessibility, content relevance, and pedagogical effectiveness (Lai & Pai, 2024; O'Grady et al., 2023). Therefore, mastery of the subject matter is not enough, but also psychomotor exploration, aesthetic appreciation, and internalization of values embedded in drama culture through comprehensive and extensive drama experiences (Zakopoulos et al., 2023). Meanwhile, learning methods that focus only on passive teaching are not enough to meet the needs of holistic learning oriented towards active student engagement (Wales & Mohamed, 2012). In contrast, the existence of digital books allows innovative learning solutions that enrich students' learning experiences through access to multimodal resources, providing a variety of print, audio, visual, and other interactive elements to improve students' comprehension and skills (Polymeris et al., 2018; Wang et al., 2020). However, despite the widespread adoption of digital technology in language and literature subjects, the increase in use still has the potential to present limitations, where research on the development of learning objects such as digital books has been widely conducted, but local intensity has not been specifically focused on literature studies, especially theater.

For this reason, local wisdom in literary and drama education plays an important role in reconstructing traditional values in the digital realm (Rubtsova & Poskakalova, 2021). Drama literature, as an expressive art product that emerges from everyday social and cultural life, has the function of aesthetic representation not as pure criticism, but as an aesthetic formative element in cultural self-identity (Lai & Pai, 2024; Lees et al., 2021; Sudigdo et al., 2024; Taufik & Pamungkas, 2025). Drama, both from a cultural and juridical perspective, should provide an academic experience motivated by the cultural context of students who are independently engaged with historical and local values in national culture. Furthermore, this dramatic aspect will be strongly negotiated with cognitive values (Budde & Samur, 2019; Cameron et al., 2017). However, most textbooks used in some comprehensive universities—defined here as higher education institutions that offer a wide range of multidisciplinary programs across sciences, humanities, and technology—do not only address dramatization but also its cultural dimension. In this context, the term comprehensive university refers to an institution whose broad curriculum scope requires teaching materials, including those in drama education, to adopt interdisciplinary approaches and incorporate local values relevant to their diverse academic environment.

In this case, the majority of the books used in compiling dramatization education are oriented to the Western perspective. However, this is appropriate nonetheless, as culturally oriented literacy can give rise to experiences of learning interventions that are appropriate to relevant situations, which increase cognitive awareness of cultural values applied to students from local life circumstances, as noted by Hammond (2014). Although digital book innovation must also be adaptive to relevant technologies and cultures where there is a connection between students and light reality with Vanda, digital developers and drama practitioners aim to achieve a more rational dramatic approach (Bories et al., 2022; Shah, 2017; Thao et al., 2022). In this regard, including regionally rooted narratives and performance traditions can offer students immersive experiences that are pedagogically rich and contextually grounded. Digital books can foster critical reflection and deepen students' intercultural competence by integrating dramaturgical elements derived from local customs and oral traditions. Furthermore, such integration enables a balanced epistemology that values indigenous knowledge systems alongside global theatrical conventions.

For this issue, various studies have been conducted to show the effectiveness of digital books at different levels of education (Cameron & Anderson, 2022). However, research explaining the integration of local culture in digital books specifically for drama learning and its effectiveness is still very limited. Therefore, the explanation of the material mentioned above is deliberately given as a first step to explain the concept of digital books and their suitability with local wisdom in drama learning (Choi & Park, 2024; Michalovich, 2023). For this reason, this research aims to answer the knowledge gap by designing a digital book based on local wisdom as a pedagogical instrument in drama learning in higher education. This research was conducted with the aim of designing the implementation and measuring the effectiveness of digital books as a learning medium that integrates local cultural elements to increase students' conceptual understanding, drama skills, and appreciation of traditional values in drama. Therefore, this research is expected to contribute to the development of literary and drama learning in higher education, as well as introduce appropriate learning models as an effort to preserve traditional values in digital technology formats. This book is an ideal educational solution in bridging the digital era with culturally charged learning.

## **2. Literature Review**

### **2.1. Digital Book Concept**

Digital books, as one of the innovations in technology-based educational transformation, are defined as interactive learning media that integrate text, images, videos, and audio elements designed for access through electronic devices such as computers, tablets, or smartphones (Haleem et al., 2022; Tuhuteru et al., 2023). Digital books facilitate students' access to learning materials anytime and anywhere, offering them flexibility regarding time and location (Zainuddin et al., 2020). Additionally, digital books have the potential to increase learning engagement, incorporating interactive features such as simulations, quizzes, and discussion forums (Subhash & Cudney, 2018). However, the main challenges in implementing digital books include the limitations of technological infrastructure, the refusal of faculty to adopt new technologies, and the need for user training to make optimal use of digital books. In the context of drama learning, digital books present an opportunity to combine textual and visual dimensions (Bozia, 2018; Mokoena & van Vuuren, 2023). These resources enhance the student learning experience, especially in exploring dramatic elements such as expressions, dialogues, and visual backgrounds.

### **2.2. Relevance of Local Wisdom**

Local wisdom refers to the manifestation of cultural values, traditions, and identities that exist and develop in social communities, serving as an ethical attitude against modernity (Tohri et al., 2022; Uge et al., 2019). In the context of drama education, local wisdom is not only a source of inspiration for students, but also an instrument for them to internalize traditional values that are consistent with the cultural context of the archipelago. The integration of local wisdom into digital drama books allows students to understand cultural values through local-based texts and dramatic performances (Davis, 2017; Yang & Xu, 2024). For example, traditional Javanese *dongkrek* or Balinese banners, along with various traditional dramas, can increase students' perception of cultural diversity, thus preserving the traditional drama culture that has been eroded by modernism (Bozia, 2018; Liyanawatta et al., 2022). As a result, digital books based on local wisdom represent not only a sound pedagogical strategy but also an effective strategy for cultural preservation.

### **2.3. Previous Research**

A number of studies have shown the effectiveness of the use of digital books as a tool that contributes to the quality of learning in various disciplines, including language and literature. Nagyová & Turcáni (2008). shows that multimedia presentations contribute to increased interest in learning. However, according to Tomlinson et al. (2011), this learning appeal may only represent learners in

problem-based learning compared to other methods. The Hetami Study (2010) emphasizes the importance of interlocation features in dramatic text studies to strengthen analytical skills" for students, while several other studies have not explored the integration of digital technology with local presence. A study by Henry (2000) showed that digital drama books facilitated by technology resulted in a percentage of affective competence; However, the differences between cultural theory and practice present a major challenge. This study tries to overcome these challenges while introducing digital books that integrate elements of local culture. Another study by Kim et al. (2020) shows that multimodal digital books that utilize digital books based on theater are better understood by students, but the pedagogical implications involve our experience with TPACK.

