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DEVELOPING INTERACTIVE VIDEOS FOR FACILITATING READ-ING ACTIVITY IN AN INCLUSIVE CLASS AT THE FOURTH GRADE OF SDN 2 BENGKALA

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Abstrak

Penelitian ini bertujuan untuk mengembangkan flipbook digital interaktif yang mengintegrasikan elemen visual, bahasa isyarat, animasi, dan materi bacaan terstruktur untuk meningkatkan pemahaman dan keterlibatan membaca di antara siswa kelas empat di kelas inklusif. Penelitian ini bertujuan untuk mengembangkan video interaktif sebagai materi pembelajaran multimoda untuk pengajaran bahasa Inggris kepada siswa kelas empat di kelas inklusif di SD N 2 Bengkala. Dengan menggunakan model desain instruksional ADDIE (Analisis, Desain, Pengembangan, Implementasi, Evaluasi), penelitian ini meningkatkan minat baca dan pemahaman di antara siswa tuna rungu-bisu dan siswa reguler melalui integrasi bahasa isyarat, alat bantu visual, dan latihan interaktif. Analisis kebutuhan mengungkapkan bahwa siswa inklusif membutuhkan materi yang adaptif dan menarik secara visual. Video tersebut selaras dengan Kurikulum Merdeka, menampilkan visual yang jelas, narasi terstruktur berdasarkan nilai-nilai Pancasila, dan dukungan pembelajaran inklusif. Instrumen yang digunakan meliputi panduan wawancara, jurnal peneliti, lembar kemajuan pengembangan, penilaian ahli, dan kuesioner praktikalitas. Validasi ahli menunjukkan skor tinggi: 4,625 (ahli konten) dan 4,75 (ahli media), dikategorikan sangat baik. Uji praktikalitas mendapat skor 4,3 (siswa) dan 4,75 (guru), menunjukkan efektivitas tinggi. Hasil penelitian menunjukkan bahwa video interaktif meningkatkan aksesibilitas, keterlibatan, dan pemahaman bacaan bagi siswa berkebutuhan khusus. Tantangannya meliputi keterbatasan akses teknologi dan perlunya pelatihan guru. Studi ini menyimpulkan bahwa pembelajaran multimoda memberikan manfaat signifikan bagi pendidikan inklusif dan merekomendasikan penelitian lebih lanjut tentang skalabilitas dan dampak jangka panjang.

Abstract

This study aims to develop interactive videos as multimodal learning materials for teaching English to fourth-grade students in an inclusive classroom at SD N 2 Bengkala. Using the ADDIE instructional design model (Analysis, Design, Development, Implementation, Evaluation), the research enhances reading interest and comprehension among deaf-mute and regular students through sign language integration, visual aids, and interactive exercises. Needs analysis revealed that inclusive students require visually engaging, adaptive materials. The videos align with the Merdeka Curriculum, featuring clear visuals, structured narration based on Pancasila values, and inclusive learning support. Instruments used include interview guides, researcher journals, development progress sheets, expert judgments, and practicality questionnaires. Expert validation showed high scores: 4.625 (content expert) and 4.75 (media expert), categorized as very good. Practicality tests scored 4.3 (students) and 4.75 (teachers), indicating high effectiveness. Results show that interactive videos improve accessibility, engagement, and reading comprehension for students with special needs. Challenges include limited technology access and the

need for teacher training. The study concludes that multimodal learning significantly benefits inclusive education and recommends further research on scalability and long-term impact.

Keywords *Reading Comprehension, Inclusive Education, Special Needs Students, Interactive Videos, ADDIE Model.*

1. Introduction

Reading is a fundamental skill that significantly contributes to shaping intelligent and critically thinking future generations. Grabe and Stoller (2019) emphasized that reading broadens one's knowledge and deepens the understanding of global issues. However, despite its recognized importance, Indonesia continues to struggle with low reading interest. Kusuma (2017) noted that the widespread belief in hoaxes among Indonesians is partially rooted in weak reading habits. UNESCO's data ranks Indonesia 62nd out of 70 countries in reading interest, with only 0.001% of the population actively engaged in reading (Nirmala et al., 2022). This issue becomes more complex within inclusive education settings, where students with hearing and speech impairments face unique challenges in accessing reading materials. For instance, SDN 2 Bengkala in Bali has implemented inclusive education since 2007 by adopting a co-teaching method—one teacher delivers content in Indonesian, while another translates into sign language. This method fosters interaction and mutual understanding between deaf and hearing students. Nonetheless, access to appropriate English reading materials remains limited, especially considering the importance of English as a global language that expands access to professional and social opportunities (Ogunsola, 2005).

