

Development and Validation of Canva-Based Learning Media for Improving Early Reading Skills in Children Aged 5–6

Rahma¹, Salpina², Darmiati³, Anisaturrahmi⁴

^{1,2,3}Universitas Almuslim, Bireuen, Indonesia

⁴Sultan Idris Education University, Perak, Malaysia

Article Info

Article history:

Received 2026-04-28

Revised 2026-06-27

Accepted 2026-07-25

Keywords:

Canva

Early Childhood Education

Early Reading Skills

Learning Media

Literacy Development.

ABSTRACT

Early reading skills are a fundamental aspect of emergent literacy and play an important role in children's future academic success. However, observations at Harapan Bunda Preschool revealed that literacy learning activities still relied primarily on printed books and student worksheets, while the use of digital learning media remained limited. This study aimed to develop and validate Canva-based learning media to support early reading activities among children aged 5–6 years. The study employed a Research and Development (R&D) approach using the ADDIE model, consisting of Analysis, Design, Development, Implementation, and Evaluation stages. The participants were 10 children aged 5–6 years enrolled in Harapan Bunda Preschool. Data were collected using media validation sheets, material validation sheets, teacher response questionnaires, and observation sheets to assess children's early reading skills. The validation results showed that the Canva-based learning media received feasibility scores of 91% from media experts and 93% from material experts, both categorized as very feasible according to the established validation criteria. During implementation, the same group of children participated in both the small-group and large-group trial stages. Observation scores increased from 48.75% in the initial trial stage to 90% in the subsequent implementation stage. These findings indicate that the developed Canva-based learning media is feasible and appropriate for supporting early reading activities in preschool settings. Further studies using experimental designs are recommended to examine its effectiveness in improving children's reading outcomes.

This is an open-access article under the [CC BY-SA](#) license.



Corresponding Author:

Rahma

Universitas Almuslim, Aceh, Indonesia

Email: rahma.zf31@gmail.com

1. INTRODUCTION

Early reading skills are a fundamental component of emergent literacy and constitute an important foundation for children's future academic achievement. Emergent literacy refers to the knowledge, skills, and attitudes that develop before children acquire conventional reading and writing abilities, including letter recognition, vocabulary development, print awareness, and phonological awareness [1], [2]. Children who develop

strong literacy foundations during preschool years tend to demonstrate better academic performance in later stages of education, whereas children with limited literacy experiences often encounter difficulties in formal schooling [3].

Developing early reading skills requires meaningful, engaging, and developmentally appropriate learning experiences. Young children learn most effectively through play, visual stimulation, direct experiences, and active interaction with learning materials. Therefore, learning media play a crucial role in facilitating children's literacy development. Appropriate learning media can help children recognize letters, connect symbols with sounds, and construct meaning from printed texts in ways that are enjoyable and developmentally appropriate [4].

The rapid advancement of digital technology has transformed educational practices, including literacy instruction in early childhood education. Digital learning media enable the integration of text, images, animation, audio, and video into a single learning environment. According to multimedia learning theory, children learn more effectively when information is presented through multiple sensory channels rather than solely through text. Multimedia-based learning environments can improve children's attention, motivation, and comprehension by providing visual and auditory representations simultaneously [5], [6].

The integration of technology in education can be achieved through the development of digital learning resources such as e-modules [7], interactive animations [8], and game-based learning media [9]. Teachers are increasingly expected to design digital-based instructional materials that support children's learning needs, including early reading activities. As educational practices continue to evolve in the digital era, children's reading experiences should also be supported by developmentally appropriate digital learning media that foster engagement and literacy development [10].

One digital platform that has recently gained popularity among educators is Canva. Canva is an online design platform that lets teachers create visually appealing learning materials by integrating illustrations, animations, videos, audio recordings, and interactive presentations. Previous studies have shown that Canva-based learning media can increase students' engagement, motivation, and participation in learning activities while supporting visual learning experiences [7], [8]. Furthermore, Canva offers user-friendly features that enable teachers to design instructional materials without advanced technical skills [9].

Several recent studies have explored the educational potential of Canva. Wibowo et al. reported that Canva-based literacy media enhanced children's interest and understanding of literacy concepts in kindergarten settings [10]. Similarly, Lestari et al. found that Canva supported interactive literacy learning experiences by combining visual and contextual learning activities suitable for children aged 5–6 years [11]. Other studies have demonstrated that Canva-based multimedia can support the development of foundational reading skills through visual design, audio-visual integration, and interactive learning elements [12]. These findings indicate that Canva has considerable potential as an instructional medium for literacy learning.