## **2.4. Theoretical Framework**

The development of digital books in this study is based on the theoretical framework of technology-based education, especially the Research and Development model by Gall et al. (1996, 2007), which includes systematic stages ranging from needs analysis to product evaluation (Aka, 2019). This approach allows for developing teaching materials based on student needs and relevant to the local context. In addition to this theory, the study also adopts the theory of constructivist learning, which focuses on activity-based student learning experiences (Arik & Yilmaz, 2020; Liyanawatta et al., 2022). As a drama education method, the Socratic method is very relevant in motivating students to explore critical understanding through dialogue and improvisation-based exploration of dramatic situations (Ganiron Jr, 2014). Therefore, its development is expected to integrate three dimensions: technology, culture, and pedagogy.

## **3. Methodology**

### **3.1. Material**

This research involved five universities in Central Java. This research involved five universities in Central Java Province, which were selected based on certain criteria to ensure the suitability of the context and diversity of representations. The selection criteria include: (1) universities that have language or drama arts education study programs, (2) the willingness of institutions and lecturers to actively participate in the research process and implementation of digital books, and (3) geographical locations that allow logistical coordination and the sustainability of research activities. Selection is carried out through initial surveys and official communication with the institution to ensure optimal involvement. This approach aims to ensure the validity of the context of research results in application in higher education.

The research subjects consisted of 150 students who were divided into an experimental class and a control class. The formation of experimental and control groups was carried out purposively by considering the equality of initial characteristics between the groups. The selection criteria include: (1) similarity of the study program and the student's semester level, (2) the use of previous conventional textbooks, and (3) the readiness and willingness of the teaching lecturer to carry out the learning scenario according to the research design. Each university includes two parallel classes that meet these criteria, where one class is designated as an experimental group (using digital books based on local wisdom) and the other class as a control group (using conventional textbooks). This approach is designed to minimize bias and ensure the comparative validity of learning outcomes.

Furthermore, the distribution of digital book implementation is divided into documented components based on systematic stages, namely Focus Group Discussion-based design, expert validation, limited trials, and wide-scale implementation (Wang et al., 2020; Yen et al., 2020). Each stage runs in accordance with the report instrument to measure its effectiveness in improving the student's dramatization competence. The conclusion of this study is expected to contribute to literary learning and drama research in higher education as well as introduce the right learning model as an

effort to preserve traditional values and technology in the form of digital books. Therefore, this book is ideal as an educational solution that integrates the digital era and learning.

In this study, digital books were created as an innovative alternative to conventional textbooks used in the field of drama education in various universities. Digital books, which refer to local wisdom, not only incorporate interactive and multimodal elements but also provide students with a learning experience that presents cultural values that are closer to their reality (Mills, 2015; Tzima et al., 2020; Yulia & Sutrisno, 2024). An analysis was carried out on textbooks used before the digital book intervention (in Fall 2023) regarding the use of textbooks in five universities in Central Java to understand the initial conditions and characteristics of textbooks. The list of textbooks used, as well as their strengths and limitations in the field of drama education, is summarized in Table 1 below.

**Table 1.** Drama Textbooks Used in College

Author	Publisher	Year of Publication	City	Book Advantages	Lack of Books
Cahyaningrum Dewojati	Gadjah Mada University Press	2010	Yogyakarta	Explain basic and structural theories of drama.	Lacks discussion of practical aspects and staging skills.
Drs. Hasanuddin WS., M. Hum.	Angkasa	1966	Bandung	One of the classic reference books in Indonesian drama studies.	Too theoretical and less applicable to modern learning.
Ahmad Jusmar, Ari Pahala Hutabarat, Imas Obariah, Iswadi Pratama	Teater Satu	(2010).	Bandar Lampung	Explore modern drama staging and production techniques.	Has not accommodated technological developments in drama learning.
Cahyaningrum Dewojati	Javakarsa Media	(2012).	Jakarta	Integrating drama learning with cultural studies.	Lacks visual illustrations and has no interactive elements.
Bintang Angkasa Putra	Citra Aji Pratama	(2012).	Klaten, Yogyakarta	Contains practical exercises to improve drama skills.	Less attention to technology integration in learning.
Harry D Fauzi	CV Armico	2007	Bandung	Provides a guide to writing drama scripts with a creative approach.	Does not discuss digital applications in drama script writing.
Jonathan Neelands	Dahara Prize	(1993).	Semarang	Explaining exploration and improvisation-based learning methods.	No practical guidance on the application of exploratory methods.
Adjib Hamzah	CV Rosda	1985	Bandung	Emphasizes the historical aspects and development of drama.	The historical context used is less relevant to the modern era.

Author	Publisher	Year of Publication	City	Book Advantages	Lack of Books
Herman J Waluyo	Hanindita Graha Widia	(2002).	Yogyakarta	Discuss literary theory and criticism from a drama perspective.	The historical context used is less relevant to the modern era.
Asul Wiyanto	Grasindo	(2002).	Jakarta	Focus on performance practice and drama techniques.	Does not provide digital or multimedia-based materials.
Tato Nuryanto	RajaGrafindo Persada	(2017).	Depok	Explaining the latest approaches in contemporary drama learning.	Lack of case studies relevant to drama education today.

It is clear from the analysis of the textbooks used that most books still adopt a traditional approach without including digital technology and interactivity (Fichman et al., 2014; Gagnon et al., 2016). While these books have strengths in presenting a strong conceptual foundation in the field of drama theory and practice, the limitations of both accommodating drama using modern technology and the low representation of local wisdom offered are major limitations. This research aims to create a digital book that not only solves these shortcomings but also makes learning more meaningful and has elements of local culture in digital technology-based teaching materials.

### **3.2. Procedure**

This study used a Research and Development approach based on the Borg & Gall (2007) model, because this model offers a systematic framework that allows the development of educational products through structured validation stages, from needs analysis to final product evaluation. The selection of this model is based on its suitability with the research objectives, namely designing and testing the effectiveness of digital books based on local wisdom in drama learning. In addition, the Borg & Gall model has been widely used in the development of innovative teaching materials in the field of education due to its flexibility in accommodating input from various stakeholders on an ongoing basis. The procedures in this study follow the systematic framework of the Research and Development (R&D) model designed to produce innovative and tested educational products (Gall et al., 1996, 2007; Gustiani, 2019; Sefriani et al., 2020). The research stages are described in detail as follows:

#### **1) Needs Analysis**

The research began by identifying the needs of students and lecturers regarding the use of drama learning modules. The data came from surveys, in-depth interviews, and Focus Group Discussions (FGD) for five universities. The identification of needs includes an assessment of the shortcomings of textbooks so far, students' tendency to prefer digital, and the need for digital books that integrate local wisdom (Saidah & Damariswara, 2021; Suskie, 2018).

#### **2) Digital Book Prototype Design**

From the needs analysis results, the research team produced an initial prototype of a digital book based on local wisdom. This prototype consists of several elements, namely dramatic texts, cultural illustrations, performance videos, and interactive components such as simulations and situation-dramatic quizzes (Lai & Pai, 2024; Rubtsova & Poskakaeva, 2021). Combined together, these

components offer abordation in the college drama learning curriculum and student-centered learning-oriented (Sultan et al., 2023).