Reading is an essential language skill that supports critical thinking, vocabulary development, and cultural understanding (Haleem et al., 2022; Ansarey, 2016; Zhong & Wakat, 2023). However, Indonesia still struggles with low reading interest, especially among students, including those in inclusive classrooms (Marmoah & Suharno, 2022). This study was conducted at SDN 2 Bengkala, a school in Bali that includes deaf-mute students. These students face challenges in reading English due to a lack of engaging, visual-based learning materials that match their needs. Current resources often rely heavily on text and outdated teaching methods. As a solution, this research proposes the use of interactive videos that combine visuals, text, and sign language to enhance comprehension and engagement. Videos can support different learning styles, allow self-paced learning, and foster inclusivity (Khasawneh, 2023; Utami et al., 2023). While previous studies highlight the benefits of video media, they rarely address its impact in inclusive English classrooms. Therefore, this study aims to fill that gap by developing multimodal video-based materials to improve reading interest and English learning outcomes for deaf-mute students at SDN 2 Bengkala.

2. Method

The research conducted in this study employs the Research and Development (R\&D) method. According to Sugiyono (2008), the R\&D research method is utilized to produce specific products and assess their effectiveness. R\&D is a process that involves steps for developing a new product or refining an existing one in a way that is accountable and measurable. In the context of education, R\&D is applied to create and validate educational products. This study adopts the R\&D approach because it enables the development of educational media tailored to specific student needs and the evaluation of its practicality and effectiveness. To carry out the development, the researcher uses the ADDIE model, which

stands for Analysis, Design, Development, Implementation, and Evaluation (Branch, 2021a). The ADDIE model was chosen for its structured, systematic nature, which simplifies the development process while maintaining a focus on product quality and effectiveness. Each phase of the ADDIE model is detailed as follows: In the Analysis phase, a needs analysis is conducted to determine the problems and requirements in reading instruction within inclusive classrooms. This includes document analysis of teaching materials such as annual programs, modules, and student activity sheets; interviews with teachers and students to understand their challenges; observation of classroom activities; and documentation gathering to support media development.

In the Design phase, the interactive video is conceptualized based on the needs identified. This involves creating a learning scenario, developing visual and audio components, drafting expert validation blueprints, and selecting elements such as sign language, text translation, images, animation, and narration to enhance comprehension. Evaluation instruments such as validation questionnaires and practicality tests are also designed during this stage. The Development phase brings the design to life through the creation of an interactive video. This includes integrating multimedia features such as illustrations, sign language, and interactive elements like quizzes and games to maintain student engagement. Media experts and inclusive education specialists validate the product, followed by revisions based on their feedback.

In the Implementation phase, the developed interactive video is tested on fourth-grade students at SDN 2 Bengkala. Teachers use the video during lessons, and trials are conducted with inclusive students to gather feedback. Observations and questionnaires are employed to assess reactions and identify challenges in the classroom. Finally, in the Evaluation phase, the effectiveness of the interactive video in improving reading comprehension is assessed. This includes evaluations from experts regarding content and media quality, as well as practicality tests to determine ease of use and applicability. Teachers and students who have used the media participate in this phase. The findings from this evaluation inform the final revisions, ensuring that the product can be effectively implemented in inclusive classrooms. A summary of these phases and their specific actions is outlined in Table 3.1. The R\&D and ADDIE models, though different in focus, are complementary. While R\&D emphasizes innovation and broader product development across industries, ADDIE is specifically structured for educational and training contexts. Both approaches highlight the importance of research, validation, and evaluation in creating effective learning tools.

