

**DEVELOPMENT OF PICTURE CARD LEARNING MEDIA
BASED ON SNOWBALL THROWING FOR READINGM
MATERIALS IN FIRST-GRADE INDONESIAN LANGUAGE
SUBJECT**

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ABSTRAK: Penelitian ini bertujuan untuk mengembangkan media pembelajaran kartu gambar berbasis model Lempar Bola Salju menggunakan CorelDRAW untuk meningkatkan kemampuan membaca awal siswa kelas satu SD Negeri 06 OKU. Isu utama yang ditangani adalah rendahnya tingkat kemampuan membaca siswa yang disebabkan oleh metode pengajaran konvensional dan kurangnya media pembelajaran yang menarik. Metode penelitian dan pengembangan (R&D) digunakan, mengikuti model pengembangan ADDIE (Analisis, Desain, Pengembangan, Implementasi, dan Evaluasi). Media dikembangkan berupa kartu visual yang menampilkan objek dunia nyata untuk merangsang minat siswa. Studi ini berfokus pada penilaian validitas oleh ahli materi dan media, serta uji kepraktisan melalui umpan balik siswa. Hasil yang diharapkan dapat menghasilkan alat pembelajaran yang valid, praktis, dan efektif dalam mengoptimalkan proses membaca awal di tingkat sekolah dasar.

Kata Kunci: ADDIE, Membaca Awal, Media Pembelajaran, Kartu Gambar, Lempar Bola Salju.

ABSTRACT: This research aims to develop picture card learning media based on the Snowball Throwing model using CorelDRAW to improve the initial reading skills of first-grade students at SD Negeri 06 OKU. The primary issue addressed is the low level of students' reading proficiency caused by conventional teaching methods and a lack of engaging instructional media. The research and development (R&D) method was employed, following the ADDIE development model (Analysis, Design, Development, Implementation, and Evaluation). The media was developed as visual cards featuring real-world objects to stimulate student interest. This study focuses on validity assessments by material and media experts, as well as practicality tests through student feedback. The results are expected to produce a learning tool that is valid, practical, and effective in optimizing the initial reading process at the elementary school level.

Keywords: ADDIE, Initial Reading, Learning Media, Picture Card, Snowball Throwing.

INTRODUCTION

Elementary education focuses on the development of foundational skills, one of which is initial reading. This capability serves as the primary cornerstone for building literacy, critical thinking abilities, and more complex language skills. However, the reading proficiency of students in Indonesia remains relatively low. Based on data from the Programme for International Student Assessment (PISA) in 2018, Indonesian students' reading literacy ranked 74th out of 79 participating countries. This low level of literacy is generally attributed to teachers' conventional pedagogical approaches and the minimal use of interactive learning media.

This exact condition was observed in the first-grade classroom at SD Negeri 06 OKU, where initial observations indicated that many students struggled to recognize letters and spell words due to monotonous learning activities devoid of instructional media support. Given that elementary school students are conceptually situated within the concrete operational stage, the application of real-world visualization is highly necessary to help them comprehend linguistic concepts easily. Piaget's cognitive theory reinforces that children at this age learn most optimally through concrete objects or images. Accordingly, implementing picture card media serves as an effective solution to bridge the connection between letter shapes, sounds, and word meanings through engaging visual illustrations.

On the other hand, Skinner's behaviorist theory emphasizes the necessity of cultivating reading habits through stimulus-response mechanisms reinforced by repetitive positive feedback (reinforcement). To create a more dynamic learning process, this visual media is integrated with the Snowball Throwing active learning model. Drawing from the concept of the Zone of Proximal Development (ZPD) in Vygotsky's constructivist theory, learning is viewed as an active process constructed through social interaction and peer reflection. The physical activity of throwing paper balls containing word or letter tasks in this model not only exercises reading fluency but also enhances student concentration and active engagement.

