



Development of Ethnoparenting Learning Media on Banten Local Culture to Improve Project-Based Learning Implementation and Students' Learning Interest

Luluk Asmawati^{1✉}

^{1✉}Universitas Sultan Ageng Tirtayasa, lulukasmawati@untirta.ac.id, Orcid ID: [0000-0002-8023-6130](https://orcid.org/0000-0002-8023-6130)

Article Info

History of Article

Received:

29 December 2025

Revised:

20 April 2026

Published:

15 October 2026

Abstract

Preserving cultural identity in early childhood education remains a critical challenge amidst the digital transformation in Indonesia. This research aimed to address the urgent need for culturally rooted pedagogical tools by developing an ethnoparenting learning media based on Banten local culture to improve the implementation of project-based learning strategies and students' learning interest. The research used the ADDIE development model to integrate Ecological Systems Theory with digital media creation. It collected data from 30 subjects using questionnaires and an observation rubric to assess feasibility, practicality, and effectiveness, and analyzed the data quantitatively. Results from early childhood education students demonstrated that the ethnoparenting model is highly feasible, with expert validation reaching 95% in average. Practicality also indicated good criteria (>94%) for practical in use in individual, small-group, and large-group trials. Effectiveness testing through pre-test and post-test analysis revealed significant improvements in the implementation of project-based learning strategies ($t = -19.406$, $p < 0.05$) and in students' learning interest ($t = -25.881$, $p < 0.05$). The findings conclude that narrating local cultural content, such as Bantenese maps, folklore, and traditional food, on digital platforms effectively fosters cultural attachment, thereby improving the implementation of project-based learning strategies and students' interest in learning. This research implies that ethnoparenting serves as a strategic intervention for preserving cultural identity within a constructivist learning model, such as project-based learning.

Keywords:

Banten Local Wisdom, Ethnoparenting Learning Media, Project-Based Learning

How to cite:

Asmawati, L. (2026). Development of ethnoparenting learning media based on Banten local culture to improve project-based learning implementation and students' learning interest. *EduBasic Journal: Jurnal Pendidikan Dasar*, 8(2), 128-142

Info Artikel

Riwayat Artikel

Diterima:
29 Desember 2025
Direvisi:
20 April 2026
Diterbitkan:
15 Oktober 2026

Abstrak

Memelihara identitas budaya dalam pendidikan anak usia dini tetap menjadi tantangan krusial di tengah transformasi digital di Indonesia. Penelitian ini bertujuan untuk menjawab kebutuhan mendesak akan kerangka kerja pedagogis yang berakar pada budaya dengan mengembangkan media pembelajaran etnoparenting berbasis budaya lokal Banten guna meningkatkan implementasi strategi pembelajaran berbasis proyek serta minat belajar siswa. Penelitian ini menggunakan model pengembangan ADDIE untuk mengintegrasikan Teori Sistem Ekologis dengan pembuatan media digital. Data dikumpulkan dari 30 subjek menggunakan kuesioner dan rubrik observasi untuk menilai kelayakan, kepraktisan, dan efektivitas dan kemudian dianalisis secara kuantitatif. Hasil dari mahasiswa pendidikan anak usia dini menunjukkan bahwa model etnoparenting sangat layak, dengan validasi ahli mencapai rata-rata 95%. Kriteria kepraktisan juga menunjukkan hasil yang baik ($> 94\%$) dalam penggunaan pada uji coba individu, kelompok kecil, dan kelompok besar. Uji efektivitas melalui analisis pra-tes dan pasca-tes mengungkapkan peningkatan signifikan dalam implementasi strategi pembelajaran berbasis proyek ($t = -19,406$, $p < 0,05$) dan minat belajar siswa ($t = -25,881$, $p < 0,05$). Temuan ini menyimpulkan bahwa menyajikan konten budaya lokal, seperti peta Banten, cerita rakyat, dan makanan tradisional, ke dalam platform digital secara efektif menumbuhkan keterikatan budaya untuk meningkatkan penerapan strategi pembelajaran berbasis proyek dan minat belajar siswa. Penelitian ini menunjukkan bahwa etnoparenting berperan sebagai intervensi strategis dalam melestarikan identitas budaya dalam model pembelajaran konstruktivisme, seperti pembelajaran berbasis proyek.

Kata Kunci:

Kearifan Lokal Banten, Media Etnoparenting, Pembelajaran Berbasis Proyek

Cara Mensitasi:

Asmawati, L. (2026). Development of ethnoparenting learning media based on Banten local culture to improve project-based learning implementation and students' learning interest. *EduBasic Journal: Jurnal Pendidikan Dasar*, 8(2), 128-142

INTRODUCTION

The landscape of early childhood education in Indonesia is currently facing a profound shift as social media and foreign cultures increasingly dominate children's daily lives. The pervasive influence of foreign cartoon films is gradually eroding original ancestral values, creating a cultural gap in the digital era. While Society 5.0 envisions a human-centered society integrated with AI, IoT, and big data, the reality of parenting has become increasingly complex. Current empirical evidence indicates that excessive gadget use has led to social isolation, weakened family communication, emotional instability, and physical health issues among children, as quoted by Bornstein (2019) in the *Handbook of Parenting: Volume 5: The Practice of Parenting*. Furthermore, the lack of digital character formation leaves early childhood vulnerable to cyberbullying, hoaxes, and inappropriate content. Consequently, culture-based digital learning media are required as an ethnoparenting innovation to reintegrate local wisdom into daily parenting practices and revitalize parents' roles in the digital age (Kartika et al., 2025; Sundari et al., 2023).