The study is conducted at SDN 2 Bengkala, a school that integrates students with special needs and typical learners. The research subjects consist of one sixth-grade teacher, one sign language teacher, and eight sixth-grade students. The object of the study is the interactive video developed for inclusive reading instruction. The participants include "Ibu Putu" (sixth-grade teacher), "Bapak Made" (sign language teacher), and students Kadek Rosa, Putu Orchid, Made Bagus, Komang Joni, Putu Jasmine, Putu Sandat, Ketut Cempaka, and Made Putra.

To collect data, several methods are used. Structured interviews are conducted with teachers to explore the challenges they face and their strategies for engaging inclusive learners in reading. Document checking is carried out using existing curricula, textbooks, and teaching resources, supported by photographic documentation. Expert judgment is sought from educational professionals, particularly in developing media suited for students with special needs. Questionnaires are distributed to teachers and students to obtain feedback on the

usability and appeal of the interactive video. Close-ended questionnaires assess reading interest and perceptions of media features before and after using the product. Various research instruments are employed. An interview guide is used to systematically gather information on inclusive classroom practices, preparation, media usage, and student reading interest. This is organized into several aspects based on references from Masitoh (2021), H. Douglas Brown (2000), and Simanullang & Sinaga (2019), as detailed in Table 3.2. Furthermore, interview blueprints for both teachers and students are developed using the Technology Acceptance Model (TAM 3), as shown in Tables 3.3 and 3.4. These instruments assess aspects such as ease of use, clarity of instructions, comfort, and media integration in learning.

The researcher also maintains a journal to document media design activities and monitor development progress. The journal includes a blueprint for media use and a product development progress sheet that tracks each phase of interactive video creation. This instrument allows for structured reflection and ensures that each stage of development aligns with the intended learning outcomes for inclusive students at SDN 2 Bengkala.

3. Findings and Discussion

This study aimed to develop interactive video media to support reading activities in an inclusive fourth-grade classroom at SDN 2 Bengkala. The development process followed the ADDIE model (Analysis, Design, Development, Implementation, and Evaluation), with a focus on integrating multimodal features such as sign language interpretation, visual aids, and interactive exercises to accommodate the needs of both regular and deaf students.

Table 1 Content Validity Expert Judges Result

Description	Score	Reason
Clear and Systematic Structure	5	The material is well-structured, with clear definitions, keywords, examples, and moral values.
Context and Moral Values	4	Integration of Pancasila values in daily activities enhances the material's relevance.
Language Accessibility	5	The use of simple and clear language, along with translations, improves readability.
Examples	5	The provided examples are relevant to students' daily lives, making the material easier to understand.
Interactivity	4	Quizzes and interactive activities are available, but more variety could further enhance engagement.
Visual Design	5	The layout of text and images is well-arranged for readability and comprehension.
Grammar Explanation	5	The grammar explanations are clearly structured, helping students better

		understand the rules.
Quiz Section	5	The quiz section effectively reinforces students' understanding through diverse exercises.

The results from the content validity assessment are presented in Table 4.6, which shows that the average score from the content expert was 4.625 (out of 5), and the average score from the media expert was 4.75. Based on the interpretation criteria, both scores fall into the category of "Very Good", indicating that the materials are appropriate in terms of content relevance, instructional design, and media quality. The expert validation confirms that the interactive video meets academic standards and is suitable for inclusive classrooms.

Furthermore, the practicality of the interactive video was evaluated through questionnaires distributed to both students and teachers. As shown in Table 4.7, the average score from students was 4.3, indicating that the students found the video easy to understand, engaging, and useful in helping them comprehend the reading material. Meanwhile, the teachers gave an average score of 4.75, which suggests a strong level of agreement that the video was effective, easy to implement, and supportive of differentiated learning. These scores demonstrate that the media is not only theoretically valid but also practically applicable in real classroom settings.

The positive responses from both experts and users align with the results of the needs analysis, which indicated that students in inclusive classes—especially those with hearing impairments—require materials that are visually engaging and provide multimodal representations of information. The inclusion of sign language in the videos was particularly appreciated by the deaf students, as it allowed them to access the content in a format aligned with their primary mode of communication. This finding is supported by previous research (Utami et al., 2023), which emphasizes the importance of sign language integration in inclusive education environments.

