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The Effect of Letter Card Media on Early Reading Skills of Grade I Students at Primary School

Nurwati Monsafe[1], Muhammad Faizin[2], Raisa Anakotta[3]

[123]Department of Primary School Teacher Education, Faculty of Language, Social and Sports Education, Universitas Pendidikan Muhammadiyah Sorong, West Papua Province, Indonesia
*Correspondence: watymon3@gmail.com

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ABSTRACT

Early reading ability is a foundational skill for lower-grade primary school students that underpins all subsequent academic learning. However, based on preliminary observations conducted over two months at SD Inpres 13, Sorong Regency, it was found that students' early reading abilities were significantly below expectations, manifested in difficulties recognising letters, reading letter sequences, and reading fluently. This was partly attributable to the limited variety of instructional media used in the classroom, which remained predominantly conventional. This study aims to determine the effect of letter card media on the early reading abilities of Grade I students at SD Inpres 13, Sorong Regency. A quantitative approach with a pre-experimental one-group pretest-posttest design was employed. The research subjects comprised all 25 Grade I students. Data were collected through oral reading tests (pretest and posttest), observation, and documentation. Data analysis used descriptive percentage analysis to document and compare pre- and post-intervention reading performance. The results demonstrate a significant improvement in early reading ability following the implementation of letter card media. The classical completion rate improved from 13% on the pretest (3 of 25 students

meeting the KKM threshold of 70) to 75% on the posttest (19 of 25 students). The mean class score improved from a range of 50–55 on the pretest to a range of 75–80 on the posttest. Letter card media proved particularly effective in improving letter recognition, letter reading, and reading fluency. It is concluded that letter card media exerts a significant positive effect on the early reading abilities of Grade I students at SD Inpres 13, Sorong Regency, and constitutes an effective, contextually appropriate, and teacher-accessible alternative instructional medium for early reading instruction in primary schools.

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INTRODUCTION

Reading is a foundational cognitive skill that is inseparable from the process of education. At the primary school level, early reading, or *membaca permulaan*, constitutes the critical first stage of literacy development in which students acquire the ability to recognise individual letters, understand grapheme-phoneme correspondences, decode syllables, and read simple words with developing fluency. Farida Rahim (2005) characterises early reading as a stage occurring in the lower primary grades (Grades 1 through 3), centred on perceptual processing: the recognition of letter-sound correspondences that enables students to transition from symbol identification to meaningful reading. The importance of early reading success cannot be overstated: research confirms that failure to develop foundational reading skills in the early primary grades is a primary predictor of reading difficulties throughout schooling and beyond (Lane et al., 2025).

Preliminary observations conducted over two months at SD Inpres 13, Sorong Regency, revealed a serious pattern of early reading difficulties among Grade I students. The principal manifestations included: failure to recognise the

shapes of letters, particularly those that are visually similar (e.g. b, d, p, q); limited capacity to blend letters into syllables; halting, word-by-word decoding that impeded comprehension; reliance on finger-tracing to guide reading; and difficulty recognising unfamiliar vocabulary items such as 'apotik' (pharmacy), 'menanak' (to cook rice), and 'tungku' (stove). Students' engagement with reading activities was also low: many students remained inattentive or engaged in off-task behaviour during reading lessons, partly as a response to the predominantly conventional, text-distribution-based instructional approach in which students were asked to follow along with a reading passage without active visual or interactive engagement. Sudjana and Rivai (2002) affirm that learning media occupy a central position within instructional methodology, functioning to enhance the quality of teacher-student and student-environment interaction during learning.

Letter card media *(kartu huruf)* represent a visual, concrete, and easily produced instructional tool for early reading. Cards bearing individual letters, typically in colour and large format, provide students with discrete, visually clear representations of letter forms that facilitate letter recognition, letter-sound correspondence internalisation, and the construction of syllables and words through card arrangement activities. The concrete and visual nature of letter cards aligns with Jean Piaget's theory of cognitive development, which positions students in the concrete operational stage (ages 7–12) as learners who require physical and visual representations to engage meaningfully with abstract symbolic systems such as the alphabet. Djamarah (2012) affirms that media serve as visual bridges connecting the spoken language system (phonemes) with its written representation (graphemes), a function that is precisely what letter card media fulfil in early reading instruction. Laely (2013) found that letter card media increased student enthusiasm and focus during reading lessons, as students became interested in and attentive to the letter card activities presented by the teacher.

