



## PRACTICALITY OF A HYBRID BOOK AS READING MEDIA IN AN INCLUSIVE CLASS

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### ABSTRACT

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This study focuses on evaluating the practicality of a hybrid book in an inclusive classroom, consisting of 6<sup>th</sup> grade regular students and deaf-mute students in SDN 2 Bengkala, as reading material in English lessons. This study was conducted to assess the extent to which students' needs for reading media in an inclusive English class is met with the development of this hybrid book. The lack of reading media for students, especially in inclusive classes, was also a factor in conducting this study to assess the suitability of implementing hybrid book in classroom teaching and learning activities. The study employed a Research and Development (R&D) design using the ADDIE approach model. The study considers research questions related to the practicality of the implemented media. Teachers and students were given practical questionnaires to complete to get the data. The results showed that learning media incorporating multimodal components, such as interactive content, sign language videos, and visual aids, are necessary for inclusive students, particularly those who are deaf and mute. 93/100 from teachers and 360/400 from students scored the practicality test as extremely practical, indicating very good practicality. As a result, it is possible to use the hybrid book as an approachable and helpful teaching tool in an inclusive English course. By providing a sustainable media innovation that can be further developed and applied to various disciplines and educational levels, this research advances inclusive education.

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## INTRODUCTION

In Indonesia, digital-based reading media or e-books have just begun to be developed and implemented as a result of the COVID-19 Pandemic. However, the media provides for reading online using electronic books and printed books for reading offline (Anggia & Habók, 2023). Even though they had been developed, the number and variations are still limited, and the media for reading only focused on the needs of regular students. The availability of e-books, printed books, or other reading

media for students with special needs is scarce. Nowadays, foreign languages, especially English, are essential to learning because they are used internationally (Tauchid et al., 2022). Due to limited availability of appropriate reading materials, deaf and mute students have challenges when learning a foreign language. So, the recent developments in media creation to support student learning, such as a hybrid book, have made the teaching and learning processes easier for students as well as teachers. And then media such as hybrid books that may be printed or accessed online, can also meet students' choices and needs for learning materials.

Engaging learning media have been widely reported to support students' reading interest and reading skill development by fostering meaningful interaction with learning materials. Active engagement in reading activities has been associated with higher academic performance, indicating the importance of motivating and accessible reading resources (Blaabæk, 2020). Previous studies also demonstrate that interactive and multimedia-based media enhance reading comprehension by presenting content in formats that are easier to understand and more engaging for learners (Fatich & Mahendra, 2020; Yusuf et al., 2023). Evidence from research further confirms that technology-integrated learning environments can improve learning performance when digital features are aligned with instructional objectives (Sung et al., 2016). Recent studies have also emphasized that the practicality of digital learning media, such as ease of use, flexibility, and classroom applicability, is a critical factor in successful implementation (Haleem et al., 2022), and national research reports that varied, technology-supported media increase student engagement in learning activities (Putu et al., 2022).

However, despite these findings, existing studies predominantly focus on learning effectiveness rather than media practicality, are conducted mainly in regular classroom settings, and rarely involve inclusive classrooms with students who have special needs, such as deaf and mute learners. In addition, prior research seldom examines practicality from both teacher and student perspectives, which is essential for evaluating real classroom feasibility. Consequently, there is a clear research gap in empirical studies that specifically investigate the practicality of a hybrid book designed for inclusive learning environments, particularly in terms of usability, accessibility, and instructional support for diverse learners. This study seeks to address this gap by evaluating the practicality of a hybrid book implemented in an inclusive classroom context.

This research is conducted in the first inclusive school in Buleleng, SDN 2 Bengkala. Inclusive education has been offered at SDN 2 Bengkala since July 19, 2007. Even though there are *SLB* (Special Schools) for children with special needs in

Buleleng, many deaf and mute students in Bengkala Village are unable to get formal education. This occurs because the school is located a long distance from the students' villages, and because the majority of the students' parents work, they are unable to always transport their children to and from school if they are enrolled in a special needs school in Singaraja. Furthermore, if parents want to send their children to school under these conditions, they must be financially capable, as transportation costs, as well as other necessities and so on, are certainly more costly than if the students attended a school closer to home. The principal of SD N 2 Bengkala decided to implement inclusive education to provide every child in Bengkala Village with an equal education because of this issue (Sariani, 2015).