In terms of product development, the interactive video was designed based on themes from the Merdeka Curriculum, including daily activities and narrative texts. These topics were chosen because they are familiar and relevant to students' lives, making it easier for them to engage with the content. The video incorporated animations, subtitles, narration, and quizzes to support students' reading comprehension. Visual design elements were created using Canva and integrated with multimedia platforms to ensure responsiveness and accessibility on various devices.

The development process also involved several iterations of expert feedback and revisions. During the initial trial phase, some technical and content-related issues were identified, such as unclear visuals or mismatch between sign language and narration. These were subsequently addressed, and the final product reflected improvements based on this formative evaluation process. This iterative approach ensured that the product was not only functional but also aligned with pedagogical and accessibility standards.

Table 2 Practically for The Interactive Video Comparison by Teacher

Description	Scored	Reason
Perceived Ease of Use	5	The teacher found the navigation intuitive and the instructions clear.
Perceived Usefulness	4	The videos effectively improved the teacher's comprehension of key concepts and facilitated teaching

		tasks.
Attitude Toward Using	4	The teacher enjoyed using the media and was motivated to engage with the content.
Acceptance of E-learning Systems	5	The videos were well-received, with the teacher demonstrating confidence in applying the concepts learned.

The results indicate that the teacher experienced minimal difficulty in using the media, with a full score of 5 for ease of use, suggesting that the interface and guidance provided were clear and user-friendly. The perceived usefulness scored 4, reflecting that the media significantly helped in both understanding the material and delivering it to students, although there may still be room for improvement in optimizing instructional value.

A score of 4 in attitude toward using shows a positive disposition and willingness to continue using the media, indicating engagement and motivation. Finally, a perfect score of 5 for acceptance of the e-learning system demonstrates the teacher's high level of confidence and readiness to integrate the interactive video into classroom teaching practices.

Table 3 Final Product

Description	Picture
Introduction Screen: Displays the title of the video and learning objectives to provide students with an overview of the lesson.	
Examples of vocabulary that are often used in Daily Activity materials	
Explanation of Pancasila Value in Daily Activity	

Visual aids that utilize animation and sign language to support students who are mute and deaf.

After completing several stages, the final product is an Inter-active English Learning Video on Pancasila values in daily activity material specifically designed for inclusive students in fourth-grade, following the principles of the Merdeka Curriculum. This Interactive Video is designed with attractive visuals to create a fun and interactive learning experience for students in inclusive class.

Despite the successful development and implementation, the study also identified several challenges. One of the most prominent obstacles was the limited technological infrastructure in the school, which affected the consistency of implementation. Some classrooms lacked adequate equipment, such as projectors or speakers, which are essential for delivering interactive content effectively. Additionally, there was a need for further teacher training, especially in the area of inclusive digital pedagogy. Teachers expressed willingness to use technology but noted that they needed more guidance in operating the tools and understanding how to adapt instruction for deaf students using digital media.

The findings suggest that interactive videos serve as a promising instructional tool for inclusive education. They offer a flexible, engaging, and inclusive way to present learning materials, especially for students with disabilities. In the context of SDN 2 Bengkala, the interactive video helped bridge the communication gap between deaf and hearing students, promoted collaborative learning, and fostered a more inclusive classroom environment.

From a broader perspective, this study contributes to the growing body of literature that supports multimodal learning in inclusive education. The findings are in line with Mayer's (2012) theory of multimedia learning, which highlights the importance of combining words and visuals to enhance understanding. The effectiveness of the developed media also reflects the principles of Universal Design for Learning (UDL), which advocates for multiple means of representation, engagement, and expression to accommodate diverse learners.

The development and implementation of interactive videos in an inclusive fourth-grade classroom at SDN 2 Bengkala demonstrated strong effectiveness in enhancing student engagement and reading comprehension. The content and media validation results, with average scores of 4.625 and 4.75 respectively, confirmed that the developed videos were of high quality and aligned well with learning objectives and inclusive education principles.