The development of these digital learning media serves as a strategic implementation of Urie Bronfenbrenner's Ecological Systems Theory. As mentioned in *The Ecology of Human Development*, the theory posits that child development is profoundly influenced by the dynamic interactions among individuals and various environmental systems, ranging from the microsystem (family, school, and peers) to the macrosystem, which comprises overarching culture, values, and social policies. These media aim to strengthen the microsystem, which includes the family, school, and peer environments. Furthermore, media facilitate the mesosystem by mediating relationships between microsystems, such as interactions between family and school. They also account for the exosystem, or indirect social environments such as parents' workplaces, and the macrosystem, which encompasses overarching culture, values, and social policies. Within this framework, ethnoparenting-based media function as a

bridge to integrate Society 5.0 technology with the noble cultural values and local traditions of Banten into daily practice. By embedding cultural identity into digital platforms, these media aim to facilitate 21st-century skills, specifically creative thinking, critical thinking, communication, and collaboration, thereby providing a robust cultural foundation for children's future development.

The integration of Bantenese cultural content into digital media aligns with Ki Hajar Dewantara's philosophy, which emphasizes that education must be rooted in three primary environments, known as *Tri Pusat Pendidikan* (the Three Centers of Education): the family, the school, and the community, as documented by Soeratman (1989) in *Ki Hajar Dewantara*. In the context of Society 5.0, the family serves as the informal foundation for character formation and the primary center for developing a child's digital character. Meanwhile, the school provides a formal environment for developing knowledge and skills, and the community offers a non-formal space to apply life values. These digital learning media function as a pedagogical bridge, instilling moral and ethical values in technology use while supporting collaborative learning between home and school. By embedding Bantenese cultural content in these educational environments, the media support learning management that fosters children's digital character formation and ethical growth.

The integration of Bantenese local wisdom into digital media is informed by an extensive analysis of pedagogical parallels across diverse indigenous and international cultures. Research indicates that Bantenese educational values share foundational principles with various Indonesian ethnic groups, including the Javanese (Andana & YUSDIANA, 2025; Ismawati, 2025), Sundanese (Nurhayati et al., 2024), Madurese (Aprilia et al., 2025; Trisetiawati et al., 2025), Batak (Nurhafizah, 2024), Minangkabau (Wirdanengsih & Wita, 2025), Lampung (Utama & Dea, 2023), and Bugis tribes (Nirwana & Irmayanti, 2022). For example, Javanese and Malay ethnoparenting is characterized by politeness, ecological adaptation, and traditional survival skills (Ida et al., 2023; Ismawati, 2025), while Sundanese pedagogy prioritizes honesty, spirituality, and

harmony with nature. Furthermore, global perspectives from Japan, China, Australia, and Arabic-speaking nations reinforce the universality of character education, self-esteem, and social politeness in parenting practices (Grace et al., 2026; Hayashi & Tobin, 2014; Kherais, 2022; Mori et al., 2012; Suratman & Arif, 2020).

However, a critical distinction lies in the pedagogical values of Bantenese culture, which are deeply intertwined with Islamic religious values, discipline, and character development (Wulandari & Listiana, 2023). Unlike traditional methods that rely solely on direct role modeling by parents and elders, the Bantenese context demands a digital transformation to remain relevant in Society 5.0. This research identifies a significant gap: while existing literature highlights the importance of cultural preservation, it lacks digital learning media that specifically narrates Islamic-Bantenese content. By synthesizing these noble cultural norms and traditional practices into accessible digital formats, this study addresses the need for a culturally rooted yet technologically advanced pedagogical framework. This approach ensures that early childhood education remains anchored in strong moral and religious identities while navigating the complexities of the digital era.

To translate these Bantenese cultural values into functional digital tools, the program uses a student-centered approach through Project-Based Learning (PjBL). As a pedagogical strategy, PjBL encourages students to construct knowledge through in-depth exploration of essential questions and collaborative activities aimed at producing authentic products (Astriani, 2020). The implementation of PjBL in this research follows a rigorous investigative process, from determining relevant real-world problems related to cultural erosion to the final evaluation and reflection on the produced media (Mubarok et al., 2021). Students engage in a systematic design process comprising schedule preparation, product design, and continuous monitoring to ensure that the digital assets they create are both pedagogically sound and culturally accurate (Zativalen et al., 2022). By using software such as Canva, Freepik, and Flaticon, students are tasked with creating image assets that align

with the ethnoparenting theme, thereby integrating 21st-century skills with practical digital creativity. This project-based approach not only focuses on the final output but also emphasizes the inquiry process, ensuring that the resulting media effectively foster a connection between traditional wisdom and modern instructional technology.

The successful execution of project-based tasks, particularly in creating complex digital learning content, is fundamentally determined by student learning interest. Interest in learning serves as a critical internal drive and a source of motivation, encouraging students to engage deeply in academic activities with a sense of enjoyment and commitment (Anggraini & Ubidia, 2022; Kurniawati, 2022). Within the context of this research, high learning interest is essential for students to navigate the technical and pedagogical challenges of designing ethnoparenting media. This interest is influenced by both internal factors, such as personal goals and expectations, and external influences, including environmental support and the relevance of course materials (Sihombing et al., 2024). When students have a strong attraction to child education within the family, they demonstrate greater persistence in searching for resources, creating layouts, and elaborating on digital elements that align with Bantenese cultural themes. Ultimately, fostering this interest not only influences academic success but also ensures that the students, as future educators, are more active and creative in preserving cultural identity through innovative technology (Wiliyanti et al., 2024).