### **3) Prototype Validation**

The developed digital book prototype was tested for validity by experts from various fields, including education, technology, and literature (Camburn et al., 2017; Lee et al., 2017). The validators assessed the content appropriateness, local cultural relevance, technical feasibility, and pedagogical potential of the product. Expert feedback was used to revise the prototype to improve quality and ensure the product met academic standards.

### **4) Limited Trial**

After the initial revision, the digital book prototype was tested on a small scale involving 30 students from one of the participating universities. At this stage, data was collected through observations, interviews, and questionnaires to evaluate students' perceptions of the design, readability, and functionality of the digital book. The results of this pilot test became the basis for product improvement before being implemented more widely (Choi & Park, 2024; Yen et al., 2020).

### **5) Product Revision**

Based on the limited trial results, a comprehensive revision of the digital book was carried out (Lewis et al., 2015; Straus et al., 2018). Improvements include improving visual design, adjusting interactive features, and adding local wisdom-based content based on student and lecturer feedback.

### **6) Large-Scale Trial**

The revised product was implemented in experimental classes at five universities. A total of 150 students were divided into two groups: an experimental class using local wisdom-based digital books and a control class using conventional textbooks (Lewis et al., 2015; Uge et al., 2019). The learning process lasted for one semester, with materials delivered consistently to both groups to ensure comparative validity.

### **7) Data Collection**

Data were collected through questionnaire instruments, in-depth interviews, observation sheets, and learning outcome tests. The questionnaire was designed to evaluate students' perceptions of the effectiveness, attractiveness, and pedagogical value of digital books (Liu et al., 2017; Shah, 2017). Learning outcome tests were used to measure students' dramatic skills, including cognitive, affective, and psychomotor aspects (Sefriani et al., 2020).

### **8) Data Analysis**

Data analysis was conducted using quantitative and qualitative approaches. Quantitative data were analyzed with descriptive and inferential statistical tests to measure significant differences between experimental and control classes (Polkinghorne, 2005). Qualitative data were analyzed thematically to identify patterns of response and perceptions of students and lecturers to the digital books developed (Halverson et al., 2014). Data were analyzed using a paired sample t-test to compare pretest and posttest scores in the experimental group. The use of these dependent group t-tests is consistent with an experimental design that emphasizes repeated measurements within the same group. In addition, Pearson's correlation analysis was used to evaluate the relationship between student engagement and understanding of local culture.

### **9) Improvement and Dissemination**

The final stage involves the final revision of the digital book based on the results of the large-scale trial. The improved digital book was disseminated through academic seminars and published in

scientific journals. This product is expected to be the main reference in technology-based drama learning and local wisdom in higher education (Saleem et al., 2022).

## 4. Results

This study evaluated the implementation effectiveness and testability of local wisdom-based digital books in the drama learning process, as well as their impact on improving the quality of conceptual understanding, dramatic skills, and cultural value appreciation for university students. More specifically, the analysis highlighted significant differences in most cognitive, affective, and psychomotor aspects of learning between the learning outcomes of students initially using digital books and students who continued to use conventional textbooks (Jhangiani et al., 2018; Lau et al., 2018). In addition, students' inclusion in the learning process of interactive mode-based technologies and lecturers' factors in the efficacy and efficiency of generalized digital books are also some of the main indicators in showing the success of an implementation. With that, this section covers the current state of textbook usage, the rise of digital books, and their impact on student learning outcomes.

### ***4.1. Initial Conditions: Traditional Textbook Analysis***



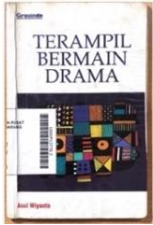
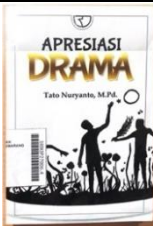
Conventional textbooks have served as the traditional source for drama education in most colleges for decades (Bozia, 2018; Marlatt, 2020). The conceptual foundation includes dramatic theory, staging techniques, and analysis of dramatic literary works (Michalovich, 2023; Mokoena & van Vuuren, 2023). However, as the boundaries of learning and technology continue to expand and students become increasingly comfortable with the so-called digital native generation, the effectiveness of conventional textbooks comes into question. In support of this argument, a survey conducted among 150 students from five different colleges revealed that 78% of respondents found conventional textbooks uninteresting and unresponsive to their individual needs. One aspect of this problem relates to the absence of visual and interactive elements in textbooks. In addition, the survey showed that 62% of students found these textbooks ineffective in promoting dramatic practice, as they mainly consisted of case study material with data unrelated to performance efforts. From the instructor's perspective, only 45% praised the suitability of this textbook for imparting local wisdom. The reason behind this is that many of these texts are not contextually relevant. In addition, there is the factor of their inability to build connections. They require students to make these connections independently (Anderson, 2018; Bell, 2016). Based on this analysis, Table 2 presents a summary of the initial condition of textbooks focused on theater materials, which are used in various colleges and universities in Indonesia:

In this regard, the limitations of conventional textbooks in drama education lie not only in their less interactive content, but also in their low contextual relevance. This has a direct impact on the motivation and involvement of students in understanding and practicing drama material as a whole. In this context, the results in Table 2 further strengthen the argument that the textbooks currently in use have not been able to answer modern pedagogical challenges, especially in the development of performative skills and the preservation of local wisdom. Therefore, new, more adaptive approaches, such as the integration of interactive digital media or project-based curricula, are needed to create a more dynamic, contextual, and meaningful learning experience. In addition, collaborations between educators, local artists, and educational technology developers can open up new opportunities in designing learning materials that are more contextual and relevant. Direct involvement of students in the production of plays based on local issues can also increase empathy and cultural understanding. Thus, the transformation of drama learning media becomes an urgent need to support transformative and inclusive learning.



Table 2. Early condition of textbooks

Physical image	Book Title	Authors	Publisher	Year of Publication	City	Paper Type	Mold Quality	Cover Type	Book Condition
	Drama: Sejarah, Teori, dan Penerapannya	Cahyaningrum Dewojati	Gadjah Mada University Press	2010	Yogyakarta	HVS 70 gsm	Black & White	Softcover	Good enough
	Drama: Karya dalam Dua Dimensi	Drs. Hasanuddin WS., M. Hum.	Angkasa	1966	Bandung	Opaque Paper	Black & White	Softcover	Not Good
	Buku Panduan Belajar Teater untuk SMA	Ahmad Jusmar, Ari Pahala Hutabarat, Imas Obariah, Iswadi Pratama	Teater Satu	2010	Bandar Lampung	HVS 80 gsm	Black & White	Softcover	Good
	Drama: Sejarah, Teori, dan Penerapannya	Cahyaningrum Dewojati	Javakarsa Media	2012	Jakarta	HVS 70 gsm	Black & White	Softcover	Good enough
	Drama: Teori dan Pementasan	Citra Aji Pratama	Bintang Angkasa Putra	2012	Klaten, Yogyakarta	Art Paper 90 gsm	Colored	Hardcover	Excellent
	Bagaimana Menulis Drama: Sebuah Tuntunan Praktis Menulis Drama bagi Kepentingan Pentas	Harry D Fauzi	CV Armico	2007	Bandung	HVS 80 gsm	Black & White	Softcover	Good
	Pendidikan Drama: Mengajarkan Drama	Jonathan Neelands	Dahara Prize	1993	Semarang	Opaque Paper	Black & White	Softcover	Not Good