Despite the growing body of research on Canva-based learning media, several gaps remain. Most previous studies have focused on primary, secondary, or higher education contexts, while studies specifically addressing early reading skills in preschool children

remain limited [11], [12]. In addition, existing research has predominantly examined students' motivation and engagement rather than the systematic development and validation of Canva-based learning media designed specifically for emergent literacy development. Consequently, there is a need for research to develop and validate Canva-based learning media tailored to the characteristics and literacy needs of children aged 5–6 years.

Observations conducted at Harapan Bunda Preschool revealed that literacy learning activities still relied primarily on printed books and student worksheets, while the use of digital learning media remained limited. Several children had difficulty recognizing letters, matching letters to words, and arranging letters to form meaningful words. These findings indicate the need for innovative, developmentally appropriate learning media to provide more engaging literacy experiences.

Based on the identified problems and gaps in previous studies, this research focuses on developing and validating Canva-based learning media to support early reading skills among children aged 5–6 years. The novelty of this study lies in the development of a Canva-based multimedia product specifically designed for preschool literacy learning and its validation through expert review and classroom implementation. Therefore, this study aims to develop and validate Canva-based learning media to support early reading skills among children aged 5–6 years at Harapan Bunda Preschool.

2. METHOD

Research Design

This study employed a Research and Development (R&D) approach using the ADDIE instructional design model. Research and development is a systematic method used to develop educational products and evaluate their feasibility before implementation in learning settings [13]. The ADDIE model was selected because it provides a structured framework consisting of five stages: Analysis, Design, Development, Implementation, and Evaluation, which are widely used in educational media development studies [14], [15].

Research Participants

The study was conducted at Harapan Bunda Preschool, Indonesia. The participants were 10 children aged 5–6 years enrolled in Group B, comprising 5 boys and 5 girls. Participants were selected using purposive sampling because they met specific criteria relevant to the study objectives, including active participation in literacy learning activities, regular attendance during the implementation period, and parental consent to participate in the research [16]. The same group of children participated in both the small-group trial (Stage I) and the large-group implementation trial (Stage II). Therefore, the two stages represented sequential product testing and refinement rather than comparisons between different groups of participants.

Ethical Considerations

Prior to conducting the study, permission was obtained from the principal of Harapan Bunda Preschool. Parents or guardians provided informed consent for their children's participation. The study adhered to ethical principles in educational research by ensuring

voluntary participation, maintaining the confidentiality of participants' identities, and using data solely for academic purposes [17].

Development Procedures

The development process followed the ADDIE model.

Analysis

During the analysis stage, observations and interviews were conducted to identify problems in literacy instruction. The findings revealed that learning activities primarily relied on printed books and student worksheets, with digital learning media rarely used. Several children had difficulty recognizing letters, matching letters to words, and arranging letters into meaningful words.

Design

Based on the needs analysis, Canva-based learning media were designed to support children's early reading development. The learning content focused on body-part vocabulary, including eyes, ears, nose, mouth, hands, feet, and neck. Storyboards, visual layouts, learning scenarios, audio narration, and animations were prepared before media production. The design process considered principles of multimedia learning and developmentally appropriate practice for early childhood education [18].

Development

The Canva-based learning media were developed using Canva Pro. The product integrated visual illustrations, animated text, audio narration, and interactive reading activities. According to Mayer's Multimedia Learning Theory, combining verbal and visual information can facilitate children's understanding and retention of learning materials [19]. The prototype was subsequently reviewed and validated by experts.

Implementation

The implementation stage consisted of two phases.

Stage I (Small-Group Trial)

The Canva-based learning media were initially implemented in a limited classroom trial involving the same group of children. During the session, children interacted with the learning media under teacher guidance. Observations were conducted to identify aspects requiring improvement.

Stage II (Large-Group Trial)

Following revisions based on the findings from Stage I, the improved version of the media was implemented again with the same participants. This stage aimed to examine the practicality and appropriateness of the revised product in supporting literacy learning activities. Each implementation session lasted approximately 30 minutes and was conducted twice a week over two weeks. During the learning process, teachers facilitated children's participation by guiding letter recognition, word-formation, and vocabulary identification activities using Canva-based learning media.