Despite the rich pedagogical potential of local wisdom, a significant gap remains due to the limited variety of digital learning content rooted in Bantenese culture. This scarcity is largely attributed to the lack of accessible references and structured frameworks for integrating these values into modern early childhood education. This research addresses this gap by introducing a novel approach: an ethnoparenting-based digital media design that asks students to create authentic cultural assets, such as Bantenese maps, folklore e-books, and traditional food guides. These media are strategically designed to enhance various aspects of child development,

including cognitive, moral, and emotional growth, while aligning with the values of discipline and Islamic character. Consequently, this study aims to: (1) analyze the feasibility of Bantenese culture-based digital media through expert validation; (2) analyze the implementation of user trials; and (3) evaluate the effectiveness of these media in improving project-based learning strategies and student learning interest. By providing these innovative digital tools, this research offers a scalable solution for preserving cultural identity within the Society 5.0 framework.

METHODS

This research used a Research and Development (R&D) approach using the ADDIE (Analysis, Design, Development, Implementation, and Evaluation) model. The objective is to develop Bantenese culture-based digital learning media to improve the implementation of project-based learning strategies and students' learning interest. The research involved learning experts for validation and 30 students from the Early Childhood Education Department, Teacher Training and Education Faculty, Universitas Sultan Ageng Tirtayasa, who were enrolled in the "Childhood Education in the Family" course and served as subjects in the trial phase.

Data collection techniques included questionnaires for expert validation (feasibility) and user trials (practicality), observation rubrics to measure the implementation of project-based learning strategies, and student learning interest and implementation tests to collect quantitative data for testing the effectiveness of students' learning interest.

The instrument for measuring Project-Based Learning implementation consists of four dimensions. The dimensions evaluate students' competence to (1) understand the ethnoparenting theory, (2) apply ethnoparenting theory into practice, (3) design ethnoparenting media, and (4) integrate Bantenese local wisdom into digital media design. Both dimensions utilize a 4-point rating scale.

The assessment of students' interest and technical proficiency in media production were evaluated through four behavioral

indicators: (1) diligence in searching for theme-appropriate image elements, (2) precision in creating media layouts, (3) creativity in asset elaboration, and (4) the ability to construct pedagogical narratives in ethnoparenting media.

The quantitative data collected from expert validations and student trials were analyzed using descriptive and inferential statistics. To interpret the results, the raw scores (on a 1-4 rating scale) were converted to a percentage scale (0-100%) and categorized into four performance levels. As shown in Table 1, the interval scores serve as the benchmark for determining the quality and feasibility of the media: scores between 1-25 are categorized as 'Poor,' 26-50 as 'Enough,' 51-80 as 'Good,' and 81-100 as 'Very Good.' Furthermore, to determine the significance of the results, the data underwent validity and reliability testing, followed by a Paired-Samples T-test to compare students' performance before and after the implementation of the ethnoparenting digital media based on the Banten local culture.

Table 1. Score Interval & Categories

Score	Score Interval	Category
1	1-25	Poor
2	26-50	Enough
3	51-80	Good
4	81-100	Very Good

The development process for the Bantenese ethnoparenting digital media follows the ADDIE model's systematic stages, as summarized in Table 2. Each phase was executed with specific technical and pedagogical objectives:

1. **Analysis:** The researcher identified the real conditions of parenting in the digital era, focusing on social isolation, emotional instability, and the erosion of local cultural values.
2. **Design:** This phase involved conceptualizing digital assets, including the Map of Banten, Bantenese folklore e-books, and educational games such as 'Snakes and Ladders' and facial fans.
3. **Development:** Media production utilized Canva, Freepik, and Flaticon. Crucially,

expert validation was conducted by design, material, and media specialists to assess the products' feasibility.

4. Implementation: The media's practicality was analyzed through user trials conducted in three iterative phases: individual, small group, and large group trials involving 30 students.
5. Evaluation: Finally, the researcher evaluated the effectiveness of the media in improving project-based learning strategies and students' learning interest through pre-test and post-test measurements.

Table 2. Summary of ADDIE Development Procedures for Bantenese Digital Media

Stage	Activity
Analyze	Identify the probable causes for the performance gap
Design	Design ethnoparenting based on the Bantenese local culture
Develop	Create Banten maps, Snakes dan Ladders game, Sultan Banten paper fan, Banten folklore e-book, Banten traditional food e-book
Implement	Test the practicality with 30 early childhood education students
Evaluate	Evaluate the effectiveness through an authentic portfolio assessment

RESULTS AND DISCUSSION

Development of Ethnoparenting Learning Media Based on Bantenese Local Culture

The research findings begin with a detailed documentation of the media development process following the ADDIE framework. Table 3 delineates the operational syntax, elements, and specific activities undertaken to ensure the digital media were pedagogically sound and culturally relevant. In the Analysis phase, the focus was on identifying performance gaps to tailor the materials to student needs. The Design and Development phases involved a systematic task inventory and content generation, including the creation of supporting media and instructional guidance for both students and lecturers. Subsequently, the Implementation phase ensured that the learning environment was prepared for student engagement,

followed by a comprehensive Evaluation to assess the effectiveness of the instructional tools. This structured process served as the foundation for the subsequent validity, practicality, and effectiveness testing.