A number of prior studies have demonstrated the efficacy of combining these instruments. Fitriani and Nurhidayah (2021) discovered that the use of picture cards significantly enhanced student learning outcomes compared to conventional methods. Meanwhile, Citrawati and Prayogo (2023) showed that the Snowball Throwing model

was highly effective in boosting elementary students' learning engagement and achievement in the Indonesian language subject. The integration of these two sets of findings underscores the urgency of innovating and developing enjoyable reading instructional media based on digital technology.

Grounded in these practical problems and theoretical frameworks, this study aims to develop picture card learning media based on the Snowball Throwing model using the CorelDRAW application to produce a valid, practical, and effective tool for improving initial reading skills in the Indonesian language subject for first-grade students at SD Negeri 06 OKU.

RESEARCH METHODS

This study is classified as Research and Development (R&D). The development procedure follows the ADDIE instructional design model originally conceptualized by Dick and Carey (1996) and further reinforced by Branch (2009). This model consists of five systematic phases, including:

1. Analysis: Assessing instructional needs and initial problems.
2. Design: Designing media drafts and specifications.
3. Development: Implementing product realization using CorelDRAW and conducting expert validation.
4. Implementation: Conducting classroom field trials.
5. Evaluation: Carrying out formative evaluations at each phase and executing final product adjustments.

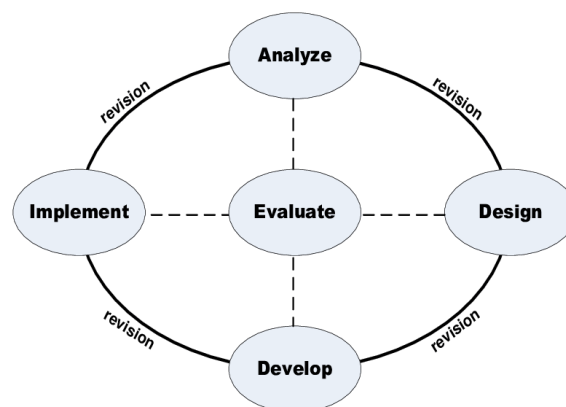


Figure 1. ADDIE Model here

The subjects involved in this research consisted of material experts, media experts, and language experts acting as product validators (*expert judgment*); the first-grade classroom teacher acting as the instructional practitioner; and first-grade students at SD Negeri 06 OKU as the product trial participants. Meanwhile, the objects of this study encompassed the feasibility (validity and practicality) and the effectiveness of the developed Snowball Throwing-based picture card media designed via CorelDRAW for initial reading materials in the Indonesian language subject.

This research was conducted during the even semester of the 2025/2026 academic year at SD Negeri 06 OKU, Baturaja, Ogan Komering Ulu Regency, South Sumatra Province. Sample selection was carried out using a *purposive sampling* technique (Sugiyono, 2019). The intentionally selected sample comprised first-grade students at SD Negeri 06 OKU. The rationale for this selection was based on the developmental characteristics of students undergoing the transition into the concrete operational stage, coupled with the authentic classroom challenges regarding low initial reading proficiency identified during preliminary observations.

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Data were structured and gathered using specific instruments aligned with the formative evaluation stages of the ADDIE model:

1. **Validation Sheets:** Used to measure the validity level of the product based on evaluations from media, material, and language experts.
2. **Questionnaires:** Used to measure the practicality of the media based on feedback from the classroom teacher and students following the implementation trials.
3. **Observation and Documentation:** Used to capture qualitative data regarding the baseline classroom environment and student actions throughout the trial process.

Data Analysis Techniques

1. **Qualitative Data Analysis:** Descriptive qualitative methods were applied to evaluate feedback, critiques, and revision suggestions from expert validators to refine the media drafts during the *Development* stage.
2. **Quantitative Feasibility Analysis (Validity and Practicality):** Evaluation scores from the expert validation sheets and student response questionnaires were calculated using the feasibility percentage formula (Arikunto, 2019).

