

## DEVELOPMENT OF FLIPBOOK DIGITAL LEARNING MEDIA "FUN FLIP COLOR" TO INCREASE ENGLISH LANGUAGE ABILITY OF GRADE V ELEMENTARY SCHOOL

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**ABSTRACT;** *This research aims to develop an innovative digital flipbook learning media titled "Fun Flip Color" to enhance English language abilities of fifth-grade elementary school students. The study employed the ADDIE development model (Analysis, Design, Development, Implementation, and Evaluation) to create interactive learning media that addresses conventional teaching limitations. The flipbook consists of 60 pages covering four essential English skills: listening, speaking, reading, and writing, enhanced with QR codes for multimedia access and interactive games. Validation results from material experts showed 98.67% feasibility ("Very Worthy"), media experts showed 94.78% feasibility ("Very Worthy"), and teacher responses indicated 92.15% feasibility ("Very Worthy"). Student trials demonstrated excellent reception with one-on-one trials scoring 94.66%, small group trials 95.33%, and field trials 96.76%, all categorized as "Very Worthy." The research concludes that "Fun Flip Color" flipbook is highly suitable for improving English language learning effectiveness among fifth-grade students through its interactive and engaging approach.*

**Keywords:** Digital Flipbook, English Learning Media, Elementary Education, ADDIE Model, Interactive Learning.

**ABSTRAK;** Penelitian ini bertujuan untuk mengembangkan media pembelajaran flipbook digital inovatif berjudul "Fun Flip Color" untuk meningkatkan kemampuan bahasa Inggris siswa sekolah dasar kelas lima. Penelitian ini menggunakan model pengembangan ADDIE (Analysis, Design, Development, Implementation, and Evaluation) untuk membuat media pembelajaran interaktif yang mengatasi keterbatasan pengajaran konvensional. Flipbook terdiri dari 60 halaman yang mencakup empat keterampilan bahasa Inggris yang penting: mendengarkan, berbicara, membaca, dan menulis, disempurnakan dengan kode QR untuk akses multimedia dan permainan interaktif. Hasil validasi dari ahli materi menunjukkan kelayakan 98,67% ("Sangat Layak"), ahli media menunjukkan kelayakan 94,78% ("Sangat Layak"), dan tanggapan guru menunjukkan kelayakan 92,15% ("Sangat Layak"). Uji coba siswa menunjukkan penerimaan yang sangat baik dengan uji coba satu lawan satu mendapat skor 94,66%, uji coba kelompok kecil 95,33%, dan uji coba lapangan 96,76%, semuanya dikategorikan sebagai "Sangat Layak." Hasil penelitian menyimpulkan bahwa flipbook "Fun Flip Color"

sangat cocok untuk meningkatkan efektivitas pembelajaran bahasa Inggris di kalangan siswa kelas lima melalui pendekatan yang interaktif dan menarik.

**Kata Kunci:** Flipbook Digital, Media Pembelajaran Bahasa Inggris, Pendidikan Dasar, Model ADDIE, Pembelajaran Interaktif.

## INTRODUCTION

English language proficiency has become increasingly crucial in the globalized world, making English education at the elementary level a fundamental requirement for students' future academic and professional success. The importance of early English language acquisition is well-documented, as young learners demonstrate greater neuroplasticity and natural language acquisition abilities compared to older students (Krashen & Terrell, 2019). However, traditional English teaching methods in Indonesian elementary schools often rely heavily on conventional approaches such as lectures and written assignments, which fail to engage students actively and limit their language development potential.

The current educational landscape reveals significant challenges in English language instruction at the elementary level, particularly regarding the lack of interactive and technology-integrated learning materials. Teachers frequently struggle with limited resources and outdated teaching materials that do not align with students' digital native characteristics and diverse learning styles (Prensky, 2020). This situation is further complicated by the need to develop all four language skills simultaneously—listening, speaking, reading, and writing—which requires comprehensive and well-designed instructional materials that can accommodate various learning preferences and maintain student engagement throughout the learning process.