Table 3. Description of Stage, Elements, and Activities of the Ethnoparenting Learning Media Development

Analyze	
Procedure/ Element	Identify performance gaps in the learning course
Activity	Organizing materials, activities, and learning evaluations based on student needs
Design	
Procedure/ Element	Design performance and appropriate testing methods
Activity	Conduct a task inventory Compose performance objectives Generate testing strategies
Develop	
Procedure/ Element	Generate and validate the learning resources
Activity	Generate content Develop supporting media Develop guidance for the student Develop guidance for the lecture Conduct a formative test
Implement	
Procedure/ Element	Implement the strategy and media/prepare the learning environment, and engage the students
Activity	Prepare the lecture Prepare the student
Evaluate	
Procedure/ Element	Evaluate plan
Activity	Select evaluation tools Conduct evaluation

The development phase of this research successfully transformed conceptual Bantenese local wisdom into functional digital learning assets. By using the ADDIE framework, the researcher developed a comprehensive ethnoparenting media package for parents and educators in the Society 5.0 era. The production process integrated high-resolution visual elements from Canva, Freepik, and Flaticon to ensure that the pedagogical narratives remained engaging for

early childhood audiences. The primary outputs of the development phase consist of five distinct digital assets, which are detailed in the following prototype designs.

Table 4. Prototype of Ethnoparenting Digital Learning Media Based on Bantenese Local Culture

Assets	Prototype
Banten Maps	
Snakes and Ladders Game	
Sultan Banten Paper Fan	
Banten Folklore E-Book	
Banten Traditional Food E-Book	

The prototype designs presented in Table 4 focus on translating Bantenese identity into interactive formats. The Banten Maps serve as a geographical introduction to local roots, while the Snakes and Ladders Game and Sultan Banten Paper Fan provide gamified learning experiences. Furthermore, the Banten Folklore and Traditional Food E-books act as narrative tools to instill moral values and cultural identity. These prototypes served as the basis for subsequent expert validation and field testing.

Instrument Validity & Reliability Results

Before measuring the effectiveness of the media, the research instruments comprising the Project-Based Learning (PjBL) strategy scales and the Learning Interest scales underwent empirical validity testing. The results of the validity tests for both instruments are presented in Tables 5 and 6.

Table 5. Validity Results of Project-Based Learning Strategy Instrument

Item	r-count	r-table	Description
1	0.716	0.361	Valid
2	0.689	0.361	Valid
3	0.461	0.361	Valid
4	0.730	0.361	Valid

The results of the validity test for the project-based learning strategy indicate that all 4 questions are valid, as evidenced by the r-count exceeding the r-table.

Table 6. Validity Results of Learning Interest Instrument

Item	r-count	r-table	Description
1	0.592	0.361	Valid
2	0.533	0.361	Valid
3	0.492	0.361	Valid
4	0.599	0.361	Valid

The validity test results for learning interest indicate that all 4 questions are valid, as evidenced by the r-count exceeding the r-table.

After ensuring the validity of each item, the instruments were tested for reliability using Cronbach's alpha. A reliable instrument ensures that data collection tools yield consistent results across trials. The reliability coefficients for both the Project-Based Learning strategy and the Learning Interest instruments are presented in Tables 7 and 8.

Table 7. Reliability Results for Project-Based Learning Strategy Instrument

Cronbach's Alpha	N of Items
0.811	4

The results of the validity test of students' learning interest indicate that all 4 questions are reliable, as evidenced by the calculated value above 0.70 for Cronbach's Alpha.

Table 8. Reliability Results for Learning Interest Instrument

Cronbach's Alpha	N of Items
0.746	4

The reliability test results of 0.746 indicate that the 4 items of the learning interest instrument have very high reliability. According to the reliability criteria, a Cronbach's Alpha value above 0.70 indicates high internal consistency. Therefore, it can be concluded that both instruments are highly reliable and suitable for evaluating the effectiveness of the ethnoparenting digital media based on the Bantenese local culture.

Feasibility Validation Result

The feasibility of ethnoparenting digital media based on Bantenese local culture was evaluated through a rigorous expert-judgment process across three specialized domains: learning design, learning materials, and learning media technology. The quantitative results of these validations are summarized in Table 9.

Table 9. Results of the Expert Judgment Validation

Aspects	Result	Description
Learning Design	97%	Highly Feasible
Learning Materials	95%	Highly Feasible
Learning Media	95%	Highly Feasible
Total score	287/3	
Average	95%	

As shown in Table 9, the developed media achieved an average score of 95%, placing it within the "Very Good" or "Highly Feasible" category (81%–100%). Specifically, the Learning Design validation reached 97%, indicating that the instructional flow, indicators, and the integration of the project-based learning strategy are perfectly aligned with student needs. The Learning Materials expert scored it 95%, confirming that the integration of Bantenese local culture and Islamic values is accurate and meets the intended learning outcomes. Furthermore, the Learning Media validation resulted in a 95% score, certifying that the visual aesthetics, interactivity, and navigation of the digital assets meet professional standards. These results provide a robust foundation for proceeding to the implementation phase, suggesting that the media has strong potential to enhance students' learning interest and the practical implementation of ethnoparenting activities in a project-based learning strategy.

Practicality Result

Following the expert validation, the practicality of the ethnoparenting digital learning media based on Bantenese local culture was assessed through a three-stage formative evaluation involving students as target users. These stages included an individual trial (N=3), a small-group trial (N=6), and a large-group trial (N=21). The results are presented across Tables 10, 11, and 12.