Evaluation

The evaluation stage involved revising the product based on expert recommendations, classroom observations, and teacher feedback. This process aimed to produce a final version of the Canva-based learning media that met pedagogical, technical, and developmental requirements [14].

Research Instruments

To ensure the validity and practicality of the developed Canva-based learning media, several research instruments were employed. The instruments were designed to evaluate the quality of the learning media, the appropriateness of the instructional content, and children's early reading skills during implementation. The research used three main instruments: a media validation sheet, a material validation sheet, and an early reading skills observation sheet. The details of these instruments are presented in Figure 2.

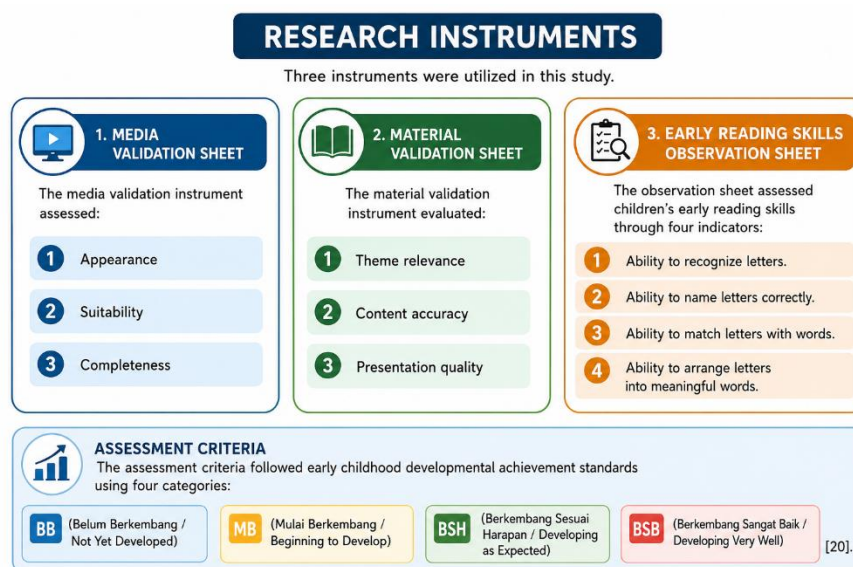


Figure 2. Research Instruments Used in the Study

As shown in Figure 2, the media validation sheet assessed three aspects, namely appearance, suitability, and completeness of the Canva-based learning media. The material validation sheet evaluated theme relevance, content accuracy, and presentation quality to ensure that the developed media was appropriate for children aged 5–6 years. Meanwhile, the early reading skills observation sheet was used to assess children's literacy development through four indicators: recognizing letters, naming letters correctly, matching letters with words, and arranging letters into meaningful words. Children's performance was evaluated using four developmental categories: Not Yet Developed (BB), Beginning to Develop (MB), Developing as Expected (BSH), and Developing Very Well (BSB), according to early childhood developmental assessment standards.

Data Collection

Data were collected through expert validation, classroom observations, and teacher response questionnaires. A media expert lecturer from the Early Childhood Education Department of Almuslim University conducted media validation. Material validation was conducted by two experienced preschool teachers from Harapan Bunda Preschool. Expert validation is commonly employed in educational product development studies to determine content validity and media feasibility before implementation [20].

Data Analysis

Validation data were analyzed using descriptive percentage techniques [21]. The percentage score was calculated using the following formula:

where:

$$\begin{aligned} P &= \text{Percentage score} \\ \Sigma X &= \text{Total score obtained} \\ \Sigma X_{\max} &= \text{Maximum possible score} \end{aligned}$$

The feasibility criteria were interpreted as follows [22]:

Table 1. Feasibility Assessment Criteria Based on Percentage Scores

Percentage	Category
81–100%	Very Feasible
61–80%	Feasible
41–60%	Fairly Feasible
21–40%	Less Feasible
0–20%	Not Feasible

Children's observation scores were interpreted according to early childhood developmental achievement criteria [20]:

Table. 2. Criteria for Interpreting Child Development Achievement Levels

Percentage	Category
76–100%	Developing Very Well (BSB)
51–75%	Developing as Expected (BSH)
26–50%	Beginning to Develop (MB)
0–25%	Not Yet Developed (BB)

The validation and observation results were analyzed descriptively to determine the feasibility and appropriateness of the Canva-based learning media for supporting early reading activities among children aged 5–6 years.

