

Evidence-based reading intervention for a struggling beginner: Outcomes and insights from a one-on-one case study

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Abstract: This case study examines a 12-week individualized reading intervention for a first-grade student exhibiting persistent challenges in word recognition, decoding, comprehension, and fluency. Grounded in Science of Reading, the intervention incorporated explicit instruction in high-frequency words, phonics, and comprehension strategies, alongside affective supports designed to strengthen confidence, engagement, and self-efficacy. Instruction was closely aligned with diagnostic assessments and adapted throughout the intervention to address emerging needs. Pre- and post-intervention data from the Qualitative Reading Inventory (QRI), Woodcock Reading Mastery Test (WRMT), and Peabody Picture Vocabulary Test (PPVT) indicated measurable gains in decoding accuracy, oral reading fluency, and comprehension, with progress documented at the pre-primer level. Qualitative observations further revealed increased task persistence, metacognitive strategy use, and a more positive literacy identity. Together, these findings underscore the value of integrated cognitive-affective approaches that combine explicit skill instruction with motivational supports. The study contributes to early literacy intervention research by demonstrating how theory-driven, diagnostic-to-instruction models can promote meaningful growth in young struggling readers.

Keywords: *Decoding, Comprehension, Early literacy, Fluency, Individualized instruction, Qualitative observations, Reading intervention, Self-efficacy, Metacognitive strategies.*

1. Introduction and Purpose

Reading proficiency is essential for academic success and lifelong learning (National Reading Panel, 2000). Early identification and targeted intervention are crucial for students facing reading challenges, impacting their long-term academic outcomes (Torgesen, 2002). The complexity of reading development requires comprehensive interventions addressing multiple components while being attuned to individual needs. Effective reading interventions must be evidence-based, targeting specific needs and fostering positive reading attitudes (Scanlon, Anderson, & Sweeney, 2016). This study analyzes a structured intervention for a student encountering difficulty in word recognition and comprehension. It systematically examines the translation of theoretical frameworks into practical strategies, focusing on cognitive and affective aspects, thereby contributing to the literature on individualized interventions for struggling readers.

1.1. Theoretical Foundations of Reading Intervention

Contemporary understanding of reading development is informed by several key theoretical models that guide intervention design. Scarborough (2001) Reading Rope model provides a foundational framework for conceptualizing skilled reading as the product of word recognition and language comprehension processes working in concert. This model particularly informs intervention approaches that balance decoding and comprehension instruction, recognizing that proficient reading requires simultaneous development of both strands.

(1985) Verbal Efficiency Theory posits that automatic word recognition is crucial for liberating cognitive resources necessary for comprehension processes. This theoretical foundation supports intervention emphasis on developing automaticity in word recognition skills. Additionally, engagement models of reading development (Guthrie & Wigfield, 2000) inform approaches to motivation and reading attitude, particularly when addressing reading anxiety in struggling students.

1.2. Evidence-Based Intervention Components

The National Reading Panel (2000) identified five essential components of effective reading instruction: phonemic awareness, phonics, fluency, vocabulary, and comprehension. Research, such as Torgesen (2002), consistently shows that interventions tailored to these core areas and individual student needs are most successful. Meta-analyses by Wanzek et al. (2018) emphasize the importance of systematic, explicit instruction with ample practice. Successful interventions, as noted by Scammacca, Roberts, Vaughn, and Stuebing (2015), blend multiple instructional methods and maintain high engagement levels. Integrating the Reading Rope and Verbal Efficiency Theory provides a comprehensive framework for crafting interventions, highlighting the interplay of word recognition, language comprehension, and engagement. This synthesis aids in understanding literacy challenges and interpreting improvements as holistic cognitive and motivational gains.

2. Materials and Methods

2.1. Participant Profile

The participant was a first-grade student (age 6 years, 9 months) identified through systematic school-based screening protocols as demonstrating significant reading difficulties consistent with characteristics of developmental dyslexia. Initial referral concerns documented by the classroom teacher included persistent below-grade-level word recognition abilities, comprehension challenges across multiple text types, and observable reading anxiety manifesting as avoidance behaviors during classroom reading activities.

The student's educational history revealed a pattern of reading struggles with previous interventions showing limited sustained improvement. Classroom observations indicated the student exhibited frustration-level reading behaviors when presented with grade-appropriate texts, including frequent word substitutions, omissions, and self-corrections that disrupted overall comprehension. The student's reading rate was notably below grade-level expectations, and oral reading was characterized by word-by-word processing rather than fluent phrase-level reading. Family literacy practices were supportive, with regular reading sessions and parental engagement in school activities, creating an enriching home environment conducive to literacy development.