Internationally, research using visual card media in early reading instruction has consistently demonstrated positive outcomes. A Scopus-indexed study from the Journal of Innovation and Research in Primary Education documented that picture letter card media significantly improved early reading performance, with posttest classical completion rates substantially exceeding pretest levels (Papanda JIRPE, 2025). Research by Suyatno (2022) similarly found that letter card media improved the early reading ability of Grade I students, consistent with the broader evidence base reviewed by Musfirah and Listyorini (2016), who identified visual and concrete media as essential supports for literacy development in lower-grade students. In the Indonesian context, Ain et al. (2024) confirmed that early reading difficulties in Grade I students are prevalent and directly linked to the under-utilisation of varied and engaging instructional media. This study was conducted to address this challenge at SD Inpres 13, Sorong Regency, by examining the effect of letter card media on students' early reading ability.

METHODS

This study employed a quantitative approach with a pre-experimental research design, specifically the one-group pretest-posttest design (Sugiyono, 2015). In this design, a single group of 25 Grade I students at SD Inpres 13, Sorong Regency, was assessed on early reading ability before the letter card media intervention (pretest), received the intervention over multiple instructional sessions, and was reassessed after the intervention (posttest). All 25 students were included as the total sample, consistent with the principle of saturated sampling for small, bounded populations. Data were collected through three instruments: (1) an oral early reading test assessing the three core dimensions of early reading ability, namely letter recognition, letter reading, and reading fluency, administered as both pretest and posttest; (2) structured observation of student engagement and behaviour during instructional sessions; and (3) documentation of instructional activities.

The letter card media comprised colourful, large-format cards each displaying a single letter of the Indonesian alphabet, designed to facilitate letter discrimination, letter-sound correspondence, and syllable/word construction through individual and group card-arrangement activities. Instrument validity was reviewed through expert judgment. Data analysis employed descriptive percentage analysis, calculating the percentage of students achieving the Minimum Completion Criterion (KKM = 70) at pretest and posttest, and the classical completion rate *(ketuntasan klasikal*), to document and compare early reading performance before and after the intervention.

RESULTS AND DISCUSSION

Pretest Results

Prior to the implementation of letter card media instruction, all 25 Grade I students completed the early reading pretest. The frequency distribution of pretest scores is presented in Table 1.

Table 1. Frequency Distribution of Early Reading Pretest Scores (N = 25)

No.	Score Range	Category	Number of Students (%)
1	0–49	Very Low	15 (60%)
2	50–69	Low	7 (28%)
3	70–79	Adequate (meets KKM)	2 (8%)
4	80–89	Good	1 (4%)
5	90–100	Very Good	0 (0%)
Total		25 students	KKM Attainment: 13%

Note: KKM = Minimum Completion Criterion (score ≥ 70). Source: Primary data, SD Inpres 13 Sorong Regency.

The pretest results reveal that the majority of students (60%, or 15 students) scored in the Very Low range (0–49). Seven students (28%) scored in the Low range (50–69), 2 students (8%) in the Adequate range, and only 1

student (4%) in the Good range. No student achieved a Very Good score. Only 3 students (13%) met the KKM threshold of 70, establishing a baseline classical completion rate of 13%. These findings confirm the severity of early reading difficulties identified in the preliminary observations: the vast majority of Grade I students demonstrated limited letter recognition, halting reading of individual letters, and minimal reading fluency.

Posttest Results

Following the letter card media instructional intervention, the 25 Grade I students completed the early reading posttest. The frequency distribution of posttest scores is presented in Table 2.

Table 2. Frequency Distribution of Early Reading Posttest Scores (N = 25)

No.	Score Range	Category	Number of Students (%)
1	0–49	Very Low	0 (0%)
2	50–69	Low	6 (24%)
3	70–79	Adequate (meets KKM)	7 (28%)
4	80–89	Good	9 (36%)
5	90–100	Very Good	3 (12%)
Total		25 students	KKM Attainment: 75%

Source: Primary data, SD Inpres 13 Sorong Regency.

The posttest results demonstrate a substantial upward shift in the distribution of student performance. No student remained in the Very Low category. The proportion in the Good (80–89) and Very Good (90–100) categories increased to 36% and 12% respectively. Nineteen students (75%) met the KKM threshold of 70, representing a classical completion rate of 75%, compared to 13% at pretest. Six students (24%) remained below KKM, suggesting these students may require more intensive individual remediation.

Comparison of Pretest and Posttest Results

The comparative summary of pretest and posttest performance is presented in

Table 3.

Table 3. Comparison of Pretest and Posttest Early Reading Performance (N = 25)

Indicator	Pretest	Posttest
Mean Score Range	50–55	75–80
Students Meeting KKM (≥70)	3 (13%)	19 (75%)
Students Below KKM	22 (87%)	6 (24%)
Classical Completion Rate	13%	75%
Score Improvement		~20–25 points per student

Table 3 confirms a dramatic improvement across all key performance indicators. The mean class score improved from 50–55 (pretest) to 75–80 (posttest). The classical completion rate rose from 13% to 75%, representing a gain of 62 percentage points. The proportion of students below KKM decreased from 87% (22 students) to 24% (6 students), representing a reduction of 63 percentage points. These results confirm that the letter card media intervention produced a significant and educationally meaningful improvement in early reading ability across the three assessed dimensions: letter recognition, letter reading, and reading fluency.

