

DEVELOPMENT OF A FLIPBOOK MEDIA FEATURING KAPILARA (KARAKTER PILAR DUA) TO FOSTER CHILDREN'S INDEPENDENCE IN KINDERGARTEN

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Abstract

This study aimed to develop a flipbook learning media containing Kapilara values (Karakter Pilar Dua) to foster the independent profile of kindergarten children, and to examine its validity, practicality, and effectiveness. The study employed a Research and Development (R&D) method adapted from the Borg and Gall model through seven stages: needs analysis, planning, initial product development, expert validation, limited trial, field implementation, and final revision. The population was all children in Group A of TK Intan Permai, totaling 17 children, selected using purposive sampling as the unit of analysis. Data were collected through structured interviews with the class teacher, direct observation using a behavioral checklist, expert validation sheets, parent response questionnaires, and learning documentation. Quantitative data were analyzed using descriptive percentage techniques, while qualitative data from observations and interviews were analyzed thematically. The findings revealed that material expert validation reached 94.6% and media expert validation reached 93.7%, both categorized as very valid. Practicality based on parents' responses reached 93.01%, categorized as very practical. Effectiveness results showed significant improvement in children's independent behaviors, including self-care, task completion, responsibility, and discipline. Therefore, the developed Kapilara-based flipbook media is feasible, practical, and effective for strengthening character education in early childhood institutions.

Keywords

Flipbook Media, Character Education, Independence, Kindergarten, Early Childhood Education



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INTRODUCTION

Early childhood education serves as a fundamental stage in preparing quality, character-driven generations who are ready for further learning. The early childhood period, widely recognized as the golden age, represents a phase in which brain development and personality formation occur at an exceptionally rapid pace, necessitating appropriate and sustained stimulation (Hurlock, 2013; Susanto, 2021). During this phase, character formation becomes a primary priority, as the values instilled during early years will form the behavioral foundation of adult life.

One of the most critical characteristics that must be developed from an early age is independence. Independence refers to the ability of children to carry out activities according to their developmental stage without excessive reliance on others (Suyadi, 2020; Wiyani, 2013). Independent children exhibit confident, responsible behavior, demonstrate simple decision-making abilities, and complete tasks through their own efforts. In the context of modern education, independence is also closely associated with the profile of lifelong learners who are adaptive and resilient in facing the challenges of the twenty-first century.

The Indonesian national curriculum framework, particularly through the Kurikulum Merdeka (Freedom Curriculum), explicitly integrates the Profil Pelajar Pancasila (Pancasila Student Profile) as its central educational aspiration. One of the six core dimensions of this profile is mandiri (independence), which encompasses self-regulation, initiative, and perseverance in learning (Kemendikbud, 2022). This policy underscores the urgency for educators at all levels, including in early childhood settings, to deliberately and systematically cultivate independence in young learners.

However, the reality of learning at Intan Permai Kindergarten reveals fundamental issues regarding the development of independence in young children, particularly among those in Group A. Based on initial observations, many children still exhibit a high level of dependence on teachers and parents during daily activities at school. Children tend to wait for help, guidance, and supervision before engaging in an activity, even for simple tasks that are actually appropriate for their developmental stage. Some children still require assistance with putting on shoes, tidying up play materials, washing their hands, carrying and managing personal belongings, and completing simple tasks in the classroom. Additionally, children appear to lack confidence when asked to try things on their own, easily give up when facing difficulties, and consistently seek the teacher's help in every learning activity. These conditions indicate that the development of children's independent

attitudes has not yet reached its full potential and represents a significant issue in early childhood education.

In the context of early childhood development, the ages of 4–6 years are a crucial period for the development of children's social-emotional skills, character, and independence. At this stage, children should begin to learn self-help skills, make simple decisions, take responsibility for their belongings, and be able to complete tasks step by step without always relying on adult assistance. Independence is a crucial aspect of development as it relates to building self-confidence, the ability to solve simple problems, the courage to take initiative, and a child's readiness to face the next level of education. Research by (Rahmawati & Rachman, 2025) confirms that the development of independent character in young children can be optimized through consistent practice, hands-on experiences, modeling, and active, enjoyable learning. Furthermore, (Nisviati et al., 2025) state that character education for young children requires a holistic, integrative approach that involves the school environment, family, and meaningful learning experiences so that children's character development can flourish optimally.