This study employs a Research and Development (R&D) approach using the ADDIE model and focuses specifically on the evaluation stage, which emphasizes systematic judgment of a developed product in real learning contexts (Branch, 2009). The novelty of this study lies in its exclusive focus on evaluating the practicality of a hybrid English book within an inclusive elementary classroom, rather than developing or testing effectiveness of learning media. Unlike many development studies that emphasize learning outcomes, this study prioritizes practical usability, examining whether the hybrid book is understandable, accessible, and capable of meeting the diverse reading needs of both teachers and students. This focus is particularly significant in inclusive education, where learning media must accommodate heterogeneous learners, including students with special needs (UNESCO, 2017). By concentrating on practicality as a key quality criterion of educational products, defined as ease of use, clarity, and suitability for classroom implementation (Nieveen, 1999), this study offers a distinct contribution to educational media evaluation. Moreover, the evaluation is conducted in a real inclusive setting at SDN 2 Bengkala, where students with special needs have limited access to reading resources, highlighting the contextual relevance of the study. Therefore, this research provides a novel perspective by positioning practicality evaluation of a hybrid book in an inclusive classroom as a critical foundation for sustainable and equitable learning media implementation.

## METHODS

The development of the hybrid book used Research & Development as the method of the study, and the ADDIE Model approach to support the process of implementing this research. The ADDIE approach is specifically used in the following research and development. There are five steps in developing this research method: analysis, design, development, implementation, and evaluation (Branch, 2009). This

study uses the ADDIE model approach because this approach is suitable for the continuity of previous research. In previous studies, researchers have developed a hybrid book, in which the researchers have analyzed, designed, developed, and implemented the product, but have not fully discussed the evaluation of the developed product. So, for this research, the researchers are focused on evaluating the hybrid book that has been developed and implemented in an inclusive class. Evaluation is the last step of the ADDIE model. This step goals to assess the quality of the product that has been produced by comparing the assessment before and after implementation. This stage also evaluates the effectiveness of the media developed on students' academic performance, as well as assessing teachers' and students' perceptions of the media developed. In this stage, also focus on the effectiveness of the product by creating evaluation criteria, choosing evaluation tools, and conducting the evaluation tools (Branch, 2009).

This study was conducted at SDN 2 Bengkulu, Bengkulu Village, Buleleng. SD N 2 Bengkulu is the first primary school in Buleleng to implement inclusive education in its institution. Sixth-grade students at SDN 2 Bengkulu consist of eight students, including both 6 regular students and 2 students who are deaf and mute. This school has limited resources and learning media for students with special needs; teaching and learning activities cannot be carried out in one room because students with special needs need special instructors to teach them. The object of the study is the evaluation of reading media developed in the form of a hybrid book, which integrates visual, textual, and sign-language-based components to support inclusive learning. The goal is to evaluate how practical the hybrid book is when applied in daily learning activities as reading media, both for teachers or students, especially for deaf and mute students.

To find out their opinion about the hybrid book as a reading media for sixth grade students in inclusive classes. 1 sixth-grade homeroom teacher, 1 sign language interpreter, and 8 sixth-grade students (2 deaf-mute and 6 regular) in SDN 2 Bengkulu participated in data collecting. They were all given questionnaires to complete about the usage of the hybrid book as reading media in the classroom. This study then used a practicality questionnaire as a research instrument to collect data. This questionnaire consisted of 10 questions based on 10 different aspects, and each question was tailored to the respondents' position as student or teacher. The grand theories used in developing the questionnaire in this study are the practicality of product evaluation by teachers and students (Nieveen, 1999; Tessmer, 1993), the technology acceptance model (Davis, 1989), the flexibility of products that can reach all teachers and students (CAST, 2011), multimedia learning theory (Mayer, 2001) and the last, instructional design theory (Dick et al., 2009).

The results of the questionnaires were quantified to get the mean score for all aspects that were used to check the practicality of the product. Then the mean score was categorized using a category table that was determined using the theoretical ideal reference assessment theory by Nurkencana & Sunartana (1992).

**Table 1. The Theoretical Ideal Reference Assessment Criteria**

Interval	Category
$(MI + 1.5 SDI) < X$	Very Good (VP)
$(MI + 0.5 SDI) \leq X < (MI + 1.5 SDI)$	Good (P)
$(MI - 0.5 SDI) \leq X < (MI + 0.5 SDI)$	Fair (SP)
$(MI - 1.5 SDI) \leq X < (MI - 0.5 SDI)$	Poor (N)
$X < (MI - 1.5 SDI)$	Very Poor (VN)

*Descriptions:*

$MI = \frac{1}{2}$  (ideal maximum score + ideal minimum score)

$SDI = \frac{1}{6}$  (ideal maximum score - ideal minimum score)

$X =$  score achieved

## FINDINGS AND DISCUSSION

### Finding

The practicality questionnaire was compiled based on Nieveen’s (1999) theory of learning media practicality, which assesses three main aspects, namely: ease of use, support for the learning process, and suitability of implementation in a real learning context.