3. RESULTS AND DISCUSSION

3.1. Results

The development of Canva-based learning media followed the ADDIE model, which consists of Analysis, Design, Development, Implementation, and Evaluation stages. The results obtained at each stage are presented as follows.

Analysis Stage

The needs analysis was conducted through classroom observations and interviews with teachers at Harapan Bunda Preschool. The findings revealed that literacy learning activities primarily relied on printed books and student worksheets. Furthermore, several children experienced difficulties recognizing letters, matching letters with words, and arranging letters into meaningful words. These findings indicated the need for innovative learning media that support children's early reading development through more engaging, interactive learning experiences.

Design Stage

Based on the results of the needs analysis, Canva-based learning media were designed to support children's early reading skills. The learning content focused on body-part vocabulary, including eyes, ears, nose, mouth, hands, feet, and neck. The media integrated visual illustrations, animated text, audio narration, and simple literacy activities designed according to children's developmental characteristics. Based on the results of the needs analysis, a Canva-based learning media was designed to support the development of early reading skills among children aged 5–6 years. The media was developed by integrating visual illustrations, animated text, audio narration, and interactive literacy activities that were appropriate for children's developmental characteristics. The learning content focused on body-part vocabulary because it represents familiar concepts encountered in children's daily lives. Selected screenshots of the developed learning media are presented in Figure 3.



Figure 3. Canva-Based Learning Media Design

Figure 3 illustrates the main components of the Canva-based learning media developed in this study. The media consists of six sections, namely the opening page, learning objectives, body-part vocabulary materials, letter-recognition activities, word-formation activities, and the closing page. The design incorporates colorful illustrations, child-friendly visual elements, and interactive features intended to attract children's attention and encourage active participation during learning activities. The integration of images, text, and audio was designed to facilitate letter recognition, vocabulary acquisition, and word formation, thereby supporting the development of early reading skills among children aged 5–6 years.

Development Stage

At the development stage, the Canva-based learning media were evaluated by media and material experts to determine their feasibility before implementation.

Media Validation Results

The media validation assessed three aspects: appearance, suitability, and completeness.

Table 3. Media Validation Results

Aspect	Percentage	Category
Appearance	90%	Very Feasible
Suitability	93%	Very Feasible
Completeness	90%	Very Feasible
Average	91%	Very Feasible

The results indicate that the Canva-based learning media achieved an average score of 91%, placing it in the "Very Feasible" category. The highest score was achieved in the suitability aspect (93%), indicating that the developed media was considered appropriate for literacy learning activities in preschool settings. Following the development stage, the Canva-based learning media was evaluated by a media expert to determine its feasibility prior to classroom implementation. The validation focused on three aspects, namely appearance, suitability, and completeness. The results of the media validation are presented in Table 3 and Figure 4.

As shown in Figure 4, the suitability aspect obtained the highest score (93%), followed by appearance and completeness, each achieving 90%. The overall average score reached 91%, indicating that the developed Canva-based learning media was categorized as "Very Feasible." These findings suggest that the media featured appropriate visual design, relevant content organization, and adequate learning components to support early reading activities among children aged 5–6 years.

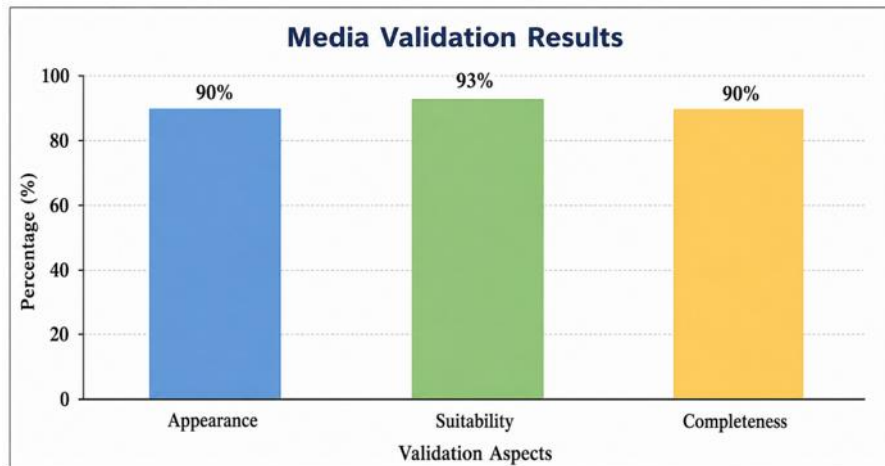


Figure 4. Media Validation Results

Material Validation Results

Material validation was conducted to evaluate the appropriateness of the learning content in terms of theme relevance, content accuracy, and presentation quality.