The issue of high levels of dependency among children at Intan Permai Kindergarten is believed to be influenced by several factors, including both the learning process and the guidance the children receive. A learning approach that remains largely teacher-centered results in children receiving more instructions than having opportunities to explore and engage in activities independently. Additionally, the limited availability of interactive learning materials that incorporate character education has resulted in suboptimal stimulation for the development of children's independence. Children more often become passive recipients of learning rather than active participants in the learning process. On the other hand, the habit of parents and teachers to rush to help children complete daily tasks indirectly reinforces children's dependence on adults. (Damayanti et al., 2025) explain that independence in young children develops through consistent habit-forming practices in daily activities. Furthermore, (Nur'ainy, 2025) emphasize that collaboration between teachers and parents plays a crucial role in fostering children's independence by providing them with opportunities to try things on their own, make simple decisions, and take responsibility for their own tasks. Research by (Lastari et al., 2025) also indicates that the teacher's role as a learning facilitator is crucial in fostering independence in young children through an active, supportive, and exploratory learning environment.

One reason for the underdevelopment of character is the limited availability of interactive learning materials rich in character values, as well as the inadequate integration of character education into engaging learning activities. (Unayah et al., 2024) explained that interactive flipbook media significantly increased children's engagement. Similarly, (Lestari et al., 2025) found that digital storytelling media effectively improved children's independence character, particularly in the areas of task completion and self-responsibility. (Jumiati et al., 2022) explains that interactive media provide a more engaging, participatory, and immersive learning experience, thereby stimulating the cognitive development of young children more effectively.

Several other relevant studies also support this conclusion. (Luaili et al., 2023) explain that flipbook-based learning materials facilitate the learning process for young children because they are visual, interactive, and capable of increasing user engagement in learning activities. (Maulidia et al., 2023) explain that early childhood education in the Society 5.0 era requires the use of technology-based media that is interactive, engaging, and aligned with children's developmental characteristics in order to create more effective and meaningful learning experiences. Character education for young children is more effective when integrated into learning activities that are enjoyable, active, and based on hands-on experiences, so that children can understand character values through meaningful activities in their daily lives (Hasnah et al., 2024; Purwastuti, 2022). (Ghofur & Nurhayati, 2023) state that the development of multimedia-based learning materials for early childhood education using the Research and Development (R&D) method results in products that are valid, practical, and effective for use in learning activities. Furthermore (Linda et al., 2021) The use of interactive e-modules has been shown to enhance students' independent learning and academic performance by providing more self-directed and flexible learning opportunities and fostering active engagement in the learning process.

The above studies collectively indicate that while research on digital media and independence has been conducted in various educational contexts, limited attention has been given to the integration of structured character education frameworks—such as the Kapilara (Karakter Pilar Dua) system from the Indonesia Heritage Foundation (IHF)—within flipbook media designed explicitly for kindergarten learners. The present study addresses this gap by developing a flipbook media that systematically embeds Kapilara values as the instructional content, rather than treating character education as an incidental element. This approach distinguishes the current study from prior research that primarily focuses on media aesthetics or general character outcomes without

reference to a specific, theoretically grounded character framework (Aprida et al., 2025).

One relevant innovation for addressing the identified problem is digital flipbook media. A flipbook is an interactive electronic book that presents a combination of text, images, animations, audio, and page-turning effects that simulate a physical book. This media format is capable of enhancing attention, learning motivation, and active engagement of children in the learning process (Purnomo et al., 2024). Additionally, flipbooks can be accessed through mobile devices, enabling continuous learning at home together with parents, which is particularly important for character education that requires reinforcement across both school and home environments.

In this study, the flipbook media was developed with Kapilara (Karakter Pilar Dua) content, a set of character values that emphasize discipline, responsibility, personal hygiene, and independence. The integration of Kapilara values into visual narratives is expected to help children internalize moral values through characters and situations that are closely related to their everyday lives (Ridnawati, 2020).

Based on the foregoing discussion, this study aimed to: (1) develop a valid, practical, and effective flipbook learning media featuring Kapilara values for kindergarten children; (2) examine the level of validity of the developed media based on material and media expert assessments; (3) determine the practicality of the media based on user responses; and (4) assess the effectiveness of the media in fostering independent behavioral profiles among children of TK Intan Permai, Group A.