Table 10. Individual Test Results of the Ethnoparenting Learning Media

Indicator	Score		%
	Obtained	Max.	
Students are able to understand the ethnoparenting theory	12	12	100
Students are able to apply the theory and practice of the ethnoparenting learning model design	12	12	100
Students are able to design ethnoparenting learning models	12	12	100
Students are able to integrate Banten local wisdom into the design of ethnoparenting learning models	9	12	75
Total	45	48	94

The results of the individual trial showed 94%, proving that the ethnoparenting learning media design is very suitable for use in the Childhood Education in the Family course.

Table 11. Small Group Test Results of the Ethnoparenting Learning Media

Indicator	Score		%
	Obtained	Max.	
Students are able to understand the ethnoparenting theory	24	24	100
Students are able to apply the theory and practice of the ethnoparenting learning model design	24	24	100
Students are able to design ethnoparenting learning models	24	24	100
Students are able to integrate Banten local wisdom into the design of ethnoparenting learning models	21	24	87
Total	93	96	97

The small-group trial achieved 97%, demonstrating that the ethnoparenting learning model design is well-suited for use in the Childhood Education in the Family course.

Table 12. Large Group Test Results of the Ethnoparenting Learning Media

Indicator	Score		%
	Obtained	Max.	
Students are able to understand the ethnoparenting theory	84	84	100
Students are able to apply the theory and practice of the ethnoparenting learning model design	84	84	100
Students are able to design ethnoparenting learning models	84	84	100
Students are able to integrate Banten local wisdom into the design of ethnoparenting learning models	80	84	95
Total	332	336	99

The results of the large-group trial achieved 99%, demonstrating that the ethnoparenting learning model is well-suited for use in the Childhood Education in the Family course. Across all phases, the highest scores were consistently achieved in students' theoretical understanding and their ability to design the media assets. These findings confirm that the developed media are highly practical, user-friendly, and effectively facilitate the learning objectives within the 'Childhood Education in the Family' course.

Effectiveness Testing Result

The effectiveness of the developed ethnoparenting media was evaluated by comparing pre-test and post-test scores across three domains: instructional design proficiency, implementation of the PjBL strategy, and student learning interest. The statistical results from the Paired-Sample T-Test are presented in Tables 13, 14, and 15.

Table 13. Pre-test and Post-test of Ethnoparenting Learning Design Proficiency

	Pre-test	Post-test
Mean	73.667	85.833
Variance	29.195	19.109
Observations	30	30
Pearson Correlation	0.559	
Hypothesized Mean Difference	0	
df	29	
t Stat	-14.250	
t Critical one-tailed	1.699	
t Critical two-tailed	2.045	

The pre-test results had an average score of 73.667 (good criteria), and the post-test results had an average of 85.833 (very good criteria). It indicates an improvement in learning outcomes using the ethnoparenting learning model design.

Table 14. Pre-test and Post-test of Project-Based Learning Strategy Implementation

	Pre-test	Post-test
Mean	80.000	90.333
Variance	3.222	8.505
Observations	30	30
Pearson Correlation	0.550	
Hypothesized Mean Difference	0	
df	29	
t Stat	-19.406	
t Critical one-tailed	1.699	
t Critical two-tailed	2.045	

The pre-test had an average score of 80 for the good criteria, and the post-test had a score of 90 for the very good criteria. This indicates an improvement in the implementation of project-based learning strategies.

Table 15. Pre-test and Post-test of Students' Learning Interest

	Pre-test	Post-test
Mean	57.333	89.333
Variance	51.264	27.126
Observations	30	30
Pearson Correlation	0.436	
Hypothesized Mean Difference	0	
df	29	
t Stat	-25.881	
t Critical one-tailed	1.699	
t Critical two-tailed	2.045	

The pre-test results obtained an average score of 57.333 (Good criteria), while the post-test results obtained 89.333 (Very Good criteria). It indicates an increase in students' interest in learning about ethnoparenting through learning media design.

The data reveals a significant improvement in all three areas. For the Instructional Design Proficiency (Table 13), the mean score rose from 73.667 to 85.833. The PjBL Strategy implementation (Table 14) saw an increase from 80.00 to 90.333, while the most substantial growth occurred in Learning Interest (Table 15), which surged from 57.333 to 89.333. Statistically, all tests yielded a t-statistic significantly higher than the t-critical (2.045) with a p-value ($P < 0.05$), confirming that the integration of Bantenese local culture through ethnoparenting digital media effectively enhances both students' competence and motivation.

Discussion

The results show a significant increase in the average learning outcome. This surge in interest is largely due to students' transformation into researchers, designers, editors, and curators during project-based activities. The lecturer implemented the ethnoparenting pedagogical strategy. The ethnoparenting pedagogical strategy involved creating Banten cultural activities using Canva software. The use of Canva as an innovative platform for designing narratives grounded in local culture has been shown to enhance specific learning competencies (Hardina et al.,

2024). The pedagogical strategy includes four stages: researcher, designer, editor, and curator. By shifting from passive learners to active researchers, designers, editors, and curators, students experienced a profound engagement with the material.