Table 4. Material Validation Results

Aspect	Percentage	Category
Theme Relevance	90%	Very Feasible
Content Accuracy	93%	Very Feasible
Presentation Quality	96%	Very Feasible
Average	93%	Very Feasible

As shown in Table 4, the material validation achieved an average score of 93%, categorized as "Very Feasible." The highest score was obtained in presentation quality (96%), indicating that the content was well organized and suitable for children aged 5–6 years. Following media validation, the Canva-based learning media was further evaluated by subject matter experts to assess the appropriateness of its instructional content. The validation focused on three aspects: theme relevance, content accuracy, and presentation quality. This evaluation was conducted to ensure that the learning materials were developmentally appropriate, aligned with early childhood literacy objectives, and suitable for children aged 5–6 years. The results of the material validation are presented in Table 4 and Figure 5.

As shown in Figure 5, the presentation quality aspect obtained the highest score (96%), followed by content accuracy (93%) and theme relevance (90%). The overall average score reached 93%, indicating that the instructional content was categorized as "Very Feasible." These findings suggest that the learning materials were well organized, accurate, and relevant to children's developmental characteristics. Furthermore, the high validation scores indicate that the body-part vocabulary content and literacy activities incorporated into the Canva-based learning media were considered appropriate for supporting early reading activities among children aged 5–6 years.

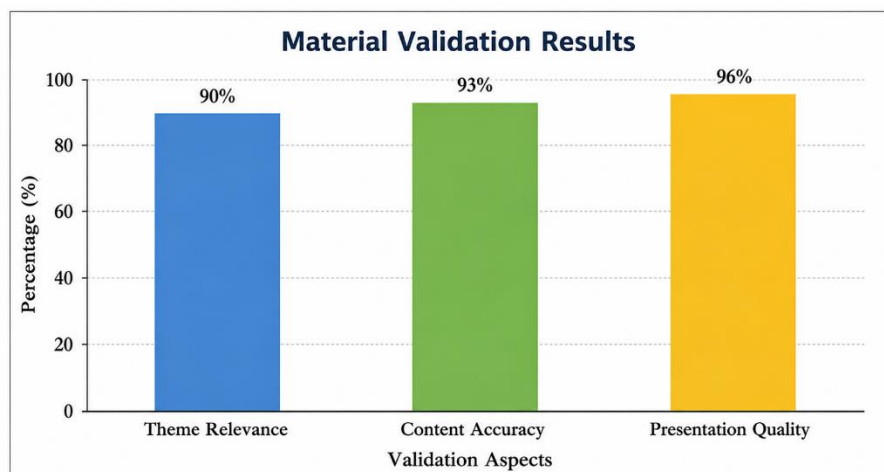


Figure 5. Material Validation Results

Implementation Stage

Following expert validation and product revision, the Canva-based learning media were implemented with 10 children aged 5–6 years. The implementation was conducted in two stages. Stage I represented an initial small-group trial, whereas Stage II represented the implementation of the revised product.

Observation Results of Children's Early Reading Skills

Children's early reading skills were assessed through four indicators: letter recognition, letter naming, matching letters with words, and arranging letters into meaningful words.

Table 5. Observation Results of Children's Early Reading Skills

Observation Stage	Percentage	Category
Stage I	48.75%	Beginning to Develop (MB)
Stage II	90%	Developing Very Well (BSB)

The results presented in Table 3 show that the observation score increased from 48.75% in Stage I to 90% in Stage II. Based on the established assessment criteria, stage I was categorized as "Beginning to Develop" (MB), whereas Stage II was categorized as "Developing Very Well" (BSB). Following expert validation and product revision, the Canva-based learning media was implemented with 10 children aged 5–6 years. The implementation was conducted in two sequential stages. Stage I represented the initial trial of the developed media, while Stage II represented the implementation of the revised version following improvements based on observations and feedback from the first trial. Children's early reading skills were observed using four indicators: letter recognition, letter naming, matching letters to words, and arranging letters into meaningful words. The results of the observations are presented in Figure 6.