### Teacher judgment

The practicality questionnaire for teacher consisted of two teachers, each of whom assessed 10 items on a scale of 1 to 5. Scores obtained as below.

**Table 2. Results of Practically Questionnaire for Teachers**

Aspects	Score by Teachers		Description
Ease of Use	5	5	Can be used easily without special training
Time Efficiency	5	5	Saves time in delivering material
Instructional Clarity	5	5	Helps clarify the structure and content of material studied
Accessibility Support	5	4	Sign language, audio, and translation features are helpful
Implementation Readiness	5	5	Can be implemented directly in class
Learning Goal Support	4	4	Supports achievement of learning objectives
Student Compatibility	5	5	Suitable for inclusive students
Teacher Motivation	4	4	Motivates teachers to use the product
Technical Functionality	5	5	All media features work well
Overall Practicality	4	4	Practical and applicable in inclusive classroom

Total obtained from 1<sup>st</sup> rater and 2<sup>nd</sup> rater (teachers) is 93.

Maximum Score = 10 (Questions) x 5 (Max Score) x 2 (Raters) = 100

**Table 3. Interval Category Score of Teacher’s Questionnaire**

Interval	Category
80 < 93	Very Good (VP)
66.66 ≤ 93 < 80	Good (P)
53.33 ≤ 93 < 66.66	Fair (SP)
40 ≤ 93 < 53.33	Poor (N)
93 < 40	Very Poor (VN)

Based on the practicality analysis provided by teachers, the total score is 93 out of 100, it can be seen from the table, the correct statement is the first category (80 < 93), so the respondents rated the hybrid book as very good or very practical. This shows that the hybrid book is easy for teachers to use, effective in helping to deliver material, and can be directly implemented in inclusive classroom learning.

**Student Judgment**

Practically questionnaire for students consists with 8 students (6 regular students, and 2 deaf-mute students) in 6<sup>th</sup> Grade as the raters of the product implementation. The number of statements is 10 items with the scale of 1 to 5 points, and the results as follows.

**Table 4. Results of the Practically Questionnaire for Students**

Aspects	Score by Students	Description
Ease of Use	5 5 4 5 5 5 4 4	Students can use the hybrid book without confusion
Understanding Support	4 5 4 5 5 4 4 4	Helps students understand the Past Tense topic clearly
Translation Helpfulness	4 5 5 5 5 5 5 5	Indonesian translation helps in understanding the English content
Sign Language Clarity	5 5 4 4 4 4 4 4	Sign language videos are clear and helpful
Audio Narration	3 3 5 5 4 5 4 4	Audio is clear and supports comprehension
Image Support	5 4 5 4 5 4 4 4	Images help explain the content more clearly
Fun and Motivation	5 5 5 5 5 5 5 4	The hybrid book is interesting and motivating
Independent Learning	4 4 5 4 4 5 5 4	The book helps students learn independently
Accessibility	4 5 4 4 4 4 4 4	The features (video, audio, sign, translation) make it easier to learn
Overall Practicality	5 5 5 5 5 5 5 5	The hybrid book is practical and good for learning English

Total overall student score is 360.

Maximum Score = 10 (Questions) x 5 (Max Score) x 8 (Raters) = 400

**Table 5. Interval Category Score of Student’s Questionnaire**

Interval	Category
320 < 360	Very Good (VP)
266.66 ≤ 360 < 320	Good (P)
213.33 ≤ 360 < 266.66	Fair (SP)
160 ≤ 360 < 213.33	Poor (N)
360 < 160	Very Poor (VN)

Student assessments of the practicality of the hybrid book showed that the score achieved is 360 out of 400 fell into the “very practical” category, because of the interval score got is 320 < 360. These results prove that the hybrid book are easy for deaf students to use independently, that the visual and multimedia features function optimally, and that they are able to increase students' motivation and reading comprehension.

Overall, the results of the practicality analysis from teachers (93/100) and students (360/400) were in the very practical category. Thus, the hybrid book was declared suitable for use in learning for sixth-grade students in inclusive classes and could proceed to the effectiveness testing stage.

**Discussion**

The hybrid book developed combines text, images, sign language videos, and audio, so that deaf and mute students still have equal access to learning without relying on sound. This supports the principle of Universal Design for Learning (UDL), which emphasizes accessibility for all students in inclusive classrooms. Therefore, the hybrid book not only serve as additional learning media, but also fulfill the learning rights of students with special needs in accordance with *Permendiknas* No. 70 of 2009. And then, the Evaluate stage was carried out through minor revisions in accordance with expert input and field test results. Thus, the application of the ADDIE model in this study has successfully produced a hybrid book that is systematic, feasible, and in line with user needs in the context of inclusive learning. This study contributes the field of English learning by giving empirical data on the usefulness of a hybrid book as a reading media in an inclusive classroom. The findings emphasize the need of practical and accessible learning media in helping different learners, such as deaf and mute students. This study provides useful information for teachers and educational institutions when selecting and implementing inclusive and user-friendly reading media for English lessons.