The quantitative data from the questionnaires were analyzed using descriptive statistics to determine the percentage of feasibility for each indicator. The percentage was calculated using the following equation:

$$P = \frac{f}{N} \times 100\%$$

Where *P* represents the percentage, *f* is the total score obtained from respondents, and *N* is the maximum ideal score.

RESULTS AND DISCUSSION

Result

The development procedure of the picture card media based on Snowball Throwing using CorelDRAW resulted in a final product comprising a set of verbal-visual instrument cards that were validated, tested for practicality, and measured for effectiveness. The results of the study are discussed to address the problem formulated, objectives, and research hypotheses. It is highly suggested that discussion be focused on the why and how of the research findings and to extend to which the research findings can be applied to other relevant problems.

Validity of the Learning Media

Product validation was conducted by three expert evaluators (*expert judgment*) to assess the baseline feasibility of the media prototype prior to field testing. The accumulated assessment results from the validators are presented in Table 1.

Table 1. Expert Validation Results for the Picture Card Media

No	Validator	Score	Category
1	Material Expert	88,5%	Feasible for Use
2	Instructional Design Expert	91 %	Feasible for Use
3	Media Expert	86 %	Feasible for Use
Average		88,5 %	Highly Feasible

Based on Table 1, the average validity percentage from the experts reached 88.5%. These results demonstrate that the initial reading content, the graphic design visualization created in CorelDRAW, and the grammatical structures used on the cards are highly valid and suitable for operational field trials.

Practicality of the Learning Media

The practicality level of the media was derived from response questionnaires completed by the first-grade classroom teacher as the learning practitioner, alongside student responses gathered after the execution of the Snowball Throwing model.

Table 2. Practicality Assessment Results of the Learning Media

No	Respondents	Skor	Category
1	<i>One-to-One Evaluation</i>	86,91%	Baik Sekali
2	<i>Small Group Evaluation</i>	88,07%	Baik Sekali
3	<i>Field Test</i>	89,57%	Baik Sekali
Rata - Rata		88,18 %	Baik Sekali

The data in Table 2 reveal an average practicality score of 88.18%. Respondents indicated that the picture card media is highly straightforward to integrate with the syntax of the Snowball Throwing model, primarily because the instructions for utilizing the visual media are easily understood during the question-ball throwing game.



Figure 2. *Visualizations of Picture Card*

Discussion

The research findings demonstrate that the development of picture card learning media based on the Snowball Throwing model using CorelDRAW successfully fulfills scientific feasibility standards and effectively addresses the low initial reading proficiency of first-grade students at SD Negeri 06 OKU. This success is driven by a robust integration of a structured visual design and psychomotor stimulation delivered through an active learning model.

The results show that the developed picture card materials fell into the "Highly Feasible" category, yielding an average expert validation score of 87.12%. This structural feasibility was further substantiated by empirical field testing, which demonstrated a gradual percentage increase from the *One-to-One Evaluation* stage (86.91%) to the *Small Group Evaluation* (88.07%), culminating at the highest score during the *Field Test* (89.57%). This positive trend proves that iterative modifications of the media drafts based on validator input and real-time classroom dynamics effectively refined the visual, pedagogical, and conceptual essence of the content. This is highly consistent with the

formative evaluation cycles characteristic of modern instructional design methodologies (Plomp & Nieveen, 2021; Richey & Klein, 2023; Widoyoko, 2021) that prioritize product reliability.

Overall, this successful outcome is fundamentally linked to the systematic execution of the ADDIE operational procedures. Metaphysical precision in formulating the instructional blueprint since the *Design* and *Development* phases—such as selecting child-friendly typography and ergonomically balanced card dimensions—was proven to minimize learning anxiety among early-grade students while effectively converting abstract language symbols into recognizable, concrete shapes (Aldoobie, 2022; Molenda, 2024; Reiser & Dempsey, 2022; Tegeh & Kirna, 2023).