METHOD

This study employed a Research and Development (R&D) approach using the Borg and Gall developmental model as adapted by (Sugiyono, 2022). The R&D paradigm was selected because it is systematically designed to produce a specific educational product through a series of need analyses, design, development, validation, and testing phases, thereby ensuring both the theoretical soundness and practical usability of the resulting product (Sugiyono, 2022). The model was simplified into seven stages appropriate for the scope of this study.

The population in this study was all children enrolled in Group A (4–5 years old) at TK Intan Permai, Jalan Batusari Raya No. 144, Kecamatan Mranggen, Kabupaten Demak, totaling 17 children. Given the small and manageable population size, a purposive sampling technique was employed. Purposive sampling was chosen because the entire Group A was the identified unit

experiencing the observed learning problem—specifically, low development of independence behaviors—as confirmed through preliminary observations and teacher interviews. Consequently, all 17 children served as the research subjects in the product trial phases. Expert validators consisted of three material experts and three media experts, all of whom were lecturers from the Postgraduate Program of Universitas PGRI Semarang with relevant areas of specialization.

The research followed seven developmental stages as follows: a) Stage 1: Needs Analysis: Preliminary data were collected through classroom observations and semi-structured interviews with the Group A teacher at TK Intan Permai. This stage identified the core problem: children's low independence levels and the absence of character-based interactive media; b) Stage 2: Planning: Based on the identified needs, the researcher planned the product specifications, learning objectives, target users, content scope, and development procedures; c) Stage 3: Initial Product Development: The flipbook media was constructed using a digital flipbook application, incorporating cover pages, learning objectives, narrative content aligned with Kapilara values, activity menus, a glossary, and a bibliography. The content was organized around the sub-theme *Aku Anak Mandiri* (I am an Independent Child); d) Stage 4: Expert Validation: The initial product was submitted to material and media validators using structured validation sheets. Revisions were made based on validator feedback; e) Stage 5: Limited Trial: The revised product was tested with a small group of children to identify any operational issues prior to full-scale implementation; f) Stage 6: Field Implementation: The validated media was implemented with all 17 research subjects. Pre- and post-implementation observation data were recorded; g) Stage 7: Final Revision: Minor adjustments were made based on field implementation results to produce the final version of the media.

Data were collected using multiple techniques to ensure triangulation of findings: a) Structured Interview: A semi-structured interview was conducted with the Group A class teacher at the needs analysis stage to obtain information about children's independence behaviors, existing media usage, and learning challenges. The interview guide was developed based on dimensions of independence proposed by Wiyani (2013) and covered six thematic areas; b) Behavioral Observation: Direct observation of children's independence behaviors was conducted both before and after media implementation. The instrument was a behavioral observation checklist comprising 12 observable indicators of independence, including self-care routines, task completion, responsibility for personal belongings, and social cooperation. Each indicator was rated on a four-point scale: (1) Not yet developed, (2) Beginning to develop, (3) Developing as expected, and (4)

Well developed; c) Expert Validation Sheets: Separate structured rating sheets were used for material validation and media validation. The material validation sheet assessed content accuracy, alignment with the Kapilara framework, language appropriateness, and curriculum relevance (18 items). The media validation sheet assessed visual design quality, navigational ease, audio-visual integration, and developmental suitability (16 items). Both instruments used a five-point Likert scale; d) Children's Response Questionnaire: A closed-ended questionnaire was distributed to the parents of all 17 research subjects to assess the practicality of the media from the users' perspective. The instrument comprised 15 items covering ease of access, clarity of content, visual appeal, and perceived usefulness in supporting independence habituation at home; e) Documentation: Photographs and field notes of learning activities were collected throughout the implementation phase to support a qualitative description of the process.

Two types of data analysis were employed in this study: Quantitative analysis was applied to numerical data from the expert validation sheets, parent response questionnaires, and behavioral observation scores. Validation and practicality data were analyzed using the descriptive percentage formula:

$$P = \frac{\sum X}{\sum X_i} \times 100\%$$

Where P is the percentage score, $\sum X$ is the total actual score obtained, and $\sum X_i$ is the total maximum possible score. The resulting percentages were interpreted according to the following criteria (Sugiyono, 2022):

Table 1. Validity and Practicality Interpretation Criteria

Percentage	Category
81–100	Very Valid / Very Practical / Very Effective
61–80	Valid / Practical / Effective
41–60	Fairly Valid / Fairly Practical
≤40	Not Valid / Not Practical

Observational data on children's independence behaviors were analyzed by calculating mean scores per indicator and comparing pre- and post-implementation scores to identify changes. A paired descriptive comparison was used, given the single-group design. Qualitative analysis was applied to data derived from interviews, open-ended observation notes, and documentation. The analysis followed a thematic approach: data were transcribed, coded, organized into thematic

categories corresponding to dimensions of independence, and interpreted in relation to theoretical frameworks. Member checking with the class teacher was conducted to ensure the credibility of qualitative findings.