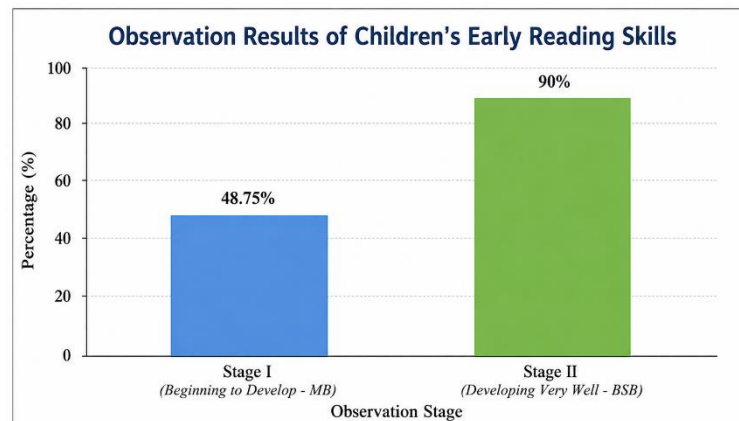


Figure 6. Observation Results of Children's Early Reading Skills

As illustrated in Figure 6, the observation score increased from 48.75% during Stage I to 90% during Stage II. Based on the established assessment criteria, the stage I score was categorized as Beginning to Develop (MB), whereas the Stage II score was categorized as Developing Very Well (BSB). The increase in scores indicates that children demonstrated more active participation and stronger engagement during literacy learning activities after the Canva-based learning media had been refined. These findings suggest that the developed media provided a more supportive learning environment for letter recognition, vocabulary learning, and word formation activities among children aged 5–6 years. The increase in observation scores indicates that children demonstrated more positive participation and engagement during literacy activities following the revision and refinement of the Canva-based learning media.

Evaluation Stage

The final evaluation stage was conducted through teacher response questionnaires and classroom observations. The results showed an average teacher response score of 80, indicating positive acceptance of the developed media. Teachers reported that the Canva-based learning media were visually attractive, easy to use, and appropriate for supporting literacy learning activities among preschool children. Overall, the findings from the validation process, classroom implementation, and teacher evaluations indicate that the Canva-based learning media is feasible and appropriate for supporting early reading activities among children aged 5–6 years.

3.2. Discussion

The results of this study indicate that the Canva-based learning media achieved high feasibility scores from both media experts (91%) and material experts (93%). These findings suggest that the developed product fulfilled the pedagogical, technical, and developmental requirements necessary for implementation in early childhood education settings. According to educational design research, expert validation serves as an important indicator of product quality because it evaluates the appropriateness of instructional content, learning design, and usability before classroom implementation [21], [23]. Therefore, the high validation scores

obtained in this study demonstrate that the Canva-based learning media were considered suitable for supporting early reading activities among children aged 5–6 years.

The positive evaluation of the developed media may be attributed to the integration of multimedia elements, including visual illustrations, animated text, audio narration, and interactive learning activities. These features enabled children to engage with literacy content through multiple sensory modalities. This finding is consistent with Multimedia Learning Theory proposed by Mayer [19], which states that learners process information more effectively when verbal and visual information are presented simultaneously. The integration of images, text, and audio within the Canva-based media may have facilitated children's understanding of letters and words by reducing cognitive load and supporting dual-channel information processing. Another important finding was the increase in observation scores from 48.75% during the initial implementation stage to 90% during the revised implementation stage. Although this increase should not be interpreted as definitive evidence of effectiveness, given the study's developmental nature, it indicates that children demonstrated greater participation and engagement after the media were refined. Young children are naturally attracted to colorful visuals, movement, and sound. Therefore, the interactive characteristics of the Canva-based media may have increased children's attention and willingness to participate in literacy-related activities.

The findings can also be explained through the perspective of Emergent Literacy Theory, which emphasizes that literacy development begins long before children receive formal reading instruction [1], [2]. Emergent literacy develops through meaningful interactions with oral language, printed symbols, pictures, and environmental texts. In the present study, children were exposed to illustrated vocabulary of body parts, enabling them to associate printed words with familiar objects encountered in daily life. Such experiences are important because they help children understand the relationships among spoken language, written language, and visual representations, which are foundational for later reading development.