Practicality assessments also indicated a high level of usability and effectiveness. Students rated the practicality at 4.3, while teachers gave an even higher rating of 4.75, confirming that the videos were easy to use, engaging, and beneficial in classroom settings. Furthermore, the teacher's feedback based on the Technology Acceptance Model (TAM) showed high scores in perceived ease of use (5), usefulness (4), positive attitude (4), and system acceptance (5), suggesting the media is well-received and likely to be sustained in use.

The integration of sign language, clear narration, and interactive elements addressed the unique needs of both deaf and hearing students. Despite some challenges, such as technological limitations and the need for further teacher training, the interactive video proved to be an effective and inclusive learning tool. Overall, the findings support the use of multimodal instructional media to foster inclusive, accessible, and engaging learning experiences in diverse classroom environments.

4. Conclusion and suggestion

The results of this study highlight the importance of multimodal learning materi-als in inclusive classrooms. The integration of sign language, engaging visuals, and interactive exercises significantly improved students' comprehension and reading interest. The findings support the idea that digital learning tools, particularly interactive videos, can be highly beneficial for students with special needs. Additionally, teach-ers and students responded positively to the developed materials, emphasizing their practicality and ease of use. However, the study also identified some limitations, such as the need for improved technological infrastructure and broader generaliza-bility of findings to other inclusive classrooms.

Based on the research findings, it is recommended that teachers incorporate multimodal learning materials, especially interactive videos, to improve engagement and comprehension in inclusive classrooms. Future research should investigate the long-term impact of these tools on literacy skills and explore their use in various educational settings. Schools are encouraged to enhance their technological infrastructure to ensure equal access to interactive learning. Additionally, future learning materials should include more diverse features like gamification, real-time feedback, and personalized learning paths to meet students' different needs.

References

Abdulrahaman, M. D., Faruk, N., Oloyede, A. A., Surajudeen-Bakinde, N. T., Olawoyin, L. A., Mejabi, O. V, Imam-Fulani, Y. O., Fahm, A. O., & Azeez, A. L. (2020). Multimedia tools in the teaching and learning processes: A systematic re-view. Heliyon, 6(11), e05312. https://doi.org/10.1016/j.heliyon.2020.e05312

Al-Gahtani, S. S. (2016). Empirical investigation of e-learning acceptance and assimila-tion: A structural equation model. Applied Computing and Informatics, 12(1), 27–50. https://doi.org/10.1016/j.aci.2014.09.001

Anderson, L. W., Krathwohl Peter W Airasian, D. R., Cruikshank, K. A., Mayer, R. E., Pintrich, P. R., Raths, J., & Wittrock, M. C. (2001). Taxonomy for_ Assessing a Revision 0F Bl00M'S Tax0N0My 0F Educati0Nal Objectives.

Ansarey, D. (2016). Reading Improves English Speaking Skills. An Empirical Examina-tion of Tertiary Level Students in Bangladesh, 10(1), 77–92.

Astuti, F. N., Suranto, S., & Masykuri, M. (2020). The appropriateness of devel-oping the media: Experts' validation and students' response of learning me-dia based on augmented reality technology for natural science lesson. Jour-Nal of Physics. https://doi.org/10.1088/1742-6596/1567/4/042023

Bintoro, S., Suryana, D., & Hidayat, A. (2023). The teacher strategies in teaching sign language for deaf students in inclusive classroom. Cogent Education, 10(1).

Boscolo, P., Ariasi, N., Del Favero, L., & Ballarin, C. (2011). Interest in an ex-pository text: How does it flow from reading to writing? Learning and In-Struction, 21(3), 467–480. https://doi.org/10.1016/j.learninstruc.2010.07.009

Branch, R. M. (2021a). Instructional Design: The ADDIE Approach. In Encyclopedia of Evolutionary Psychological Science. https://doi.org/10.1007/978-3-319-19650-3_2438

Branch, R. M. (2021b). Instructional Design: The ADDIE Approach. In Encyclopedia of Evolutionary Psychological Science. https://doi.org/10.1007/978-3-319-19650-3_2438

Chau, P., & Hu, P. (2001). Information Technology Acceptance by Individual Profes-sionals: A Model of Comparison Approach. Decision Sciences, 32(4), 699–719.