Physical image	Book Title	Authors	Publisher	Year of Publication	City	Paper Type	Mold Quality	Cover Type	Book Condition
	Pengantar Bermain Drama	Adjib Hamzah	CV Rosda	1985	Bandung	HVS 70 gsm	Black & White	Softcover	Good enough
	Drama: Teori dan Pengajarannya	Herman J Waluyo	Hanindita Graha Widia	2002	Yogyakarta	HVS 80 gsm	Black & White	Softcover	Good
	Terampil Bermain Drama	Asul Wiyanto	Grasindo	2002	Jakarta	HVS 70 gsm	Black & White	Softcover	Good enough
	Apresiasi Drama	Tato Nuryanto	Raja Grafindo Persada	2017	Depok	HVS 70 gsm	Black & White	Softcover	Excellent

### 1) Advantages of Conventional Textbooks

- A Strong Theoretical Foundation

Most of these books present structural analysis of drama, staging techniques, and the history of theater development, which provides a solid theoretical foundation for students.

- Consistent and Structured Materials

Conventional textbooks present a clear curriculum, which allows lecturers to structure learning systematically without having to rely on additional materials.

- Good Physical Endurance

Some books, such as *How to Write a Drama* (2012), were printed with color art paper and hardcover, which improved their visual quality and durability.

### 2) Disadvantages of Conventional Textbooks

- Minimal Interactive Features

There are no multimedia elements such as videos, animations, or digital quizzes that can improve student understanding through hands-on experience.

- Lack of Local Cultural Representation

Most textbooks still use global or national references, without adjusting to dramas based on local wisdom that are more relevant to the student context.

- Does not facilitate practical learning

Students have difficulty understanding expression, vocal, and movement techniques because the book only provides written descriptions without visualization or direct demonstration.

- Diverse Mold and Material Quality

Some older books use opaque paper and black and white prints, which makes the book's durability lower and less visually appealing.

#### **4.2. Development of Digital Books Based on Local Wisdom**

The development of digital books based on local wisdom is carried out through three main stages: design, validation, and implementation (Hidayati et al., 2020; Uge et al., 2019). During the design phase, digital books are structured to support the integration of traditional dramatic texts with interactive visual and multimedia elements, including performance videos and role-playing simulations (Liyawatta et al., 2022; Mokoena & van Vuuren, 2023). Furthermore, expert validators provide input related to the consistency of cultural elements in book design and the relationship between curriculum content and learning. For example, in the scenario about dongkrek from Central Java, which is considered the text of an Indonesian drama performance. In this case, revision is necessary to ensure that moral and social values are explicitly understood by students. The average validation score for each content element is 4.7 out of 5, with a maximum of 5. The multimedia element received the highest score of 4.9, based on content related to video tutorials and interactive quizzes. Suggestions for revision have to do with better representation of visual elements and user navigation. Then, the initial phase of implementation through limited trials showed that 92% of students believe that the interactive features in digital books help students in recognizing and understanding dramatic elements much more effectively than traditional learning methods. However, it should be noted that the interface design ran into significant issues.

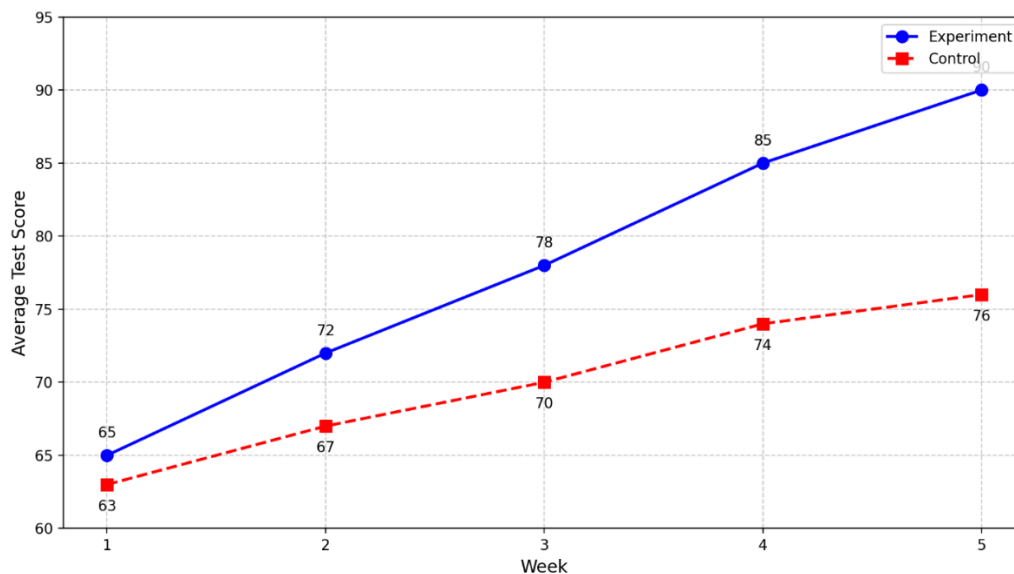
#### **4.3. The Effectiveness of Digital Books: A Comparative Analysis of Learning Outcome Test Results**

The effectiveness of the digital book was evaluated by comparing the learning outcomes between the experimental group using the digital book and the control group using the conventional textbook (Hung et al., 2014; Yen et al., 2020). The final test results showed that the mean score of students in the experimental group was 85.3 with a standard deviation of 6.2, while the control group reached 74.6 with a standard deviation of 7.8. Statistical analysis using independent t-test revealed a significant difference between the two groups ( $t(148) = 6.32, p < 0.001$ ). The findings suggest that, digital books based on local literature are more effective in improving students' understanding of dramatic concepts and practical skills.

Analysis using an independent t-test revealed a statistically significant difference between the experimental group ( $M = 85.3, SD = 6.2$ ) and the control group ( $M = 74.6, SD = 7.8$ ), with  $t = 9.23, p < 0.001$  and Cohen  $d = 1.51$ . This indicates that the utilization of local wisdom-based digital textbooks has a substantial effect in improving student learning outcomes compared to conventional textbooks (Kim et al., 2020; Uge et al., 2019). According to expert validation, the average score of the digital textbook based on local wisdom was 4.7/5, signaling its alignment with pedagogical principles and educational technology. Consequently, experts judged that the textbooks met the standards for relevant content, quality of interactive illustrations, and student accessibility (Hammond, 2014).