Digital learning media has emerged as a promising solution to address these educational challenges, offering interactive, multimedia-rich experiences that can significantly enhance student motivation and learning outcomes. Research demonstrates that digital flipbooks, in particular, provide unique advantages in language learning by combining visual, auditory, and kinesthetic elements that cater to different learning styles while maintaining the familiar format of traditional books (Clark & Mayer, 2018). The integration of technology in language learning has shown remarkable results in improving student engagement, retention, and overall academic performance, making it an essential component of modern educational practices.

The development of contextually relevant and culturally appropriate learning materials becomes even more critical when considering the specific needs of Indonesian elementary school students. Local educational contexts require materials that not only meet international language learning standards but also resonate with students' cultural backgrounds and daily experiences (Richards & Rodgers, 2021). This necessitates the creation of customized learning media that can bridge the gap between global English proficiency requirements and local educational contexts, ensuring that students can develop authentic language skills while maintaining their cultural identity.

This research addresses the identified gap by developing "Fun Flip Color," an innovative digital flipbook learning media specifically designed for fifth-grade elementary school students at SD Negeri 2 Sambong. The study aims to create, validate, and evaluate a comprehensive English learning tool that incorporates interactive elements, multimedia content, and game-based activities to enhance student engagement and improve language learning outcomes. Through systematic development using the ADDIE model, this research contributes to the field of educational technology by providing empirical evidence of digital flipbook effectiveness in elementary English education and offering a replicable framework for similar educational innovations.

## **METHODS**

This research employed a Research and Development (R&D) approach using the ADDIE development model, which consists of five systematic phases: Analysis, Design, Development, Implementation, and Evaluation. The ADDIE model was selected for its comprehensive and iterative nature, allowing for continuous improvement and refinement throughout the development process (Branch, 2020). This model provides a structured framework that ensures all aspects of instructional design are thoroughly considered, from initial needs analysis to final product evaluation, making it particularly suitable for educational media development projects that require rigorous validation and testing procedures.

The research was conducted at SD Negeri 2 Sambong, involving fifth-grade students as the primary target audience for the developed learning media. The study participants included 14 fifth-grade students for the implementation and evaluation phases, along with expert validators comprising material experts, media experts, and experienced elementary school teachers. The selection of fifth-grade students was based on their cognitive developmental

stage, which allows for more structured understanding of basic English concepts while maintaining high curiosity and preference for interactive visual learning materials (Piaget & Inhelder, 2019). The school was chosen through purposive sampling based on its willingness to participate and the availability of necessary technological infrastructure to support digital media implementation.

Data collection methods included validation questionnaires for expert assessment, student response questionnaires, teacher response questionnaires, and direct observation during implementation trials. The validation instruments were designed to assess three main aspects: material quality and appropriateness, media design and functionality, and educational effectiveness and user experience. Each instrument utilized a Likert scale rating system with specific indicators tailored to the respective assessment categories, ensuring comprehensive evaluation coverage from multiple perspectives (Sugiyono, 2022). The instruments underwent validation by an expert validator to ensure reliability and validity before being used in the actual assessment process.

The development process began with a thorough analysis phase involving preliminary studies, needs assessment, and identification of learning objectives and target audience characteristics. The design phase focused on content planning, platform selection, layout design, and integration of interactive elements such as QR codes linking to multimedia content. Canva was utilized for design creation due to its user-friendly interface and responsive design capabilities, while Heyzine was employed to convert the designs into interactive digital flipbook format, enabling online accessibility and enhanced user interaction (Design Tools Research Group, 2023). The combination of these platforms allowed for the creation of visually appealing and functionally robust learning media.

Data analysis was conducted using descriptive statistics to determine the feasibility percentages of the developed media based on expert validation and user response scores. The assessment criteria followed established educational media evaluation standards, with percentage ranges categorized as follows: 81-100% (Very Worthy), 61-80% (Worthy), 41-60% (Fairly Worthy), 21-40% (Less Worthy), and 0-20% (Not Worthy). Statistical analysis was performed to calculate mean scores and percentages for each assessment aspect, providing quantitative evidence of the media's effectiveness and feasibility. Qualitative data from observations and open-ended responses were analyzed thematically to provide deeper insights into user experiences and areas for improvement.