Chau, P. Y. (1996). An Empirical Assessment of a Modified Technology Ac-ceptance Model. Journal of Management Information Systems, 13(2), 185–204.

Chau, P. Y. K. (1996). An Empirical Assessment of a Modified Technology Acceptance Model. Journal of Management Information Systems, 13(2), 185–204.

Cheung, M. F. (2023). The Mediating Role of Perceived Organizational Support in The Effect of Interpersonal and Informational Justice on Organizational Citizenship Be-havior. Leadership & Organization Development Journal, 13(6), 551–572.

Dahlan, M. M., Abdul Halim, N. S., Kamarudin, N. S., & Zuraine Ahmad, F. S. (2023). Exploring interactive video learning: Techniques, applications, and pedagogical in-sights. International Journal of Advanced and Applied Sci-Ences, 10(12), 220–230. https://doi.org/10.21833/ijaas.2023.12.024

Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2020). Implications for educational practice of the science of learning and development. Applied Developmental Science, 24(2), 97–140. https://doi.org/10.1080/10888691.2018.1537791

Din, M. (2020). Evaluating university students' critical thinking ability as re-flected in their critical reading skill: A study at bachelor level in Pakistan. Thinking Skills and Creativity, 35, 100627. https://doi.org/10.1016/j.tsc.2020.100627

Encabo-Fernández, E., Albarracín-Vivo, D., & Jerez-Martínez, I. (2023). Evalua-tive research on the critical thinking of primary school students. Interna-Tional Journal of Educational Research Open, 4, 100249. https://doi.org/10.1016/j.ijedro.2023.100249

Enu-Kwesi, F., & Opoku, M. O. (2020). Relevance of the technology acceptance model (TAM) in information management research: a review of selected empirical evi-dence. Pressacademia, 7(1), 34–44. https://doi.org/10.17261/pressacademia.2020.1186

Ervasti, M., & Helaakoski, H. (2010). Case study of application-based mobile service acceptance and development in Finland. Int. J. Information Tech-nology and Man-agement, 9(3), 243-259.

Grabe, W., & Stoller, F. L. (2019). Teaching and researching reading. Routledge.

Gregory, R. J. (2015a). Psychological Testing History, Principles, and Applications. Pearson Education Inc.

Gregory, R. J. (2015b). Psychological Testing History, Principles, and Applications. Pearson Education Inc.

Habók, A., Oo, T. Z., & Magyar, A. (2024). The effect of reading strategy use on online reading comprehension. Heliyon, 10(2), e24281. https://doi.org/10.1016/j.heliyon.2024.e24281

Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. Sustainable Operations and Comput-ers, 3, 275–285. https://doi.org/10.1016/j.susoc.2022.05.004

H.Douglas Brown. (2000). [H._Douglas_Brown]_Teaching_by_Principles,_Second_(BookFi.org).pdf. In Teaching by Principles An Interactive Approach to Language Pedagogy (p. 491).

Hennessy, S., D'Angelo, S., McIntyre, N., Koomar, S., Kreimeia, A., Cao, L., Brugha, M., & Zubairi, A. (2022). Technology Use for Teacher Professional Development in Low- and Middle-Income Countries: A systematic review. Computers and Edu-cation Open, 3, 100080. https://doi.org/10.1016/j.caeo.2022.100080

Hidayati, D. (2019). Improving Speaking Skill Through Videos for Junior High School Students. Dialectical Literature and Educational Journal, 4(1), 37–41. Howerton-Fox, A., & Falk. J. L, 9(2). https://doi.org/10.51714/dlejpancasakti.v4i1.8.pp.37-41

Ji-Won Moon, Y. K. (2001). Extending the TAM for a World-Wide-Web con-text. In-formation & Management, . Information & Management, 38, 217–230.