FINDINGS AND DISCUSSION

Findings

Needs Analysis Results

The needs analysis phase identified three core problems in the Group A classroom at TK Intan Permai. First, children demonstrated limited independence in self-reflection and narrating their learning experiences. Second, children showed difficulty in expressing their ideas into concrete actions and pursuing activities based on personal interest. Third, children were not yet able to complete simple tasks independently until finished. These findings were consistent with the teacher's accounts during the interview, who noted that classroom learning was predominantly teacher-centered, with the main instructional material being conventional printed worksheets (LKPD). The absence of media that engages children actively and model independence behaviors was identified as the primary gap to be addressed.

Product Design and Description

Based on the needs analysis results, a digital flipbook media titled *Aku Anak Mandiri* was developed. The final product comprised 28 pages in A5 format and was structured as follows: (a) front cover with theme-appropriate illustrations depicting an independent child in a school setting; (b) learning objectives page; (c) narrative content pages presenting behavioral modeling scenes aligned with Kapilara values; (d) interactive activity pages; (e) a simple game section; (f) a glossary; and (g) a bibliography.

The media was designed in accordance with early childhood learning principles — concrete, visual, stimulating, and joyful. Each section of the flipbook incorporated vibrant illustrations, simple audio narration, and child-friendly language. The digital format allowed flexible access through mobile devices, enabling both in-class and at-home use. Figure 1 presents the front cover and content pages of the developed media.



Figure 1. Developed Media

Expert Validation Results

Prior to field implementation, the flipbook media was subjected to validation by six experts: three material validators and three media validators, all of whom are lecturers at Universitas PGRI Semarang with relevant expertise. Validation was conducted through structured rating sheets following an initial presentation and discussion of the product.

Table 2. Summary of Expert Validation Results

Validator	Aspects Assessed	Percentage	Category
Material Expert (n=3)	Content accuracy, alignment, language, and curriculum relevance	94.6	Very Valid
Media Expert (n=3)	Visual design, navigation, audio-visual integration, and developmental suitability	93.7	Very Valid

The material validation score of 94.6% indicates that the Kapilara content embedded in the flipbook was accurately represented, developmentally appropriate, and well-aligned with the Kurikulum Merdeka framework. Validators particularly noted the systematic presentation of independence indicators drawn from the IHF Kapilara framework as a key strength. The media validation score of 93.7% confirms that the visual and technical aspects of the flipbook met high-quality standards for early childhood media, including appropriate color contrast, readable typography, and intuitive navigation. Several revisions were made following validator recommendations, including the addition of source references within the content, the inclusion of a

glossary section, and adjustments to activity setting illustrations for developmental accuracy.

Practicality Results

Table 3. Parent Response Questionnaire Results

Respondent	Number of Items	Percentage	Category
Parents of Group A Children (n=17)	15 items	93.01	Very Practical

The practicality score of 93.01% reflects strongly positive user responses. Parents reported that the media was easy to access through their mobile devices, visually appealing, and clearly structured. Many parents indicated that the flipbook facilitated meaningful discussions with their children about independence behaviors at home, supporting the continuity of character education between school and the domestic environment. The high practicality score aligns with (Arsyad, 2020) assertion that effective learning media must be accessible, user-friendly, and context-relevant.

Effectiveness Results

Effectiveness was assessed by comparing children's behavioral observation scores before and after media implementation across five key independence indicators:

Table 4. Comparison of Pre- and Post-Implementation Independence Behavioral Scores

Independence Indicator	Pre-Implementation	Post-Implementation	Change
Tidying up play equipment	Low	Good	Significant Improvement
Completing assigned tasks independently	Moderate	Very Good	Significant Improvement
Managing personal belongings	Low	Good	Significant Improvement
Personal hygiene routines	Moderate	Very Good	Significant Improvement
Taking responsibility for actions	Low	Good	Significant Improvement

Across all five indicators, children demonstrated a notable shift from low or moderate independence levels to good or very good levels following consistent use of the flipbook media. The most pronounced improvements were observed in task completion and personal hygiene routines, suggesting that the visual modeling approach effectively translated abstract character values into observable behavioral changes.