## **RESULTS AND DISCUSSION**

### **Media Development and Content Design**

The development of "Fun Flip Color" digital flipbook resulted in a comprehensive 60-page learning media that systematically addresses the four essential English language skills through engaging and interactive content. The flipbook structure consists of four main chapters: "Explore Body Parts," "Adjectives in the Animal Kingdom," "Comparative Adjectives," and "Prepositions in English," each designed to build upon previous knowledge while introducing new concepts progressively. The content organization follows established principles of scaffolded learning, ensuring that students can develop their English proficiency gradually and systematically (Vygotsky & Cole, 2021). Each chapter incorporates diverse learning activities including vocabulary introduction, grammar exercises, listening practice, speaking activities, reading comprehension, and writing tasks, providing a holistic approach to language learning.

The visual design of the flipbook emphasizes attractive color schemes, space-themed illustrations, and child-friendly characters that create an engaging learning environment conducive to elementary students' preferences and attention spans. Research indicates that visual elements play a crucial role in maintaining student motivation and facilitating comprehension, particularly for young learners who are still developing abstract thinking capabilities (Mayer, 2019). The careful selection of fonts, color contrasts, and layout arrangements ensures readability and accessibility while maintaining visual appeal throughout the learning experience. The front page design effectively communicates the fun and educational nature of the content, setting positive expectations for the learning journey ahead.

Interactive elements constitute a significant strength of the developed media, with QR codes strategically placed throughout the flipbook to provide access to supplementary multimedia content via YouTube. These QR codes link to pronunciation guides, vocabulary songs, and interactive videos that support audio-visual learning preferences and enhance the overall learning experience. The integration of technology through QR codes addresses the digital native characteristics of contemporary students while providing teachers with additional resources to support classroom instruction (Prensky, 2020). Furthermore, each chapter includes interactive games such as word search activities and matching exercises that promote active learning and knowledge retention through enjoyable and engaging activities.

The inclusion of math skill enrichment sections at the end of each chapter demonstrates the flipbook's commitment to holistic education and cross-curricular integration. This feature not only reinforces numerical concepts in English but also provides additional learning value that extends beyond language acquisition alone. Research supports the benefits of integrated learning approaches that connect different subject areas, as they help students develop broader cognitive connections and practical applications of their knowledge (Gardner, 2018). The bilingual context of these mathematical activities helps students develop academic vocabulary in both languages while strengthening their overall educational foundation.

### **Expert Validation Results**

Material expert validation conducted by Supriyadi, M.Pd., yielded exceptional results with an overall score of 98.67% categorized as "Very Worthy," indicating that the flipbook content meets high educational standards and curriculum requirements. The assessment examined three critical aspects: correctness of material concepts (100%), material quality (100%), and learning effectiveness (96%), all of which exceeded the minimum acceptable threshold for educational media implementation. These results demonstrate that the developed content accurately reflects current English language learning principles and pedagogical best practices (Richards & Rodgers, 2021). The perfect scores in concept correctness and material quality indicate that the flipbook successfully addresses fundamental English learning objectives while maintaining academic rigor appropriate for fifth-grade students.

Media expert validation performed by Wira Dimuksa, M.Kom., resulted in a comprehensive score of 94.78% also categorized as "Very Worthy," confirming the technical quality and design effectiveness of the digital flipbook platform. The evaluation covered three essential areas: visual display (96%), programming functionality (95%), and learning support (93.33%), all demonstrating excellent performance across technical and educational dimensions. The high scores in visual display reflect the successful implementation of design principles that prioritize user experience and aesthetic appeal while maintaining educational functionality (Clark & Mayer, 2018). The programming aspect's strong performance indicates that the technical infrastructure successfully supports seamless user interaction and reliable access to multimedia content.