Kasmiri, U. A., Riyanti, D., & Fitriarti, U. M. V. N. (2023). Enhancing Students' Read-ing Comprehension through the Implementation of TAR (Text Around The Room) Technique. Lingua Didaktika: Jurnal Bahasa Dan Pembelaja-Ran Bahasa, 17(2), 219. https://doi.org/10.24036/ld.v17i2.124079

Kendeou, P., Papadopoulos, T. C., & Spanoudis, G. (2015). Reading Comprehension and PASS Theory. In T. C. Papadopoulos, R. K. Parrila, & J. R. Kirby (Eds.), Cognition, Intelligence, and Achievement (pp. 117–136). Academic Press. https://doi.org/10.1016/B978-0-12-410388-7.00007-5

Khasawneh, M. A. S. (2023). The use of video as media in distance learning for deaf students. Contemporary Educational Technology, 15(2). https://doi.org/10.30935/cedtech/13012

Kusuma, C. S. D. (2017). Counteract hoax through reading interest motivation. Science (ICEBESS) Proceeding. Universitas Negeri Yogyakarta-Fakultas Ekonomi, 34–35.

Lestari, H. D., Martatiyana, D. R., & U., H. (2023). Application of the Addie Model in Designing Digital Teaching Materials. Jurnal Pendidi-Kan Dan Pengajaran Guru Sekolah Dasar (JPPGuseda), 6(1), 105–109. https://doi.org/10.55215/jppguseda.v6i1.7525

Lestari, I. A. (2023). Use of Adaptive Learning Media for Students With Special Needs. Journal of Southwest Jiaotong University, 58(2), 382–387. https://doi.org/10.35741/issn.0258-2724.58.2.55

Lusiana, B., & Maryanti, R. (2020). The Effectiveness of Learning Media Used During Online Learning. Media Pendidikan, Gizi, Dan Kuliner, 9(2), 81–92. https://doi.org/10.17509/boga.v9i2.38379

Mahartika, I., Aisyah, S. N., Meisyalla, L. N., & Ilhami, A. (2023). What are the Char-acteristics of Learners and the Variations of Non-Electronic Learning Media? JPI (Jurnal Pendidikan Indonesia), 12(2), 305–316. https://doi.org/10.23887/jpiundiksha.v12i2.51325

Marmoah, S., & Poerwanti Suharno, J. I. S. (2022). Literacy culture management of el-ementary school in Indonesia. Heliyon, 8(4), e09315. https://doi.org/10.1016/j.heliyon.2022.e09315

Masitoh, S. (2021). Siti masitoh nim: 17551064.

Mayer, R. E. (2012a). Multimedia Learning. Encyclopedia of the Sciences of Learning, 41, 2372–2375. https://doi.org/10.1007/978-1-4419-1428-6_285

Mayer, R. E. (2012b). Multimedia Learning. Encyclopedia of the Sciences of Learning, 41, 2372–2375. https://doi.org/10.1007/978-1-4419-1428-6_285

Miles, M. B., & Huberman, A. M. (2014). Qualitative data analysis (illustrate). SAGE.

Mohanty, E., & Mishra, A. J. (2020). Teachers' perspectives on the education of deaf and hard of hearing students in India: A study of Anushruti. Alter, 14(2), 85–98. https://doi.org/10.1016/j.alter.2020.02.002

Müller, C., & Mildenberger, T. (2021). Facilitating flexible learning by replacing class-room time with an online learning environment: A systematic review of blended learning in higher education. Educational Research Review, 34, 100394. https://doi.org/10.1016/j.edurev.2021.100394

Niswaty, R., & Arhas, S. H. (2019). The Effect of Learning Media on Progress Quality in Office Administration Program in Vocational School Negeri 1 Watampone Bone Regency. Journal of Physics: Conference Series, 1387(1). https://doi.org/10.1088/1742-

Nugroho, F. A., & Lintangsari, A. P. (2022). Deaf Students' Challenges in Learn-ing English. IJDS Indonesian Journal of Disability Studies, 9(02), 217–224. https://doi.org/10.21776/ub.ijds.2022.009.02.06

Nurkencana, W., & Sunartana, P. P. (1992). Education Evaluation. Usaha Nasional.

Puspitasari, D. (2019). English Language Teaching in Inclusive Class: a Challenge (Vol. 11, Issue 1).