Hybrid book present clear practical value for teachers and school operation within inclusive learning contexts. By combining printed materials with digital features, this media allows instructional content to be delivered in an organized and flexible manner without placing heavy technical demands on teachers. Previous studies highlight that technology-supported learning media can simplify instructional processes while preserving clarity and consistency, particularly in classrooms with diverse learner characteristics (Al-Azawei et al., 2016). This ease of use enables teachers to prioritize pedagogical engagement and student support rather than focusing on technical aspects of media operation, which is a crucial consideration in inclusive classrooms.

For students, especially those with deaf and mute, the hybrid book facilitate independent learning through multimodal access to reading materials. The integration of written text, visual illustrations, and visual-based supports such as sign language videos corresponds with multimedia learning principles that emphasize the effectiveness of visual channels for learners with limited auditory access (Mayer, 2020). Further research published demonstrates that visually enriched digital materials promote better comprehension and learner autonomy, both during classroom instruction and in self-directed learning contexts, making such media particularly suitable for inclusive education settings (Alqurashi, 2019).

Beyond addressing individual learning needs, the hybrid book also serve as supportive instructional resources that complement the existing curriculum. Rather than functioning as replacements for conventional textbooks, they provide additional explanations, visual reinforcement, and flexible learning pathways that students can access according to their own learning pace. Findings reported in a published article indicate that multimedia-based learning media developed through systematic design processes contribute positively to classroom instruction by increasing student engagement and supporting differentiated learning activities (Surata et al., 2024). This suggests that the hybrid book can enhance instructional quality while remaining aligned with curricular objectives.

Furthermore, the implementation of the hybrid book encourages schools to gradually adopt learning technologies that are more accessible and inclusive. Inclusive learning media are expected not only to improve learning outcomes but also to be sustainable and adaptable to authentic classroom conditions (UNESCO, 2021). In educational settings where adaptive learning resources are still limited, the hybrid book offer a realistic and efficient solution by integrating accessibility, usability, and instructional relevance. Consequently, the hybrid book represents a practical and sustainable approach to supporting inclusive learning, particularly for schools

striving to address diverse student needs without imposing excessive technological requirements.

The results of the study show good effectiveness, but the development of this hybrid book still has several limitations. Although the fact that the study was only conducted in one school with a small number of students, the findings are still helpful for understanding the practical usage of the hybrid book in inclusive English classrooms. The reliance on internet stability for video features raises an essential concern for schools with inadequate digital infrastructure. Furthermore, while the audio element may not completely serve deaf and mute students, it is still useful for regular students in inclusive settings, demonstrating the necessity for learning tools that accommodate diverse learners. As a result, more research with a greater number of participants and more inclusive schools are necessary to enhance the findings and support broader applicability.

## **CONCLUSION**

According to the results of this study, during the implementation of the product before entering the evaluation stage, students appeared enthusiastic about the product offered. Both regular students and deaf and mute students listened and understood the contents of the hybrid book that had been developed well. Even with the help of teachers as interpreters, students with special needs were still able to use the hybrid book. Furthermore, in the evaluation stage, the data obtained from this study were based on the results of questionnaires filled out by homeroom teachers, sign language interpreters, and students in grade 6 at SDN 2 Bengkulu.

From the questionnaires that were filled out, on average, both students and teachers were able to understand the content and how to use the hybrid book that had been developed in previous research. Students and teachers also felt that the addition of the hybrid book as a learning medium was helpful for students. It can also be seen that during the evaluation, 6th-grade students had never been taught simple past tense material, but when the hybrid book-reading media was implemented, students were able to answer and understand the material in the book. It can be concluded that the hybrid book have a high level of practicality based on the scores given by students and teachers.

## **SUGGESTION**

However, despite the high practicality of this hybrid book, researchers still find some shortcomings. Several aspects of the hybrid book can still be developed, which would greatly help students, especially deaf and mute students, who tend to get bored

quickly and feel uncomfortable in a learning environment. Therefore, in future research, if researchers wish to develop a learning product specifically for students with special needs, it would be beneficial if they were able to create media that is more interactive and easily accessible. Due to the limitations of the researchers and the limited design resources, the media produced is not yet optimal, but in terms of usage, it is quite helpful for students and teachers at school. Due to the limitations of the researchers and the limited design resources, the media produced is not yet optimal, but in terms of usage, it is quite helpful for students and teachers at school.

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