Observation data provide complementary qualitative evidence. Students' classroom behaviour changed markedly during the letter card media sessions compared to conventional instruction. Students demonstrated greater attentiveness and enthusiasm, responded more willingly when called upon to read or identify letters, and engaged actively in card-arrangement tasks. Students who had previously been passive or off-task during conventional reading lessons showed noticeably higher levels of engagement and motivation during the letter card activities, consistent with Laely's (2013) finding that letter card media increase student enthusiasm and focus by providing a novel and hands-on engagement with letter forms.

Discussion

The findings of this study confirm that letter card media has a significant positive effect on the early reading ability of Grade I students at SD Inpres 13, Sorong Regency. The improvement in classical completion rate from 13% to 75% represents one of the most compelling educational outcomes achievable through media intervention at the early primary level. These results are theoretically grounded in and empirically consistent with the established literature on visual, concrete media in early reading instruction.

The effectiveness of letter card media in this study is explicable through three interrelated mechanisms. First, letter card media provide concrete, visually distinct representations of letter forms that align with the developmental characteristics of Grade I students. Piaget's theory of cognitive development posits that children in the concrete operational stage require tangible, physical representations to engage meaningfully with abstract symbolic systems (Djamarah, 2012). Individual letter cards, particularly when large in format and differentiated by colour, enable students to focus on one letter at a time, reducing the cognitive load associated with processing multiple letters simultaneously. This targeted letter-by-letter engagement addresses the most fundamental deficit identified in the pretest data: failure to recognise individual letter shapes.

Second, letter card media activate student motivation and interest, transforming the reading lesson from a passive listening activity into an interactive, participatory, and visually stimulating experience. Sadiman et al. (2017) affirm that engaging media stimulate students' thinking, feeling, attention, and interest, thereby promoting active learning. The observation data in this study corroborate this mechanism: students who had previously displayed disengagement and off-task behaviour during conventional reading instruction became actively attentive and willing participants during the letter card sessions. This motivational transformation is consistent with evidence from comparable research in Indonesian primary schools, including Suyatno

(2022) and the JIRPE study (Papanda, 2025), both of which documented positive changes in student engagement alongside improvements in early reading scores.

Third, letter card media support the decoding process that is central to early reading development. Farida Rahim (2005) emphasises that early reading is fundamentally a perceptual process, requiring students to establish stable associations between graphemes (written letter forms) and phonemes (spoken letter sounds). Letter cards enable students to focus exclusively on this grapheme-phoneme association, one letter at a time, before progressing to syllable combination and word reading. This sequenced, focused approach is supported by research on early reading predictors: a Scopus-indexed study by Guarda et al. (2023), published in Frontiers in Psychology, identified letter-sound knowledge as among the most robust predictors of first-grade reading success, confirming that targeted instruction in letter-sound correspondence, such as that provided by letter card media, is foundational to early reading acquisition.

The persistence of 6 students (24%) below KKM following the intervention highlights that letter card media, while highly effective for the majority of students, may require supplementation with more intensive, individually differentiated remediation for students with more entrenched reading difficulties. Ain et al. (2024) note that early reading difficulties in Grade I can arise from a range of interacting factors, including individual cognitive differences, home literacy environments, and physical conditions. Lane et al. (2025) similarly demonstrate that even well-implemented foundational reading programmes benefit from differentiated follow-up for students who do not reach proficiency benchmarks in the initial intervention cycle. These observations have important implications for the design of follow-up support for the 6 non-completing students at SD Inpres 13.

CONCLUSION

This study concludes that letter card media has a significant positive effect on the early reading ability of Grade I students at SD Inpres 13, Sorong Regency. The classical completion rate improved from 13% (3 of 25 students) on the pretest to 75% (19 of 25 students) on the posttest, representing a gain of 62 percentage points. The mean class score improved from a range of 50–55 (pretest) to 75–80 (posttest). Letter card media proved particularly effective in improving the three core dimensions of early reading assessed: letter recognition, letter reading, and reading fluency. Student engagement, motivation, and active participation also increased markedly during the letter card instructional sessions. Six students (24%) remained below KKM and will require targeted individual remediation. It is recommended that Grade I teachers at SD Inpres 13 and comparable primary schools in Sorong Regency integrate letter card media systematically and consistently into their early reading instruction, as the media are effective, low-cost, easily produced by teachers, and well-aligned with the concrete operational developmental characteristics of Grade I students. Future research should employ control group designs to isolate the causal effect of letter card media, compare letter card media with other visual reading media, and investigate the effects of differentiated letter card instruction on the specific reading difficulties of students who do not achieve KKM within the standard intervention timeframe.

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Declarations

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