Saharudin, S., Sulistyo, U., Handayani, R., Setyonegoro, A., & Prasetyoningsih, L. S. A. (2022). The Enactment of Online Learning for Special Need Stu-dents during COVID 19 Pandemic: A Case Study. Jurnal Ilmu Pendidikan, 28(1), 31. https://doi.org/10.17977/um048v28i1p31-36

Sari Puspita, L. P. A., Padmadewi, N. N., & Wahyuni, L. G. E. (2019). Instruc-tional Teaching Media to Promote Autistic Student's Learning Engagement. Journal of Education Research and Evaluation, 3(2), 58. https://doi.org/10.23887/jere.v3i2.20975

Savita, B. (2015). IMPROVING STUDENTS' READING COMPREHENSION OF DE-SCRIPTIVE TEXT USING SCANNING TECHNIQUE (A Classroom Action Re-search at The Eight Grade of MTs Negeri 1 Rakit in Academic Year 2013/2014). 8–27.

Simanullang, M., & Sinaga, R. T. (2019). The Effect of Applying Scanning and Skim-ming Strategy on the Students' Reading Comprehension of Grade Eight at SMP Negeri 3 Muara in Academic Year 2017/2018. Tapanuli Journals, 1(2), 332–342.

Sugiyono. (2008). Metode Penelitian Pendidikan: Pendekatan Kuantitatif, Kualitatif, dan R & D. (p. 334).

Tan, S., Zou, L., & Wijaya, T. T. (2021). Using Video Learning To Improve Students' Mathematical Ability. Journal of Didactic Mathematics, 1(3), 117–126. https://doi.org/10.34007/jdm.v1i3.364

Taylor, S. and Todd, P. A. (1995). Assessing IT usage. MIS Quarterly, 19, 561-570.

Taylor, S., & Todd, P. (2017). Assessing IT usage. MIS Quarterly, 19, 561-570. Univer-sity of Colorado Colorado Springs (UCCS). Full Participation in General Educa-tion Classrooms. https://coe.uccs.edu/sites/g/files/kjihxj1401/files/inline-

Utami, I. S., Budi, S., & Hafid, A. (2023). Development of E-Module as an Instructional Media for Students with Hearing Impairments. Journal of Education Science AndTechnology, 9(1), 1–7.

Venkatesh, V., & David, F. D. (2000). A Theoretical Extension of the Technology Ac-ceptance Model: Four Longitudinal Field Studies,. Management Science, 46, 186–204.

Venkatesh, Viswanath, Morris, Michael G., Davis, Gordon B., Davis, F. D. (2003). "User Acceptance of Information Technology: Toward a Unified View. MIS Quar-terly, 425-478.

Waitoller, F. R., & Kozleski, E. B. (2013). Working in boundary practices: Identity de-velopment and learning in partnerships for inclusive educa-tion. Teaching and Teacher Education, 31, 35–45. https://doi.org/10.1016/j.tate.2012.11.006

Walgermo, B. R., Frijters, J. C., & Solheim, O. J. (2018). Literacy interest and reader self-concept when formal reading instruction begins. Early Childhood Research Quarterly, 44, 90–100. https://doi.org/10.1016/j.ecresq.2018.03.002

Woodcock, S., Sharma, U., Subban, P., & Hitches, E. (2022). Teacher self-efficacy and inclusive education practices: Rethinking teachers' en-gagement with inclusive practices. Teaching and Teacher Education, 117, 103802. https://doi.org/10.1016/j.tate.2022.103802

Wulandari, A. D., & Setiawan, D. (2023). Complexity of Implementing In-clusive Edu-cation in Elementary Schools in Era 5.0: A Case Study. Jurnal Penelitian Pendidi-kan IPA, 9(2), 613–620. https://doi.org/10.29303/jppipa.v9i2.3033

p-ISSN : 2615-2800, e-ISSN : 2615-4404 DOI: 10.23887/jpbi.v13i1.5386

Zhong, X., & Wakat, G. (2023). Enhancing grammar proficiency of EFL learners through corpus-integrated lessons. Ampersand, 11, 100139. https://doi.org/10.1016/j.amper.2023.100139