When deployed among first-grade students at SD Negeri 06 OKU (noted in text as class I.B) , these picture cards effectively bridged the gaps in heterogeneous cognitive capacities and baseline literacy skills. For students struggling with fluid reading, the contextually familiar illustrations functioned as *visual scaffolding* that accelerated the association between phonemes and graphemes (Arsyad et al., 2024; Farrar et al., 2024). Concurrently, for students still within the syllable-spelling phase, the integration of segmented syllables (e.g., *Be-bek*) accelerated their cognitive transition toward full word recognition without compromising the literal comprehension of the word's meaning (Aminah et al., 2021; Putri & Sari, 2022).



Figure 3. *Physical Form of Media in Media Field Implementation*

The positive impacts of this instructional planning became exceptionally optimal when paired with the Snowball Throwing learning model. The synergy between the physical kinetic action of throwing paper balls and identifying the picture cards successfully transformed conventional, static literacy sessions into a highly recreational,

inclusive, and interactive experience (Juan, 2021; Mubaidilla, 2025). Through cooperative group activities, a healthy communication pattern emerged that naturally triggered *peer-tutoring*, where advanced students voluntarily assisted peers facing difficulties (Djamaluddin & Wardana, 2023; Pungky & Guruh, 2022; Totok & Iis, 2021). This combination simultaneously serves as a strategic solution to overcome the limitations of conventional media, which tend to be passive and rigidly teacher-centered (Apriatmo et al., 2021; Netri & Ramadan, 2023).

Within the Snowball Throwing syntax, the kinesthetic element acts as a catalyst for classroom energy, while the picture cards serve as a cognitive anchor ensuring that student focus remains locked onto reading competency targets. This seamless alignment underscores the principle that the utility of learning media depends heavily on the precision of the underlying instructional model that drives it (Branch, 2022; Reiser & Dempsey, 2022). Essentially, adopting this dual strategy confirms that early childhood reading targets can be successfully attained without stripping away the joy of learning. Through contextual visualization and syllabic segmentation, short-term working memory load is minimized, allowing info-retention to embed securely into the long-term memory while cultivating an inclusive and meaningful learning ecosystem (Arsyad et al., 2024; Farrar et al., 2024; Mubaidilla, 2025).

CONCLUSIONS

Based on the comprehensive Research and Development cycle executed at SD Negeri 06 OKU, it can be definitively concluded that the development of Picture Card Learning Media Based on Snowball Throwing successfully provides a valid, practical, and highly effective instructional solution for improving initial reading skills among early-grade students.

From the development aspect, this study successfully operationalized the ADDIE model systematically by implementing visual scaffolding strategies. This included utilizing child-friendly typography (Adigiana Toybox), syllabic word hyphenation, and concrete contextual illustrations (e.g., A-pel and B-bebek cards), complemented by a Teacher's Guidebook designed to ease the cognitive transition of children aged 6–7 from basic letter recognition to complete word comprehension.

In terms of scientific validity, the media was rated as "Highly Feasible" by expert validators, with verification scores spanning from 86% to 87%. This provides strong theoretical legitimacy that the artistic, technical, and thematic qualities of the media align with modern educational technology standards.

Regarding practicality, the field trial involving 24 students yielded an exceptional score of 89.57%, earning an "Excellent" descriptor. This proves that integrating picture cards with the kinesthetic nature of Snowball Throwing successfully modernizes classroom atmospheres into dynamic and inclusive spaces, minimizes learning anxiety, promotes natural peer-tutoring dynamics, and significantly assists students in the spelling phase to comprehend word structures faster and in a highly enjoyable manner.