The selection of body-part vocabulary as instructional content may also have contributed to the positive learning experiences observed during implementation. Familiar vocabulary provides contextual support, facilitating children's comprehension and reducing learning complexity. According to Neuman and Dickinson [3], literacy instruction becomes more meaningful when children can connect new learning experiences with their prior knowledge and everyday experiences. By using vocabulary that children encounter frequently, the Canva-based media provided opportunities for meaningful engagement with letters and words in authentic contexts. The findings of this study are consistent with previous research investigating the use of Canva in educational settings. Anggraeni et al. [7] reported that Canva-based learning media increased students' motivation and engagement during classroom activities. Similarly, Prihantini et al. [9] found that Canva facilitated the development of visually appealing instructional materials that supported learning. In the context of literacy learning, Wibowo et al. [10] demonstrated that Canva-based literacy activities encouraged children's participation and interest in reading-related tasks. Likewise, Lestari et al. [11] reported that Canva-supported learning environments enhanced children's interaction with literacy materials through visual and interactive features. The present study

extends these findings by focusing specifically on the development and validation of Canva-based media designed to support early reading skills among preschool children.

Despite the promising results, several limitations should be acknowledged. First, the study involved only 10 children from a single preschool, limiting the generalizability of the findings. Second, the implementation period was relatively short and focused primarily on product trials rather than long-term literacy outcomes. Third, the study employed a Research and Development approach without a control group or experimental comparison. Consequently, the findings provide evidence regarding the feasibility and practicality of the developed media but do not establish causal relationships between Canva-based learning media and improvements in children's reading achievement. Future research should employ larger sample sizes, longer implementation periods, and experimental or quasi-experimental designs to examine the effectiveness of Canva-based learning media in improving specific aspects of early reading development, such as letter recognition, phonological awareness, vocabulary acquisition, and word reading skills. Furthermore, future studies may explore integrating Canva with other digital learning technologies to enhance literacy learning experiences in early childhood education settings.

4. CONCLUSION

This study developed and validated Canva-based learning media designed to support early reading skills among children aged 5–6 years at Harapan Bunda Preschool. The validation results demonstrated that the developed media achieved a feasibility score of 91% from media experts and 93% from material experts, both categorized as very feasible. In addition, the implementation results showed positive responses from teachers and increased children's participation in literacy learning activities. The findings indicate that Canva-based learning media is appropriate and feasible for early childhood literacy instruction. The integration of visual illustrations, animated text, and audio narration provides engaging learning experiences that support children's interaction with letters, words, and familiar vocabulary. Therefore, the developed media have the potential to serve as an alternative digital learning resource for supporting early reading activities in preschool settings.

Nevertheless, this study was limited by the small sample size and the absence of an experimental design. Consequently, the findings primarily provide evidence of media feasibility and classroom practicality rather than effectiveness in improving reading achievement. Future research is recommended to involve larger samples, longer implementation periods, and experimental or quasi-experimental designs to examine the effectiveness of Canva-based learning media in enhancing specific aspects of children's early reading development.

REFERENCES

- [1] Teale WiH, Elizabeth S. *Emergent Literacy: Writing and Reading*. Norwood, NJ, USA: Ablex Publishing, 1986.
 - [2] Justice LM, Kaderavek K. "An overview of emergent literacy," in *Handbook of Early Childhood Literacy*. 3rd ed. London, U.K.: Sage, 2023, p.37–52.
 - [3] Neuman SB, Dickinson DK. *Handbook of Early Literacy Research*. 2nd ed. New York, NY, USA: Guilford Press, 2022.
 - [4] Fadlillah M. *Desain Pembelajaran PAUD*. Jakarta: Ar-Ruzz Media, 2022.
-