As researchers, they meticulously investigated Bantenese cultural themes and digital assets. Their tasks included reading reference books on the theme, understanding Canva icons, and searching for and finding cover slides, section dividers, content slides, visual slides, closing slides, icons, fonts, image elements, and colors. As designers, they mastered spatial layouts and typography. Their tasks included designing the layout into 3 parts: a top layout for the theme, a middle layout for image elements, and a bottom layout for text, as well as designing easy-to-read font typography and visual typography tailored to real situations. This systematic design process reflects the effective integration of local culture into educational interventions to improve target pedagogical outcomes (Padwika et al., 2025).

The editor's tasks included editing visual layouts, fonts, simple sentences, images, and colors, and choosing bright colors. At the same time, the curator's tasks included selecting fonts, images, and colors that support each other thematically, and placing content that is understandable to readers. Their roles as editors and curators further refined their critical thinking, ensuring that the final digital products created in Canva were not only aesthetically pleasing but also pedagogically sound and culturally accurate. The successful digitalization of local wisdom through these specialized roles demonstrates how instructional technology can preserve cultural values while fostering student creativity (Budiarti & Wakhudin, 2026). This transformation underscores how project-based learning (PjBL) acts as a bridge between theoretical knowledge and practical 21st-century skills.

Students' 21st-century learning skills developed remarkably well. The feasibility of the ADDIE model development research showed that the ethnoparenting learning model design was highly feasible, with expert validation at 95%, making it highly relevant for bridging the implementation of project-

based learning strategies with student learning interests. The practicality of the project-based learning strategy was very good. This is because the course was designed to train students' skills in designing digital learning media grounded in Banten's local cultural wisdom, in accordance with ecological systems theory (Zubaedah et al., 2022).

Through the challenge of digitizing Banten's local wisdom content, such as the map of Banten, a digital snakes-and-ladders game with Banten's rural and urban themes, Sultan fans, and folklore and traditional food e-books, students connected with their heritage while mastering tools like Freepik, Canva, and Flaticon. Lecturers facilitated learning by providing keywords for image searches, enabling the learning model design to be practically used.

Students' learning interest increased because they learn with a sense of enjoyment, actively participate in learning, take responsibility for assignments, and are disciplined (Situmorang, 2021). Lecturers' strategies to increase students' interest in learning include designing course materials that are more relevant and applicable to real life. Therefore, learning interest builds good educational quality and encourages students to develop further. It shows that technology-based media can foster active participation and academic discipline, as emphasized by Wiliyanti et al. (2024), who state that appropriate digital tools create enjoyable learning experiences that significantly boost student interest.

The effectiveness of ethnoparenting digital media is statistically evidenced by significant improvements in both project-based learning strategies and student interest in learning. Based on the Paired Sample T-test results, the implementation of PjBL strategies showed a significant increase, with the t-stat (-19.40) exceeding the t-critical (2.045) and a p-value ($P < 0.05$). This substantial growth occurs because the systematic stages of media production, facilitated by Canva, Freepik, and Flaticon, encourage students to embrace new technological challenges, effectively turning the classroom into a dynamic studio of cultural innovation. This aligns with Rahmi et al.'s (2023) findings that PjBL helps prospective early childhood education teachers bridge the

gap between theory and practice in pedagogical competencies.

This process highlights the deep relevance of Bantenese culture in modern education through three critical dimensions: cultural attachment (engagement), cultural ownership (sense of belonging), and pedagogical integration. By integrating Bantenese cultural themes into digital platforms, the learning environment became a space where cultural values were not merely studied as abstract theories but actively practiced and owned by students. The integration of ethno-parenting into technology-driven approaches is essential for aligning cultural preservation with 21st-century education policies (Mahardhani et al., 2025). This sense of ownership, driven by their roles as creators of Bantenese-themed assets, fostered a deeper emotional and psychological connection to the material. Consequently, this high level of engagement and cultural attachment served as the primary catalyst for the superior learning outcomes and the surge in interest observed in the post-test results.

Specifically, the pedagogical integration of course materials with Bantenese cultural values proved to be a decisive factor in academic success. This integration was not merely superficial; it aligned the Course Learning Outcomes and Sub-Course Learning Outcomes with the students' lived cultural reality. Revitalizing local wisdom through an ethnopedagogy approach effectively strengthens character education by embedding ancestral values within modern instructional frameworks (Sakti et al., 2024). By connecting complex pedagogical theories, such as child development and family systems, with familiar local heritage, students achieved a significantly deeper conceptual understanding (Supriyanto & Herlambang, 2025). This clarity allowed them to move beyond rote memorization, fostering a learning environment in which they could actively participate and contribute original ideas. Consequently, the development of cultural attachment and ownership did not result in a digital product alone, but in a sustainable pedagogical mastery that ensures these future educators can authentically transmit local wisdom to the next generation.

The contribution of this research, based on statistical analysis and discussion, demonstrates that the ethnoparenting learning media design effectively improves students' ability to create digital learning media based on Banten's local cultural wisdom. This ethnoparenting learning design is highly suitable as an alternative learning innovation to develop student competency in the Childhood Education in Family course. This development serves as a concrete response to the complexity of parenting in the digital era, where excessive gadget use without cultural guidance often leads to social isolation and emotional instability, as noted by Bornstein (2019). The global contribution of this research is that integrating materials with Banten culture can create an inclusive learning environment centered on students, increase psychological safety, and foster emotional attachment, making lectures meaningful and authentic. Using Canva software can promote student engagement and enhance 21st-century learning, as digital learning is relevant to today's students' needs.