REFERENCES

- Aldoobie, N. (2022). Evaluating instructional design models: A deeper look into ADDIE. *American International Journal of Contemporary Research*, 12(1), 34–41.
- Aminah, S., Sari, N., & Rahmawati, D. (2021). Penggunaan media kartu bergambar untuk meningkatkan kemampuan membaca permulaan di sekolah dasar. *Jurnal Basicedu*, 5(3), 747–758.
- Apriatmo, Y., Susila, H. R., & Eriyanti. (2021). Pemanfaatan media pembelajaran oleh guru di SMP Negeri 36 OKU. *Jurnal Lentera Pedagogi*, 5(1), 7–10.
- Arsyad, M., Mujahiddin, & Syakhrani, A. W. (2024). The efficiency of using visual learning media in improving the understanding of science concepts in elementary school students. *Journal of Elementary Education*, 8(1), 12–25.
- Branch, R. M. (2022). *Instructional design: The ADDIE approach* (2nd ed.). Springer.
- Djamaluddin, & Wardana. (2023). *Hakikat pembelajaran sebagai proses interaksi* (2nd ed.). Kaaffah Media.
- Farrar, J., Arizpe, E., & Lees, R. (2024). Thinking and learning through images: A review of research related to visual literacy, children's reading and children's literature. *Education 3–13*, 52(7), 993–1005.
- Isa, Y., Eriyanti, E., Rahmi, J., & Novita, R. (2024). Pengembangan Multimedia Interaktif dengan Menggunakan Adobe Animate CC pada Mata Pelajaran Ilmu Pengetahuan Alam Kelas VI Semester I di SD Negeri 10 OKU. *Edu Cendikia: Jurnal Ilmiah Kependidikan*, 4(02), 247-259.

- Juan, F. A. P. (2021). Penerapan media pembelajaran interaktif untuk meningkatkan literasi membaca pada anak usia dini. *Jurnal Basicedu*, 5(5), 2510–2520.
- Kirna, I. M., & Tegeh, I. M. (2022). Pengembangan model ADDIE dalam penelitian pengembangan pendidikan (2nd ed.). Ganesha Press.
- Molenda, M. (2024). The ADDIE model: Past, present, and future perspectives. Performance Improvement Books.
- Mubaidilla, I. A. (2025). Effectiveness of learning in primary education: Digital vs. conventional media. *Indonesian Journal of Education (INJOE)*, 5(1), 45–58.
- Netri, N., & Ramadan, Z. H. (2023). Profil pemahaman guru tentang media pembelajaran di sekolah dasar. *Jurnal Educatio FKIP UNMA*, 9(4), 1832–1839.
- Plomp, T., & Nieveen, N. (2021). Educational design research: An introduction (3rd ed.). Netherlands Institute for Curriculum Development (SLO).
- Pungky, A. I., & Guruh, W. P. (2022). Penggunaan media kartu melalui model pembelajaran snowball throwing terhadap hasil belajar akuntansi. *Jurnal Pendidikan Ekonomi (JUPE)*, 14(1), 112–120.
- Putri, D. A., & Sari, R. N. (2022). Pengembangan media pembelajaran kartu bergambar pada mata pelajaran Bahasa Indonesia di sekolah dasar. *Jurnal Inovasi Pembelajaran Dasar*, 6(2), 130–139.
- Reiser, R. A., & Dempsey, J. V. (2022). Trends and issues in instructional design and technology (5th ed.). Pearson Education.
- Richey, R. C., & Klein, J. D. (2023). Design and development research: Methods, strategies, and issues (3rd ed.). Routledge.
- Safitri, N., Nurani, D. C., Maharani, S. D., & Susiloningsih, E. (2025). Analisis hasil validitas H5P Game Map pada materi Siklus Air kelas V SD. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 10(1), 220–232.
- Tegeh, I. M., & Kirna, I. M. (2023). Model ADDIE sebagai pendekatan dalam pengembangan media pembelajaran. Deepublish.
- Totok, I., & Iis, R. (2021). Pengaruh model pembelajaran snowball throwing terhadap kemampuan membaca siswa sekolah dasar. *Elinvo: Electronics, Informatics, and Vocational Education*, 13(1), 15–23.
- Widoyoko, E. P. (2021). Evaluasi program pembelajaran: Panduan praktis bagi pendidik dan calon pendidik. Pustaka Pelajar.

Zanah, N. F. (2025). Pengembangan lembar kerja peserta didik elektronik berbasis literasi sains: Statistik dan aplikasi persentase angket. Universitas Pendidikan Indonesia.