Discussion

The results of this study indicate that the development of flipbook media incorporating "Kapilara" (a two-pillar character framework) is of high quality and significantly influences the development of independence in early childhood. These findings are supported by statistical analysis showing that all data met the necessary analysis requirements, thereby confirming the validity and reliability of the research results.

The results of the Kolmogorov–Smirnov normality test yielded a significance value of 0.200, which is greater than the predetermined significance level of 0.05. This result indicates that the null hypothesis of normality cannot be rejected, suggesting that the data are normally distributed. Meeting the normality assumption is an essential prerequisite for the application of parametric statistical analyses because these methods rely on the assumption that the observed data, or the residuals, depending on the analysis, follow a normal distribution. Consequently, the fulfillment of this assumption supports the validity and reliability of subsequent parametric analyses, allowing the statistical conclusions regarding the effectiveness of the developed learning media to be interpreted with greater confidence (Ahadi & Zain, 2023).

The homogeneity test yielded a significance value of 0.298 ($p > 0.05$), indicating homogeneous variances across groups. This finding satisfies one of the key assumptions of parametric statistical analysis, ensuring that comparisons between the experimental and control groups are not biased by unequal variances. Consequently, the treatment effect of the developed learning media can be interpreted with greater statistical confidence (Zhou et al., 2023).

The hypothesis testing results showed a significance value of 0.000 ($p < 0.05$), indicating a statistically significant difference between the pre-observation and post-observation scores. The mean score increased from 17.41 to 28.24, with an average gain of 10.824, while the high t -value (-18.493) indicates a strong effect of the Kapilara-based flipbook on improving children's independence. These findings demonstrate that the developed flipbook effectively facilitates children's learning by providing interactive, engaging, and contextual learning experiences that encourage active participation and independent behavior. Similar findings have been reported in previous studies, which found that flipbook-based learning media significantly improved learning outcomes, as evidenced by significant differences between pretest and posttest scores ($p < 0.05$) in experimental studies (Bayhaki & Untari, 2023).

The effectiveness of the developed flipbook is consistent with previous studies demonstrating that digital flipbook media significantly enhance students' learning outcomes compared with conventional instruction. The multimedia elements embedded in flipbooks make learning more engaging and meaningful, thereby increasing learners' motivation and facilitating better understanding of learning materials (Alfi Riski Ramadanti & Kurniana Bektiningsih, 2023).

The high validity scores obtained from both material and media validation are consistent with the theoretical principles underlying effective educational media design. According to (Gagné, R. M., Briggs, L. J., & Wager, 1992) It is argued that the selection of instructional media should be aligned with instructional objectives, learner characteristics, and learning conditions to maximize the effectiveness of the learning process. The developed flipbook fulfills these criteria by combining visual illustrations, audio narration, and interactive activities within a single accessible platform.

The practicality findings are aligned with (Purnamasari, 2023) research, which found that interactive digital media designed for early childhood consistently receives high usability ratings from both educators and families when the media is visually engaging, device-accessible, and contextually grounded in children's daily experiences. Similarly, (Jumiatmoko et al., 2024), it is also concluded that digital technology—whether in visual or audiovisual formats—can be utilized by teachers and parents to support character development in early childhood. The study underscores that parental involvement in the use of digital media is a crucial factor in reinforcing the habitual practice of character values on a sustained basis, ensuring that character education extends beyond the school environment into the home. while (Ritonga, 2022) argued that effective character education in the digital era requires sustained collaboration between teachers and parents. Therefore, the Kapilara-based flipbook not only functions as a learning medium in the classroom but also serves as a bridge that enables families to reinforce the same character values at home, creating greater consistency in children's character development. Thus, the use of the Kapilara-based flipbook in this study holds the potential to foster continuity in character learning between school and family settings, ultimately supporting more consistent character formation in children.

The contextual approach embedded in the flipbook also contributed to the effectiveness of the learning process. Young children learn best through concrete experiences that are closely connected to their daily lives. Therefore, presenting character values through familiar situations helps children understand and internalize these values more meaningfully. Previous studies have shown that contextual learning based on local wisdom enhances children's engagement, strengthens

cultural identity, and promotes the development of character more effectively (Yusuf et al., 2025).