The limitations of this study include the research subjects, context, materials, facilities, academic culture, time, and technical implementation. The development and testing of the ethnoparenting learning model design were conducted with limited subjects and contexts, given the number of students, institutional characteristics, facilities, and academic culture, so it cannot be generalized to all undergraduate study programs in early childhood education. These limitations also provide a clear pathway for future research to expand the scope and diversity of subjects and further validate the scalability of this ethnoparenting framework across different regional and academic contexts.

CONCLUSION

This research successfully demonstrates that the development of Bantenese culture-based digital media is highly feasible, practical, and effective in enhancing students' pedagogical competencies in implementing project-based learning (PjBL) and in their learning interests. The development of the ethnoparenting digital learning media has successfully met the highest eligibility standards, achieving an average validation

score of 95% from design, material, and media experts. This indicates that the media is not only technically sound but also pedagogically aligned with ethnoparenting quality standards. Furthermore, the implementation of the PjBL strategy using this media has demonstrated a significant positive impact on student performance. Statistical analysis of pre-test and post-test scores reveals a consistent shift from “Good” to “Very Good” categories across all measured variables.

The study confirms that integrating local wisdom into the “Childhood Education in the Family” course not only improves academic performance, as evidenced by significant t-test results, but also fosters a deeper sense of cultural attachment and ownership among students. The true innovation lies in the synergy between 21st-century digital tools, such as Canva, and the preservation of Bantenese indigenous identity, which creates a student-centered learning environment characterized by psychological safety and emotional engagement.

While the findings offer a meaningful alternative for learning innovation, the study is constrained by its specific institutional context and limited subject size. Therefore, future research should expand the geographical context beyond Banten and include diverse undergraduate programs and larger populations to validate the scalability of the ethnoparenting model. Ultimately, this research provides a framework for future educators to bridge heritage with technology, ensuring that local values remain central in the global digital era.

REFERENCES

- Andana, S., & YUSDIANA, Y. (2025). Ethno parenting Suku Jawa: Nilai pendidikan Islam dalam tradisi Sepasaran, Selapanan, dan Piton-Piton di Suku Jawa Parit Keladi Kecamatan Sungai Kakap Kubu Raya. *AlBanna: Jurnal Pendidikan Islam Anak Usia Dini*, 3(1), 41–47.
- Anggraini, R., & Ubidia, A. T. (2022). Hubungan media sosial TikTok terhadap minat belajar mahasiswa. *ISTSIFYA: Journal of Islamic Guidance and Counseling*, 3(1), 128–139.
- Aprilia, W. D., Fitroh, S. F., Latif, M. A., & Yuandana, T. (2025). Exploring the influence of Madura ethnoparenting on social intelligence development in early childhood: A case study. *Nak-Kanak: Journal of Child Research*, 2(2), 61–69.
- Astriani, M. M. (2020). Upaya mengembangkan kreativitas mahasiswa melalui pembelajaran model project based learning. *Petik: Jurnal Pendidikan Teknologi Informasi dan Komunikasi*, 36–42.
- Budiarti, M. R., & Wakhudin, W. (2026). Improving elementary school students’ digital literacy through culture responsive Canva-based science learning. *Journal of Innovation and Research in Primary Education*, 5(1), 285–297.
- Grace, R., Karatasas, K., Ezekwem-Obi, A., Blythe, S., Wright, A. C., Ravvio, J., & Hadley, F. (2026). Supporting the cultural connections of children from culturally diverse backgrounds in out-of-home care: Perspectives from Australian foster and kinship carers. *Journal of Ethnic and Cultural Diversity in Social Work*, 12(3), 1–16.
- Hardina, L. T., Asari, S., & Maruf, N. (2024). Designing local culture-based Canva narratives to enhance reading skills for junior high school students. *Journal of English Education and Linguistics Studies*, 11(2), 927–957.
- Hayashi, A., & Tobin, J. (2014). Implications of studies of early childhood education in Japan for understanding children’s social emotional development. *Asia-Pacific Journal of Research in Early Childhood Education*, 8(2), 115–127.
- Ida, A., Zulkifli, N., & Novianti, R. (2023). Pelaksanaan etnparenting Melayu Riau oleh orang tua untuk menanamkan nilai kesopanan pada anak usia dini di RA Plus Nur As Syam Desa Kasikan Kecamatan Tapung Hulu Kabupaten Kampar. *Journal on Education*, 6(1), 14–24.