To ensure ethical compliance, informed consent was meticulously obtained from the participant's guardians, detailing the scope and objectives of the study. Additionally, steps were taken to protect participant confidentiality, including anonymizing all personal identifiers.

2.2. Assessment Battery

A comprehensive, multi-dimensional assessment protocol was implemented to establish baseline performance across critical reading domains and to identify specific areas of strength and weakness to inform intervention planning. The assessment battery was administered over three sessions to minimize fatigue effects and ensure reliable performance sampling. The assessment protocol was implemented to establish baseline performance across multiple reading domains, including word recognition (decoding, sight word, phonics), comprehension (reading and listening), affective factors (reading attitude), as well as standardized assessments that included WRMT (Woodcock Reading Mastery Test) and PPVT (Peabody Picture Vocabulary Test).

2.2.1. Word Recognition Measures

Graded Word Lists; Sight Word Recognition Assessment; Phonics Pattern Assessment

Graded Word Lists were administered to assess sight word recognition in isolation without context. This standardized measure provides hierarchical word lists from pre-primer through high school levels, allowing for estimated independent, instructional, and frustration reading levels (Table 1). The assessment revealed significant deficits in automatic word recognition, with the participant achieving frustration level performance with pre-primer word lists. The miscues ranged from [back-bake], [do-dig], [for-from], [two-the], [now-new], and [there-they] at pre-primer and primer levels. There was no independent or instructional level for the student (Table 2).

Table 1.

Reading Level Description (Word List).

Level	Description
Independent Level	Student reads 99% - 100% of the words correctly. Indicates strong decoding skills and automaticity.
Instructional Level	Student reads 95% - 98% of the words correctly. Indicates a need for support during reading instruction.
Frustration Level	Student reads less than 95% of the words correctly. Indicates the word list is too difficult, even with assistance.

Table 2.

Student's Reading Level for Word List.

Pre	Level	Post
Independent	N/A	Pre-primer
Instructional	N/A	N/A
Frustration	Pre-primer	Primer

The student performed at the frustration level with pre-primer words, indicating that he was unable to recognize the majority of the most basic high-frequency words with sufficient accuracy. There was no evidence of an independent or instructional level. By post-intervention assessment, the student demonstrated modest improvement, achieving an independent level at the pre-primer word list and a frustration level at the primer level. While this suggests emerging automaticity at the pre-primer level, the student still exhibited significant difficulty with more advanced lists.

Analysis of his miscues further illustrates the student's developing but inconsistent visual discrimination and orthographic knowledge. Examples include:

- Visual similarity: *back-bake, do-dig, two-the*
- Function words miscues: *for-from, there-they*
- Phonological overlap: *now-new*

These miscues are characteristic of early readers who rely heavily on partial visual cues or initial letters rather than full orthographic processing. The student's inability to consistently and accurately recognize basic sight words showed that automatic word recognition remained a significant barrier to reading fluency and comprehension.

Sight Word Recognition Assessment utilized high-frequency word lists based on Fry's Instant Words and Dolch word lists to evaluate automaticity with the most common words in written English. Results indicated inconsistent recognition of words, with particular difficulty noted for words with irregular spelling patterns, such as *said, came*. These words are frequently found in first-grade texts and do not always follow regular phonics rules, which makes automatic sight word recognition especially important. The student's inconsistent identification of these words suggests the need for continued sight word practice to build fluency.

Phonics Pattern Assessment employed a systematic evaluation of phonics knowledge, including consonant blends, vowel patterns, and syllable types. The assessment revealed gaps in knowledge of vowel teams [out, now] and r-controlled vowel patterns [for, there, are], indicating an incomplete phonics foundation affecting the decoding of unfamiliar words.

2.2.2. Comprehension Measures

Qualitative Reading Inventory; Passage comprehension tasks; Inferential reasoning assessments

Qualitative Reading Inventory (QRI) is a comprehensive tool that assesses reading performance through both quantitative and qualitative data. It includes graded word lists, narrative and expository passages, and comprehension questions targeting literal, inferential, and critical thinking skills. The QRI evaluates students' reading under oral and silent conditions, with a listening component to gauge reading potential. It provides estimates of independent, instructional, and frustration levels, aiding in targeted instruction. When administered, this assessment is designed to analyze students' reading strategies by measuring both their comprehension and their ability to use context clues for word recognition. It provides educators with valuable information about the underlying processes students employ as they read, revealing not only what the student understands from the text but also how they arrive at that understanding. This deeper insight enables teachers to identify the specific skills and strategies each student uses to interpret and extract meaning from written material, making instructional interventions more targeted and effective.