Research (Kristin Anggraini, 2026) demonstrates that interactive digital learning environments significantly enhance children's learning independence by fostering learning initiative, self-regulation, and intrinsic motivation through exploratory learning experiences. Furthermore, the integration of character values into the flipbook contributes to children's character development by embedding moral values within interactive learning activities. Learning media that explicitly integrate character values provides meaningful experiences that help children understand and practice positive behaviors in their daily lives. This finding is supported by (Kurnia Jayadinata et al., 2025), who reported that digital learning media designed to incorporate character values effectively strengthened honesty, responsibility, empathy, and cooperation among young children. Similarly, (Samosir et al., 2023) found that character-based interactive learning media not only improved learning outcomes but also supported students' character development through value-oriented learning activities (Alfi Riski Ramadanti & Kurniana Bektiningsih, 2023).

The results of this study indicate that the Kapilara-based flipbook medium is effective for instruction, as it enhances children's engagement in the learning process while facilitating the instilling of character values. These findings align with research by (Aprilia, 2021), which demonstrated that context-based flipbooks positively influence the learning process by presenting material in a more engaging and interactive manner, thereby boosting students' critical thinking skills. Although that study focused on primary education, the results highlight how the characteristics of flipbooks—integrating text, images, and interactive elements—can improve the quality of the student learning experience. Furthermore, (Jumiatmoko et al., 2024) concluded that digital technology, in both visual and audiovisual forms, can be effectively utilized by teachers and parents to support early childhood character development. Their study confirms that using digital technology aligned with children's developmental characteristics has the potential to stimulate character growth and strengthen the collaborative role between schools and families. Thus, the findings of the present study extend previous research by demonstrating that flipbooks integrated with Kapilara values serve not only as engaging instructional tools but also as a means to reinforce early childhood character through contextual and interactive learning experiences.

Despite the positive findings, several limitations should be acknowledged. The availability of digital infrastructure, particularly digital devices used during learning activities, was still limited. In addition, the relatively short implementation period may have influenced the observed outcomes,

as character development requires continuous reinforcement over time. Previous studies have shown that the successful implementation of digital learning media depends not only on the quality of the instructional media but also on the availability of technological facilities, teachers' digital competence, and institutional support for technology integration (Alotaibi, 2023; Sugiyono, 2022; Vidal-Esteve & Martín-Gómez, 2023; Yang & Dong, 2024).

These findings also highlight the importance of parental involvement in early childhood character education. High practicality scores and positive feedback from parents indicate that the Kapilara-based flipbook is user-friendly, visually engaging, and suitable for integration into daily home activities. Such conditions encourage parents to move beyond being mere recipients of information and instead act as active partners in instilling character values in their children. These findings align with (Sujana et al., 2023), who emphasize that the success of early childhood character education is significantly influenced by parental role modeling, habituation, motivation, and active involvement within the family environment. Furthermore, (Latif et al., 2023) explain that collaboration between early childhood education institutions and parents—facilitated through parenting programs—aligns school-based education with home-based parenting, thereby ensuring the continuous development of character.

CONCLUSION

This study successfully developed a digital flipbook media featuring Kapilara (Karakter Pilar Dua) values for fostering independence in kindergarten children. The product met all three quality criteria established at the outset. The media achieved very high validity scores from both material experts (94.6%) and media experts (93.7%), confirming that its content, design, and developmental appropriateness meet professional standards. The practicality score of 93.01% based on parent responses demonstrates that the media is user-friendly, accessible, and effectively supports home-school character education continuity. Effectiveness results showed significant improvements across all five observed independence indicators following media implementation, with the most notable gains in task completion and personal hygiene routines.

The theoretical grounding of the media in Piaget's constructivism, Bandura's social learning theory, and the IHF Kapilara framework provides a robust pedagogical basis for the observed outcomes. The integration of a structured character framework within digital media represents a distinctive and replicable approach for early childhood educators seeking to develop character-

based learning materials.

Future research is recommended to conduct wider-scale implementation involving multiple kindergarten sites to test the generalizability of these findings, to incorporate quantitative pre-post statistical testing (such as the Wilcoxon Signed Rank Test) for more rigorous effectiveness measurement, and to explore the long-term retention of independence behaviors beyond the implementation period. Additionally, further development of Kapilara-based flipbook media covering other character pillars would be valuable for establishing a comprehensive digital character education resource for early childhood institutions.

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