Furthermore, the level of expert validity for the digital book reached a score of 4.7 out of 5, indicating that the book also met high pedagogical validity and technological value. These findings

were corroborated by the effectiveness test (Matsuda et al., 2024), in which the experimental group's scores increased significantly compared to the control group. Statistical analysis revealed that the average score in the group using the digital book increased from 65 to 90 over the five-week period, while the control group's score increased from 63 to 76 ( $t(148) = 9.23, p < 0.001, \text{Cohen's } d = 1.51$ ). This is visualized in Figure 1.

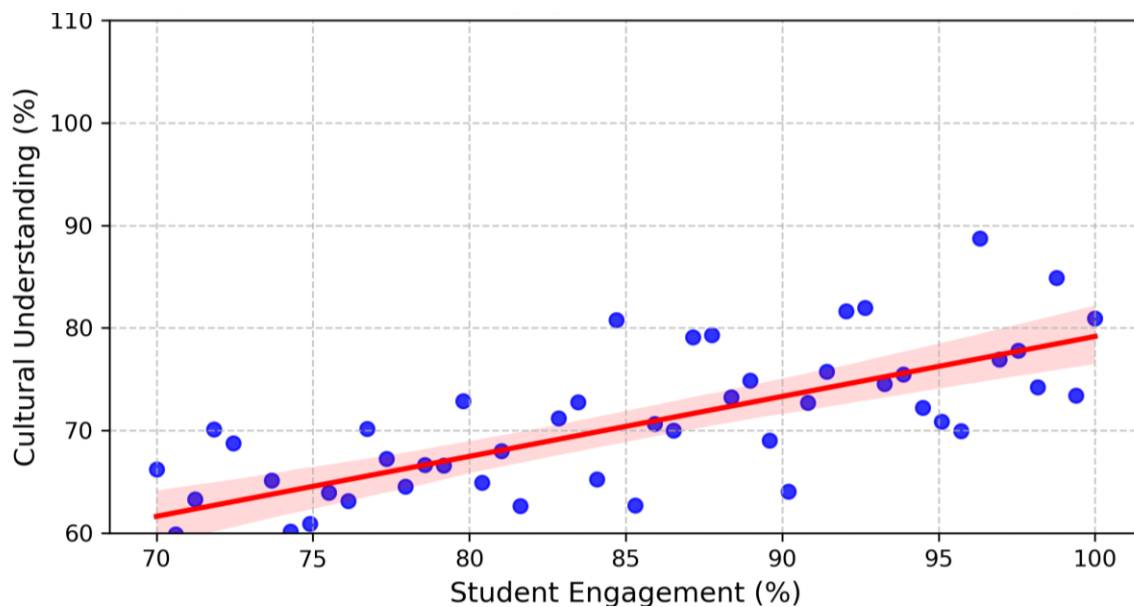


**Graphic 1.** Trend of Student Learning Outcomes in Drama Learning

As evidenced by Graph 1, learning outcomes improved from 5 to 1, with the experimental group showing a faster improvement from  $M = 65$  to  $M = 90$ , while the control group also showed an improvement from  $M = 63$  to  $M = 76$ . Yunizon's perspective explains that the integration of local wisdom-based digital books accelerates learners' understanding more significantly compared to conventional learning methods (Howles, 2023; Shah, 2017). To this end, both groups experienced identical angles of improvement, specifically 14 degrees of.

#### ***4.4. Student Involvement to Increase Understanding of Local Cultural Values***

The representation of the data provided by the observational results contradicts the perspective shown by the research findings. The level of student engagement in the experimental group, using digital books, was significantly more optimal and active compared to the control group. About 87% of the students actively participated in group discussions, role simulations, and performance evaluations, in contrast to only 58% of the students in the control group. This difference can be attributed to the interactive and multimedia elements inherent in digital books (Chin et al., 2009; Nagyová & Turcáni, 2008). This observation is further corroborated by the questionnaire data, which shows that 94% of students strongly agree that digital books are attractive because of the visual and interactive features that facilitate content comprehension.



**Graphic 2.** Relationship Between Student Engagement and Cultural Understanding ( $r = 0,82$ )

To answer the research question regarding the relationship between student engagement and understanding of local culture, a Pearson correlation analysis was conducted (Pearson, 1901; Yang et al., 2021). The results showed a very strong positive correlation between these two variables ( $r = 0.87$ ). Pearson's correlation analysis revealed that  $r = 0.87$ , signifying that higher levels of student engagement in the digital learning process corresponded with greater student understanding of local cultural elements in the teaching materials (Pearson, 1901; Yang et al., 2021). This finding suggests that a culture-based approach not only improves students' dramatic skills but also deepens their understanding of the social context in which performing arts exist (Budde & Samur, 2019; Cameron et al., 2017). This is evidenced by the graph below, which illustrates that students who actively participated in discussions, role simulations, and performance evaluations showed the highest level of cultural understanding. Consequently, this approach reinforces the initial argument that culture-based learning and technology-enhanced learning can not only increase engagement, thus optimizing academic benefits, but also deepen cultural understanding (Bozia, 2018; Reimann, 2008).

In this regard, in-depth interviews with students in the experimental group revealed that 82% of them felt a greater understanding of local cultural values from digital storybooks compared to conventional textbooks. They reported, for example, that they could more easily understand dramatic concepts of social reality through visual elements (Reimann, 2008; Tomlinson et al., 2011), such as a video staging of *dongkrek*, which represents social conflicts enacted in traditional Javanese society. At the same time, multimedia guided them through specific cases, allowing them to identify significant values and norms and, most importantly, recognize the function of norms and regulations in concrete situations (Chin et al., 2009; Nagyová & Turcáni, 2008). In contrast, students from the control group had difficulty internalizing cultural values as these were beyond their visual perception. In addition, 88% of instructors involved in the research process were of the opinion that digital books provide greater flexibility for the learning process. Evidence also suggests that interactive elements, such as simulation exercises and book-based case quizzes, which allow them to assess students' skills at a more measurable level, are more beneficial to the learning process.

## 5. Conclusion

In conclusion, digital books based on local wisdom contribute significantly to learning outcomes, academic engagement, and understanding of local culture. The findings of the study showed statistically significant differences in students' dramatic comprehension: independent t-test:  $t = 9.23$ ,  $p < 0.001$ , Cohen  $d = 1.51$ , suggesting that students in the experimental group who used digital books achieved better dramatic comprehension than those in the control group. A very significant correlation was observed between student involvement in learning and understanding of the local culture; Pearson's  $r$  analysis yielded  $r = 0.87$ . These results are in line with the local culture-based TPACK e-learning model, where the assimilation of technology, education, and digital culture influences the interactive, experiential, and contextual learning model. Therefore, digital books based on local wisdom strengthen the TPACK model in art education practices. Findings on digital books based on local wisdom bridge the gap in cultural e-learning studies and can be a model for art and literature education. The inclusion of books alone increases students' understanding of the dramatic aspects of digital books based on local wisdom. In addition, the learning model helps promote and protect cultural copyright despite the existence of digital technologies. The culture-based approach model in digital books for art education has a positive impact on learning methods. Overall, this research has positive implications for arts education programs in Indonesia and can be adopted by linguistic, artistic, and cultural disciplines around the world. The main conclusion of the study is that the existence of culture-based policies in digital books improves our understanding of systematic art and nature. The presence of local wisdom in learning consistently appreciates the inherent culture and stimulates the preservation and development of creativity, influencing the contextual approach in original works.