- Ismawati, P. (2025). Ethnographic study of ethnoparenting practices in the Samin community of Jepang village. *Thufuli: Jurnal Pendidikan Islam Anak Usia Dini*, 7(1), 45–54.
- Kartika, R. A., Novianti, R., & Tambunan, N. (2025). Analisis pelaksanaan ethnoparenting Suku Akit pada era digital di Kelurahan Teluk Belitung Kecamatan Merbau Kabupaten Meranti. *Indonesian Research Journal on Education*, 5(4), 1435–1442.
- Kherais, W. A. (2022). Saudi parents' perspectives on the influence of acculturation on their childrearing beliefs. *European Journal of Education Studies*, 9(11), 263–306.
- Kurniawati, I. D. (2022). Analysis of student learning interest by using Google Classroom on online learning for engineering physics courses. *International Journal of Basic and Applied Science*, 11(1), 47–52.
- Mahardhani, A. J., Sulton, S., Katoningsih, S., Muttaqin, M. A., Pramudiana, I. K., & Dhika, G. A. (2025). Embedding ethnoparenting into 21st century education policy: A technology-driven approach to cultural preservation. *Journal of Educational Technology and Learning Creativity*, 3(2), 204–216.
- Mori, E., Liu, C., Otsuki, E., Mochizuki, Y., & Kashiwabara, E. (2012). Comparing child-care values in Japan and China among parents with infants. *International Journal of Nursing Practice*, 18(2), 18–27.
- Mubarok, M., Iskandar, B. A., Zulparis, Z. (2021). Kreativitas mahasiswa dalam membuat media pembelajaran. *Jurnal Jendela Pendidikan*, 1(4), 265–271.
- Nirwana, N., & Irmayanti, I. (2022). Ethnoparenting in Bugis Tribe (Parental practices and beliefs in the Karampung indigenous community, Sinjai Regency, South Sulawesi). *The South East Asia Journal of Early Childhood Case Education and Parenting (SEA-CECCEP)*, 3(1), 16–29.
- Nurhafizah, S. (2024). Hubungan ethnoparenting Suku Batak Simalungun terhadap perkembangan sosial emosional anak usia 5-6 tahun di Desa Rukun Mulyo. *Jurnal Pendidikan Tambusai*, 8(2), 31211–31219.
- Nurhayati, E., Napisah, I. A., & Ramdaeni, S. (2024). Etnoparenting: Pengasuhan anak usia dini berbasis budaya sunda. *KIDDO: Jurnal Pendidikan Islam Anak Usia Dini*, 5(2), 352–362.
- Padwika, D. R., Rudiyanto, R., Rachmawati, Y., Agustin, M., & Mwariko, S. A. (2025). Integrating local culture into parental nutrition education: Evidence from an ethnoparenting-based intervention in West Java. *Golden Age: Jurnal Ilmiah Tumbuh Kembang Anak Usia Dini*, 10(3), 583–597.
- Rahmi, S., Nursyafti, Y., Purwanto, W., Maksum, H., & Hendriyani, Y. (2023). The development of flipbook based e-module with a project based learning model in the subject of electricity and electronics. *PAKAR Pendidikan*, 21(2), 228–244.
- Sakti, S. A., Endraswara, S., & Rohman, A. (2024). Revitalizing local wisdom within character education through ethnopedagogy approach: A case study on a preschool in Yogyakarta. *Heliyon*, 10, e31370.
- Sihombing, J. S., Purnawan, P. E., Sababalat, K. Z., & Tafonao, T. (2024). Analisis faktor yang mempengaruhi minat belajar mahasiswa. *Jurnal Ilmiah Multidisiplin*, 1(2), 106–118.
- Situmorang, A. S. (2021). Pembelajaran online dengan Google Classroom terhadap minat belajar mahasiswa FKIP UHN. *Sepren*, 2(2), 40–46.

- Supriyanto, D., & Herlambang, Y. T. (2025). Reconnecting to Indonesian roots in primary education: A pedagogical literature review of educational insights on local wisdom. *PAKAR Pendidikan*, 23(2), 578–600.
- Suratman, B., & Arif, M. (2020). Realm of Malay civilization: Ethnoparenting, Habitus, and cultural contestation in early childhood education of Sambas Malay Society. *JSW (Jurnal Sosiologi Walisongo)*, 4(2), 215–230.
- Sundari, A. I., Novianti, R., Satria, D. (2023). Analisis ethnoparenting Suku Sakai di era digital di Desa Bekalar Kecamatan Kandis Kabupaten Siak. *Journal on Education*, 6(1), 4138–4146.
- Trisetiawati, J., Fitroh, S. F., Latif, M. A., Yuandana, T., Al Mushaiqri, M. R. S., & Venketsamy, R. (2025). The local wisdom of Madura in ethnoparenting for shaping early childhood emotions. *Nak-Kanak: Journal of Child Research*, 2(1), 1–9.
- Utama, F., & Dea, L. F. (2023). Alternative early childhood moral development: parenting through the local wisdom of Lampung people. *Journal of Childhood Development*, 3(2), 180–187.
- Wiliyanti, V., Buana, L. S. A., Haryati, H., Rusmayani, N. G. A. L., Dewi, K. A. K., & Novita, F. (2024). Analisis penggunaan media berbasis teknologi dalam meningkatkan minat belajar mahasiswa. *Jurnal Review Pendidikan dan Pengajaran*, 7(3), 6790–6797.
- Wirdanengsih, W., & Wita, G. (2025). Ethnoparenting based on local wisdom: The practice of Manjujai among Minangkabau families in Nagari Kasang, West Sumatra. *Etnosia: Jurnal Etnografi Indonesia*, 10(1), 113–123.
- Wulandari, N., & Listiana, A. (2023). Ethnoparenting dengan budaya kearifan lokal melemang Suku Masemah Kabupaten Kaur Kota Bengkulu. *Jurnal Ceria (Cerdas Energik Responsif Inovatif Adaptif)*, 6(1), 82–93.
- Zativalen, O., Irmaningrum, R. N., & Husnah, A. (2022). Pengaruh model pembelajaran berbasis proyek (project based learning terhadap kreativitas mahasiswa program studi PGSD pada mata kuliah sumber dan media pembelajaran. *ELEMENTA: Jurnal Pendidikan Guru Sekolah Dasar*, 4(2), 44–50.
- Zubaedah, S., Hafidz, N., Lestari, Y. A., & Fatmawati, E. (2022). The concept of ethnoparenting early childhood in the Samawa Tribe. *International Proceeding of Nusantara Raya*, 1(1), 77–85.