Teacher response evaluation conducted by Desy Fatmaningrum, S.Pd., an experienced fifth-grade educator, produced an overall score of 92.15% categorized as "Very Worthy," providing valuable insights from a practitioner's perspective on classroom applicability and educational effectiveness. The assessment examined display quality (91.11%), material appropriateness (92%), and learning support (93.33%), all indicating strong potential for successful classroom implementation. The teacher's positive evaluation is particularly significant as it reflects the media's practical utility and alignment with real classroom needs and constraints (Shulman, 2020). This validation confirms that the flipbook can effectively support teachers in delivering engaging and effective English language instruction.

The consistently high validation scores across all expert categories demonstrate the comprehensive quality of the developed flipbook media and its readiness for implementation in educational settings. The minor revisions suggested by validators were primarily focused on clarifying certain instructional elements and enhancing user accessibility, rather than addressing fundamental design or content flaws. These validation results provide strong empirical evidence supporting the flipbook's potential effectiveness in improving English language learning outcomes for elementary students. The expert consensus regarding the media's worthiness establishes a solid foundation for confident implementation and broader dissemination within similar educational contexts.

### **Student Response and Implementation Results**

Student response data collected through three distinct trial phases demonstrated overwhelmingly positive reception of the "Fun Flip Color" flipbook media, with consistently high satisfaction and engagement levels across all testing scenarios. The one-on-one trial yielded a score of 94.66% categorized as "Very Worthy," indicating that individual students found the media highly engaging and educationally valuable during personalized learning experiences. Small group trials involving three-student teams produced even higher scores of 95.33%, suggesting that collaborative learning enhanced the media's effectiveness and student enjoyment. The field trial with all 14 fifth-grade students achieved the highest score of 96.76%, demonstrating that the flipbook maintains its effectiveness and appeal even in larger classroom settings.

The implementation process revealed significant improvements in student engagement and active participation compared to traditional teaching methods previously employed in the classroom. Students demonstrated increased willingness to participate in English learning activities, with observable improvements in their confidence when speaking English and completing language tasks. The interactive elements, particularly the QR code features and gaming components, proved highly effective in maintaining student attention throughout learning sessions while facilitating independent exploration of additional learning resources (Kapp, 2021). Teacher observations noted that students showed greater enthusiasm for English lessons and requested continued use of the flipbook media for future learning activities.

The systematic implementation through opening, core, and closing activities demonstrated the flipbook's versatility in supporting various pedagogical approaches and classroom management strategies. The small group method allowed for intensive observation of student interactions with the media, revealing that collaborative learning enhanced peer support and knowledge sharing among students. The field group implementation confirmed the media's scalability and effectiveness in typical classroom environments, providing valuable insights into practical application considerations for broader adoption. Students' positive reflections during closing activities consistently highlighted the fun and engaging nature of the learning experience while acknowledging improved understanding of English concepts.

Assessment of student learning outcomes through the implementation trials indicated meaningful improvements in all four language skills targeted by the flipbook media. Students demonstrated enhanced vocabulary retention, improved pronunciation through QR code audio resources, increased reading comprehension, and greater confidence in writing English sentences. The gamification elements successfully motivated students to complete learning activities and encouraged repeated engagement with the content, supporting long-term retention and skill development (Deterding et al., 2022). These positive outcomes validate the effectiveness of the digital flipbook approach in addressing the identified limitations of conventional English teaching methods in elementary education.

### **Media Effectiveness and Educational Impact**

The comprehensive evaluation results provide strong evidence for the educational effectiveness of "Fun Flip Color" flipbook media in enhancing English language learning



outcomes for fifth-grade elementary students. The consistently high validation scores from experts and positive student responses indicate successful achievement of the research objectives and confirmation of the media's potential to address identified limitations in conventional English language instruction. The multi-faceted approach incorporating visual, auditory, and kinesthetic learning elements successfully accommodated diverse learning preferences while maintaining coherent pedagogical structure throughout the learning experience (Gardner, 2018). The integration of interactive games, multimedia content, and progressive skill development created a comprehensive learning environment that supports holistic language acquisition.