In addition, the application of digital books based on local wisdom is not only an innovative strategy for cultural preservation but also a means to ensure sustainability and educate future generations in the modern education system. Additional opportunities for exploration include the utilization of Augmented Reality and Virtual Reality in digital-based Drama learning, enabling a more immersive and practice-based learning experience. Immersive technology in art allows students to observe real-time representations of dramatic scenes, actor movements, and character interactions in an authentic cultural context. As a result, the development of digital books based on local wisdom is not only a pedagogical innovation but also a strategic contribution to the transformation of art education in the global digital ecosystem, with wider application for cultural learning in various disciplines. For practitioners, universities should also promote interactive policies for technology-based art and literature learning through a digital curriculum. Among the practical implications, universities should design policies that encourage the incorporation of local wisdom into digital-based arts and literature learning curricula. Further research can identify and explore the use and advantages of Augmented Reality and Virtual Reality technologies in digital-based drama learning and teaching.

## 6. Suggestion

Overall, to increase the effectiveness of drama learning in universities, the integration of digital books based on local wisdom will not be effective enough without a more adaptive and innovative pedagogical strategy. Therefore, digital books need to be integrated with a learning method based on curricula transformation that emphasizes a multimodal approach that allows students not only to read but also to interact directly with digital books through digital-based visual, audio, and dramatic simulation elements. In addition, lecturer training will also have a great influence on the optimal use of this digital book, in addition to diverting attention from the information transfer process to the learning process that provides an innovative experience foundation that will strengthen students' dramatic learning. In addition, academic policies that facilitate the digitization of culture-based

teaching materials need to be strengthened by providing adequate technological infrastructure, as well as ensuring that all students, especially those who are unable to access technology, get the same access. Collaboration with technologists, arts practitioners, and local communities also supports the development and distribution of this digital book by supporting the virtual reconstruction of traditional theater performances that will allow students to understand the content of the book in a more authentic historical context.

## Declarations

**Author Contributions.** Ahmad Ripai: Conceptualization, Original draft preparation, Methodology, Software, Field study Andayani: Data curation, Writing, Software, Validation, Visualization, Investigation, Writing–Review and Editing. Nugraheni Eko Wardani: Conceptualization, writing–original draft preparation, methodology.

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## References

- Aka, K. A. (2019). Integration Borg & Gall (1983) and Lee & Owen (2004) Models as an Alternative Model of Design-Based Research of Interactive Multimedia in Elementary School. *Journal of Physics: Conference Series*, 1318(1), 120–132. IOP Publishing.
- Anderson, R. C. (2018). Role of the Reader’s Schema in Comprehension, Learning, and Memory. In *Theoretical models and processes of literacy* (pp. 136–145). Routledge.
- Arik, S., & Yilmaz, M. (2020). The effect of constructivist learning approach and active learning on environmental education: A meta-analysis study. *International Electronic Journal of Environmental Education*, 10(1), 44–84.
- Avdiu, E., & Holzinger, A. (2022). Modeling of Innovative Teaching in an Austrian Primary School. *Journal of Educational and Social Research*, 12(2), 191–198. <https://doi.org/10.36941/jesr-2022-0044>
- Bell, L. A. (2016). Theoretical Foundations for Social Justice Education. In *Teaching for diversity and social justice* (pp. 3–26). Routledge.
- Bories, A.-S., Fabo, P. R., & Plecháč, P. (2022). Computational Stylistics in Poetry, Prose, and Drama. In *Computational Stylistics in Poetry, Prose, and Drama*. <https://doi.org/10.1515/9783110781502>
- Bozia, E. (2018). Reviving Classical Drama: Virtual Reality and Experiential Learning in a Traditional Classroom. *Digital Humanities Quarterly*, 12(3).
- Budde, A., & Samur, S. (2019). Making Knowledge/Playing Culture: Theatre Festivals as Sites of Experiential Learning. *Theatre Research in Canada-Recherches Théâtrales Au Canada*, 40(1–2), 83–101. [https://doi.org/10.3138/tric.40.1\\_2.83](https://doi.org/10.3138/tric.40.1_2.83)
- Camburn, B., Viswanathan, V., Linsey, J., Anderson, D., Jensen, D., Crawford, R., Otto, K., & Wood, K. (2017). Design Prototyping Methods: State of the Art in Strategies, Techniques, and Guidelines. *Design Science*, 3, e13.
- Cameron, D., Anderson, M., & Wotzko, R. (2017). Drama and Digital Arts Cultures. In *Drama and Digital Arts Cultures*.