- [5] Mayer RE. *Multimedia Learning*. 3rd ed. Cambridge, U.K.: Cambridge University Press, 2021.
- [6] Clark RC, Mayer RE. *"e-Learning and the Science of Instruction: Proven Guidelines for Consumers and Designers of Multimedia Learning,"* 5th ed. Hoboken, NJ, USA: Wiley, 2023.
- [7] Novianti N, Zaiyar M, Khaulah S, Fitri H, Jannah R. Pengembangan E-Modul Berbasis Problem Based Learning Terhadap Kemampuan Berfikir Kritis Siswa. *Jurnal Ilmu Sosial dan Pendidikan*. 2023, vol.7, n°. 3, pp.2369–75.
- [8] Salpina S, Adhinda Junaidi Putri D, Amna. Pengembangan Media Animasi Interaktif Berbasis Kearifan Lokal Budaya Sumang di Gayo sebagai Upaya Penanaman Nilai Karakter pada Anak Usia Dini. *Jurnal Pelita PAUD*. 2024, vol. 9, n°.1, pp.53–62.
- [9] Rahma, Nurhayati. Pengembangan Interaktif Berbasis Game Edukasi Pada Pembelajaran Matematika. *Jurnal Edukasi Matematika dan Sains*. 2021, vol. 2, n° 1, pp.38–41.
- [10] Salpina S, Maisura M, Junaidi Putri DA, M. Nur F. Development Of 3D Digital-Based Teachinga Materials With Augmented Reality Technology In Improving Early Childhood Literacy Skills. *Edumaspul Jurnal Pendidikan*. 2024, vol.8, n°. 2, pp.2935–8.
- [11] Anggraeni D, Mulyani S, Wulandari A. "Canva as a digital learning media to improve students" learning motivation,"." *Jurnal Kependidikan*. 2022, vol.8, n°.4, pp.1045–1055.
- [12] Ekowati N, Setiawan H, Prasetyo R. "Utilization of Canva as visual learning media in elementary education," *Asian Journal of Education Research*. 2024, vol.2, n°.1, pp.34-45.
- [13] Prihantini D, Nurhayati E, Sari M. "Canva learning media to improve students" learning achievement in the Merdeka Curriculum,"." *International Journal of Learning Innovation*. 2023, vol.4, n°.2, pp. 78–89.
- [14] Wibowo A, Suryani R, Fitriani L. "Development of Canva-based literacy media for early childhood education," *Jurnal Tunas Siliwangi*. 2025, vol. 11, n° 1, pp.45–58.
- [15] Lestari D, Aisyah F, Rahmawati N. "Interactive literacy learning through Canva for children aged 5–6 years,," in *Proceedings of the International Seminar on Education*. Surakarta, Indonesia. 2025, 185–194.
- [16] Wijayanto M, Kusuma A. "Development of Canva-based interactive reading media for kindergarten children,," *Jurnal Pendidik Progresif*. 2025, vol.15. n° 2, pp. 210–222.
- [17] Sugiyono. *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung:CV. Alfabeta; 2021.
- [18] Branch RM. *Instructional Design: The ADDIE Approach*. New York, NY, USA: Springer; 2021.
- [19] Aldoobie N. "ADDIE model applications in educational research,," I *International Journal of Contemporary Educational Research*. 2021, vol. 8, n° 2, pp. 52–63.
- [20] Creswell JW. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. 6th ed. Thousand Oaks, CA, USA: Sage Publications; 2023.
- [21] Cohen L, Manion L, Morrison K. *Research Methods in Education*. 9th ed. London, U.K: Routledge, 2023.
- [22] (NAEYC) NA for the E of YC. *Developmentally Appropriate Practice Position Statement*. Washington, DC, USA: NAEYC, 2022.
- [23] Mayer RE. "Cognitive theory of multimedia learning," in *The Cambridge Handbook of Multimedia Learning*. 3 rd ed R. Cambridge, U.K.: Cambridge University Press; 2022. pp. 57–72.
- [24] Kementerian Pendidikan, Kebudayaan, Riset dan TRI. *Standar Tingkat Pencapaian Perkembangan Anak (STPPA)*. Jakarta, Indonesia: Kemendikbudristek, 2022.; 2022.
- [25] Plomp T, Nieveen N. *Educational Design Research*. 2nd ed. Enschede: Netherlands Institute for Curriculum Development (SLO), 2021.
- [26] Riduwan. *Skala Pengukuran Variabel-Variabel Penelitian*. Bandung, Indonesia: Alfabeta, 2021.
- [27] Akbar S. *Instrumen Perangkat Pembelajaran*. Bandung, Indonesia: PT Remaja Rosdakarya, 2022.