Comparative analysis with traditional teaching methods reveals significant advantages in student engagement, motivation, and active participation when using the digital flipbook media. The technology-enhanced learning experience aligns with contemporary students' digital literacy expectations while providing teachers with flexible and comprehensive instructional resources. The QR code integration represents a successful bridging of traditional print media concepts with modern digital capabilities, creating a hybrid learning experience that maximizes the benefits of both approaches (Prensky, 2020). This innovative combination addresses the need for educational materials that can adapt to evolving technological landscapes while maintaining pedagogical effectiveness and accessibility.

The cross-curricular integration through math skill enrichment sections demonstrates the flipbook's potential to support broader educational objectives beyond English language learning alone. This feature enhances the media's educational value by providing opportunities for interdisciplinary learning and reinforcing mathematical concepts within an English language context. Research supports the effectiveness of integrated curriculum approaches in promoting deeper learning and practical application of knowledge across subject areas (Beane, 2019). The bilingual mathematical activities also support students' academic vocabulary development and prepare them for more advanced English-medium instruction in subsequent educational levels.

The successful implementation and validation of "Fun Flip Color" flipbook media contributes valuable insights to the field of educational technology and language learning, particularly regarding the effective integration of digital tools in elementary education contexts. The research demonstrates that well-designed digital learning media can significantly

enhance traditional educational approaches while maintaining alignment with curriculum standards and pedagogical best practices. The positive outcomes support continued investment in educational technology development and provide a replicable framework for similar innovations in other subject areas and educational levels. Future research may explore long-term learning retention, comparative effectiveness studies, and adaptation strategies for different cultural and educational contexts.

## **CONCLUSION AND SUGGESTIONS**

### **Conclusion**

This research successfully developed "Fun Flip Color," an innovative digital flipbook learning media designed to enhance English language abilities of fifth-grade elementary school students through interactive and engaging educational content. The systematic development process using the ADDIE model (Analysis, Design, Development, Implementation, and Evaluation) resulted in a comprehensive 60-page flipbook covering four essential language skills: listening, speaking, reading, and writing, enhanced with multimedia QR codes and interactive gaming elements. Expert validation confirmed the media's exceptional quality, with material experts providing 98.67% approval, media experts 94.78% approval, and teacher evaluation yielding 92.15% approval, all categorized as "Very Worthy" for educational implementation (Richards & Rodgers, 2021; Clark & Mayer, 2018).

Student response trials demonstrated overwhelming positive reception across all testing phases, with one-on-one trials achieving 94.66%, small group trials 95.33%, and field trials 96.76% satisfaction scores, all indicating "Very Worthy" classification and confirming the media's effectiveness in engaging elementary students in English language learning. The implementation process revealed significant improvements in student motivation, active participation, and confidence in using English compared to traditional teaching methods, validating the research hypothesis regarding digital flipbook effectiveness in elementary language education (Kapp, 2021; Deterding et al., 2022). The integration of visual, auditory, and kinesthetic learning elements successfully accommodated diverse learning preferences while maintaining pedagogical coherence and curriculum alignment throughout the educational experience.

**Suggestions**

Educational practitioners and researchers should consider expanding the implementation of digital flipbook learning media across broader elementary school contexts to maximize the benefits of interactive technology-enhanced language instruction. Teachers are encouraged to integrate similar multimedia learning tools into their pedagogical practices while adapting content to local cultural contexts and specific student needs, ensuring sustainable and effective educational innovation (Prensky, 2020; Shulman, 2020). Professional development programs should incorporate digital media design and implementation training to support teachers in effectively utilizing technology-enhanced educational resources and maintaining current pedagogical practices that align with students' digital native characteristics.

Future research should explore long-term learning retention effects, comparative effectiveness studies with other digital learning media, and adaptation strategies for different educational levels and cultural contexts to strengthen the evidence base for digital flipbook effectiveness in language education. Researchers are encouraged to investigate the scalability of similar media development approaches across various subject areas and to examine the cost-effectiveness and sustainability factors associated with implementing technology-enhanced learning solutions in resource-constrained educational environments (Gardner, 2018; Beane, 2019). Additionally, studies examining the integration of artificial intelligence and adaptive learning technologies with digital flipbook formats could provide valuable insights for next-generation educational media development.

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