- Cameron, D. C., & Anderson, M. (2022). Evolution, Diffusion and Disturbance: Drama, Education and Technology. In *The Routledge Companion to Drama in Education* (pp. 513–523). <https://doi.org/10.4324/9781003000914-56>
- Chin, K.-Y., Lin, J.-M., Hong, Z.-W., Lin, K.-T., & Lee, W.-T. (2009). Developing an IDML-Based Embodied Pedagogical Agent System for Multimedia Learning. *Proceedings - 2009 9th International Conference on Hybrid Intelligent Systems, HIS 2009, 1*, 37–41. <https://doi.org/10.1109/HIS.2009.15>
- Choi, E., & Park, N. (2024). Verification of The Effectiveness of Digital Therapeutics Principle Textbooks for Elementary and Secondary School Teachers. *Journal of Autonomous Intelligence, 7*(2). <https://doi.org/10.32629/jai.v7i2.994>
- Davis, S. (2017). Drama and Arts-Based Professional Learning: Exploring Face-to-Face, Online and Transmedia Models. *Teaching Education, 28*(4), 333–348. <https://doi.org/10.1080/10476210.2017.1296830>
- Fichman, R. G., Dos Santos, B. L., & Zheng, Z. (2014). Digital Innovation as A Fundamental and Powerful Concept in the Information Systems Curriculum. *MIS Quarterly, 38*(2), 329-A15.
- Gagnon, M.-P., Ngangue, P., Payne-Gagnon, J., & Desmartis, M. (2016). M-Health Adoption by Healthcare Professionals: A Systematic Review. *Journal of the American Medical Informatics Association, 23*(1), 212–220.
- Gall, M. D., Borg, W. R., & Gall, J. P. (1996). *Educational research: An introduction*. Harlow: Longman Publishing.
- Gall, M. D., Gall, J. P., & Borg, W. R. (2007). Educational Research: An Introduction. In *Nuevos sistemas de comunicación e información* (Eighth Edi). Boston, New York, San Francisco, Cape Town, Dubai, London, Madrid, Milan, Munich, Paris, Montreal, Toronto, Delhi, Mexico City, São Paulo, Sydney, Hong Kong, Seoul, Singapore, Taipei, Tokyo: Pearson Education.
- Ganiron Jr, T. U. (2014). Teaching Styles of Using English Drama in Critical Thinking Course for Architecture Students in Qassim University. *International Journal of Education and Learning, 3*(2), 11–22.
- Gustiani, S. (2019). Research and Development (R&D) Method as a Model Design in Educational Research and Its Alternatives. *Holistics (Hospitality and Linguistics): Jurnal Ilmiah Bahasa Inggris, 11*(2).
- Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers, 3*, 275–285.
- Halverson, L. R., Graham, C. R., Spring, K. J., Drysdale, J. S., & Henrie, C. R. (2014). A Thematic Analysis of the Most Highly Cited Scholarship in the First Decade of Blended Learning Research. *The Internet and Higher Education, 20*, 20–34.
- Hammond, Z. (2014). *Culturally Responsive Teaching and the Brain: Promoting Authentic Engagement and Rigor Among Culturally and Linguistically Diverse students*. Corwin Press.
- Henry, M. (2000). Drama's Ways of Learning. *Research in Drama Education: The Journal of Applied Theatre and Performance, 5*(1), 45–62.
- Hetami, F. (2010). Literary Reception and Intertextuality as an Effective Learning Alternative in Dramaanalysis Courses. *Lembaran Ilmu Kependidikan, 39*(2).
- Hidayati, N. A., Waluyo, H. J., & Winarni, R. (2020). Exploring the Implementation of Local Wisdom-Based Character Education among Indonesian Higher Education Students. *International Journal*



*of Instruction*, 13(2), 179–198.

- Howles, L. L. (2023). From Case-Based Learning to Interactive Case Scenarios: A Digital Hybrid. In *Mapping the Field of Adult and Continuing Education: An International Compendium: Volume 2: Teaching and Learning* (pp. 219–222). <https://doi.org/10.4324/9781003445920-13>
- Kim, E.-S., Kang, W. Y., On, K.-W., Heo, Y.-J., & Zhang, B.-T. (2020). Hypergraph Attention Networks for Multimodal Learning. *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition*, 14581–14590.
- Lai, Y.-C., & Pai, H.-Y. (2024). Develop Drama Performances Featuring Virtual Characters for Utilization in Language Learning. *Proceedings of the 2024 10th International Conference on Applied System Innovation, ICASI 2024*, 140–142. <https://doi.org/10.1109/ICASI60819.2024.10547790>
- Lee, J., Lim, C., & Kim, H. (2017). Development of an Instructional Design Model for Flipped Learning in Higher Education. *Educational Technology Research and Development*, 65, 427–453.
- Lees, D., Bashford-Rogers, T., & Keppel-Palmer, M. (2021). The digital resurrection of Margaret Thatcher: Creative, Technological and Legal Dilemmas in the use of Deepfakes in Screen Drama. *Convergence*, 27(4), 954–973. <https://doi.org/10.1177/13548565211030452>
- Lestari, N., Purwaningsih, S., & Pratiwi, I. (2022). Profile of Students' Needs Analysis for the E-Module of Statistical Physics on the Topic of Quantum Statistics Applications to Other Systems. *Tarbawi: Jurnal Ilmu Pendidikan*, 18(1), 45–54.
- Lewis, S. L., Dirksen, S. R., Heitkemper, M. M., Bucher, L., & Camera, I. (2015). *Medical-Surgical Nursing-E-Book: Assessment and Management of Clinical Problems, Single Volume*. Elsevier Health Sciences.
- Liu, Y.-T., Lin, S.-C., Wu, W.-Y., & Chen, G.-D. (2017). The Digital Interactive Learning Theater in the Classroom for Drama-Based Learning. *Proceedings of the 25th International Conference on Computers in Education, ICCE 2017 - Main Conference Proceedings*, 784–789.
- Liyanawatta, M., Yang, S.-H., Liu, Y.-T., Zhuang, Y., & Chen, G.-D. (2022). Audience Participation Digital Drama-Based Learning Activities for Situational Learning in the Classroom. *British Journal of Educational Technology*, 53(1), 189–206. <https://doi.org/10.1111/bjet.13160>
- Marlatt, R. (2020). Connected Learning and Shakespeare: Engaging Students in Drama Teacher Education. *Research in Drama Education*, 25(1), 103–108. <https://doi.org/10.1080/13569783.2019.1687289>
- Michalovich, A. (2023). The Social Drama of Digital Multimodal Composing: A Case Study With Emergent Bi/Multilingual Newcomer Students. *Journal of Adolescent and Adult Literacy*, 66(6), 334–343. <https://doi.org/10.1002/jaal.1286>
- Mills, K. A. (2015). *Literacy Theories for The Digital Age: Social, Critical, Multimodal, Spatial, Material and Sensory Lenses* (Vol. 45). Multilingual Matters.
- Mokoena, M. T., & van Vuuren, P. J. (2023). Lessons Learnt from Teaching an Applied Drama and Theatre Pedagogy Online in a Digitally Divided South Africa. *Perspectives in Education*, 41(1), 103–118. <https://doi.org/10.38140/pie.v41i1.6284>
- Nagyová, I., & Turcáni, M. (2008). Teaching of Multimedia Presentation Creation. *Acta Didactica Napocensia*, 1(1), 1–6.
- O'Grady, R. J., Cassany, D., & Knight, J. (2023). 'For All the Fanatics of Drama Out There - This is Your Book!' An Analysis of Student Podcast Compositions for Responding to Literary Texts. *Changing English: Studies in Culture and Education*, 30(1), 25–42.

<https://doi.org/10.1080/1358684X.2022.2124149>

- Pearson, K. (1901). On lines and planes of closest fit to systems of points in space. *The London, Edinburgh, and Dublin Philosophical Magazine and Journal of Science*, 2(11), 559–572.
- Polkinghorne, D. E. (2005). Language and Meaning: Data Collection in Qualitative Research. *Journal of Counseling Psychology*, 52(2), 137.
- Polymeris, G., Giannakoulopoulos, A., & Tiligadis, K. (2018). Dramatization and digital technology in intergenerational learning. *CEUR Workshop Proceedings*, 2811, 194–201.
- Reimann, D. (2008). Developing a Learning Environment for Drama with Hypermedia. In *International Dialogues About Visual Culture, Education and Art* (pp. 131–139).
- Rubtsova, O. V., & Poskakalova, T. A. (2021). Drama Activity as A Means of Development and Learning in Adolescence: The Results of an Empirical Study. *Psychological Science and Education*, 25(6), 144–156. <https://doi.org/10.17759/PSE.2020250612>
- Saidah, K., & Damariswara, R. (2021). Development of Interactive Folklore Based on Android Oriented to Local Wisdom to Improve Reading Comprehension of Elementary School Students. *Al Ibtida: Jurnal Pendidikan Guru MI*, 8(2), 276–290.
- Saleem, A. N., Noori, N. M., & Ozdamli, F. (2022). Gamification Applications In E-Learning: A Literature Review. *Technology, Knowledge and Learning*, 27(1), 139–159.
- Sefriani, R., Wijaya, I., Menrisal, M., & Dewi, M. (2020). *Similarity: Testing of The Validity of Interactive Learning Module on Creative and Entrepreneurs Learning Products*.
- Shah, J. (2017). Informal Learning in A Digital Landscape: A Higher Education Drama Conservatoire Case Study. In *Informal Learning: Perspectives, Challenges and Opportunities* (pp. 73–81).
- Straus, S. E., Glasziou, P., Richardson, W. S., & Haynes, R. B. (2018). *Evidence-Based Medicine E-Book: How to Practice and Teach EBM*. Elsevier Health Sciences.
- Subhash, S., & Cudney, E. A. (2018). Gamified Learning in Higher Education: A Systematic Review of the Literature. *Computers in Human Behavior*, 87, 192–206.
- Sudigdo, A., Pamungkas, O. Y., Hastangka, Suprpto, Sumarni, Abdurrahman, O., & Mastiyah, I. (2024). Children’s Voices in Poetry: The Illustration and Re-Imagination of National Identity. *Journal of Language Teaching and Research*, 15(5), 1581–1592. <https://doi.org/10.17507/jltr.1505.19>
- Sultan, D., Omarov, B., Kozhamkulova, Z., Kazbekova, G., Alimzhanova, L., Dautbayeva, A., Zholdassov, Y., & Abdrakhmanov, R. (2023). A Review of Machine Learning Techniques in Cyberbullying Detection. *Computers, Materials and Continua*, 74(3), 2625–2640. <https://doi.org/10.32604/cmc.2023.033682>
- Suskie, L. (2018). *Assessing Student Learning: A Common Sense Guide*. John Wiley & Sons.
- Taufik, O. A., & Pamungkas, O. Y. (2025). Mapping Determinants of Success through Information Systems in Higher Education : A Structural Equation Modeling Approach. *Educational Process: International Journal*, 33(5), 505–519.
- Thao, L. T., Yen, P. H., Khang, N. D., Khoi, V. T. M., & Quyen, B. N. (2022). Digital Drama Technique in English as a Foreign Language Teaching and Learning: From Viewers’ and Actors’ Perspectives. *Nurture*, 16(2), 65–74. <https://doi.org/10.55951/nurture.v16i2.128>
- Tohri, A., Rasyad, A., Sururuddin, M., & Istiqlal, L. M. (2022). The Urgency of Sasak Local Wisdom-Based Character Education for Elementary School in East Lombok, Indonesia. *International*

*Journal of Evaluation and Research in Education*, 11(1), 333–344.

- Tomlinson, A., Bron, A. J., Korb, D. R., Amano, S., Paugh, J. R., Pearce, E. I., Yee, R., Yokoi, N., Arita, R., & Dogru, M. (2011). The International Workshop on Meibomian Gland Dysfunction: Report of the Diagnosis Subcommittee. *Investigative Ophthalmology & Visual Science*, 52(4), 2006–2049.
- Tuhuteru, L., Misnawati, D., Aslan, A., Taufiqoh, Z., & Imelda, I. (2023). The Effectiveness of Multimedia-Based Learning To Accelerate Learning After The Pandemic At The Basic Education Level. *Tafkir: Interdisciplinary Journal of Islamic Education*, 4(1), 128–141.
- Tzima, S., Styliaras, G., Bassounas, A., & Tzima, M. (2020). Harnessing the Potential of Storytelling and Mobile Technology in Intangible Cultural heritage: A Case Study in Early Childhood Education in Sustainability. *Sustainability*, 12(22), 9416.
- Uge, S., Neolaka, A., & Yasin, M. (2019). Development of Social Studies Learning Model Based on Local Wisdom in Improving Students' Knowledge and Social Attitude. *International Journal of Instruction*, 12(3), 375–388.
- Wales, P. E., & Mohamed, M. (2012). Digital Storytelling and Drama in the English Language Classroom. In *Creating Holistic Technology-Enhanced Learning Experiences: Tales from a Future School in Singapore* (pp. 59–73). [https://doi.org/10.1007/978-94-6209-086-6\\_4](https://doi.org/10.1007/978-94-6209-086-6_4)
- Wang, J.-H., Chen, Y.-H., Yu, S.-Y., Huang, Y.-L., & Chen, G.-D. (2020). Digital Learning Theater with Automatic Instant Assessment of Body Language and Oral Language Learning. *Proceedings - IEEE 20th International Conference on Advanced Learning Technologies, ICALT 2020*, 218–222. <https://doi.org/10.1109/ICALT49669.2020.00071>
- Yang, Q., Kang, Q., Huang, Q., Cui, Z., Bai, Y., & Wei, H. (2021). Linear Correlation Analysis of Ammunition Storage Environment Based on Pearson Correlation Analysis. *Journal of Physics: Conference Series*, 1948(1), 12064. IOP Publishing.
- Yang, W., & Xu, W. (2024). Research on the Optimized Creation and Talent Cultivation Mode of Online Micro Short Drama under the Background of Industry-Education Integration. *Applied Mathematics and Nonlinear Sciences*, 9(1). <https://doi.org/10.2478/amns-2024-1748>
- Yen, C.-C., Lee, C.-Y., Chen, G.-D., Wang, J.-H., & Yang, S.-H. (2020). A Digital Reality Learning Environment With Instant Assessment on Learning With Body and Visual Interaction. *Proceedings - IEEE 20th International Conference on Advanced Learning Technologies, ICALT 2020*, 77–78. <https://doi.org/10.1109/ICALT49669.2020.00030>
- Yulia, N. M., & Suttriso, S. (2024). Developing Local Wisdom-Based Augmented Reality Modules for Science and Social Studies Learning in Elementary Schools. *AL-ISHLAH: Jurnal Pendidikan*, 16(4), 5549–5560.
- Zainuddin, Z., Shujahat, M., Haruna, H., & Chu, S. K. W. (2020). The Role of Gamified E-Quizzes on Student Learning and Engagement: An Interactive Gamification Solution for A Formative Assessment System. *Computers & Education*, 145, 103729.
- Zakopoulos, V., Makri, A., Ntanos, S., & Tampakis, S. (2023). Drama/Theatre Performance in Education through the Use of Digital Technologies for Enhancing Students' Sustainability Awareness: A Literature Review. *Sustainability (Switzerland)*, 15(18). <https://doi.org/10.3390/su151813387>

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