Listening comprehension tasks - Listening comprehension is the highest level at which a child can listen and satisfactorily comprehend connected text (usually with 70% accuracy). When the Listening Comprehension section of the IRI was administered, the student demonstrated greater understanding of the material when passages were read aloud by the examiner than when reading independently. This outcome indicated that the main barrier to comprehension was difficulties with decoding text, rather than problems with overall language understanding. In other words, the student's ability to make sense of the text improved when the decoding task was removed, highlighting the need for targeted support in decoding skills.

Like many children, the student appeared to enjoy being read to more than reading on his own. He did not seem concerned about not being able to answer the comprehension questions. Since he reached the frustration level with the pre-primer story, his instructional and independent levels could not be determined, as mentioned below in Table 3.

Table 3.

QRI Passage for Comprehension.

Pre		Post
Independent	N/A	N/A
Instructional	N/A	N/A
Frustration	Pre-primer	Pre-primer
Listening Comprehension level - Primer		

The student's performance on both the pre- and post-assessment indicated reading at the frustration level when attempting to decode texts at the pre-primer level. No instructional or independent reading levels could be established, suggesting significant challenges in word recognition and decoding skills that hinder successful engagement with even early emergent texts. During independent reading, he often lost the meaning of the passage as he focused heavily on decoding individual words.

In contrast, the student's performance showed that his listening comprehension was at the primer level, meaning that while he struggled to read text on his own due to decoding difficulties, his understanding of spoken language (when the text was read aloud) was more in line with typical development. This gap indicates that the student's primary challenge lies in decoding printed words, not in understanding language itself, which is common for early readers whose reading comprehension is limited by decoding skills.

Based on these findings, it was determined that the student would benefit from focused, explicit instruction in phonemic awareness and basic phonics, as well as ongoing language development through activities such as read-alouds and oral comprehension exercises.

Assessments of inferential reasoning revealed that the student could draw appropriate conclusions and make connections between the text and prior knowledge when the reading material was easily

accessible. However, when the demands of decoding increased, his ability to engage in higher-level inferential thinking declined notably, indicating that decoding struggles were exhausting the cognitive resources, such as attention, memory, and analytical skills needed for comprehension and reasoning.

2.3. Affective Measures

- Elementary Reading Attitude Survey (McKenna & Kear, 1990)
- Reading self-efficacy questionnaire

2.3.1. Elementary Reading Attitude Survey (McKenna & Kear, 1990)

The Elementary Reading Attitude Survey, a validated Likert-scale instrument featuring cartoon illustrations, was used to assess the students' attitude toward recreational and academic reading. The student scored 73% for recreational reading and 75% for academic reading, indicating a generally positive attitude toward both domains of reading despite significant challenges with decoding and fluency.

Given that the student was reading at the pre-primer level, these results were encouraging. They suggest that while the student struggles with foundational reading skills, he remains motivated and open to engaging with reading experiences both in and out of the classroom. Maintaining and nurturing this positive disposition toward reading is essential, as reading attitude is closely linked to reading persistence, engagement, and long-term achievement (McKenna, Kear, & Ellsworth, 1995).

2.4. Standardized Assessments

The Woodcock Reading Mastery Test (WRMT - Revised) assesses reading skills such as word identification, decoding, and comprehension. Widely used for evaluating student reading abilities, it helps identify strengths and weaknesses for instructional planning. The student received a standard score of 103 (59th percentile) on the total reading cluster score, indicating average performance for his age, with an age equivalent of 6 years, 11 months, and a grade equivalent of 1.2. The subtest results showed strengths in Word Identification (standard score: 114, 79th percentile), indicating above-average sight word vocabulary (Table 4). Scores in Word Attack (standard score: 107, 67th percentile) and Passage Comprehension (standard score: 99, 41st percentile) were average. However, Word Comprehension (standard score: 87, 22nd percentile), including antonyms, synonyms, and analogies, revealed below-average vocabulary, suggesting areas for targeted support (Table 4).

Table 4.
WRMT Scores.

Subtest	Standard Score	Percentile Rank	Age Equivalent	Grade Equivalent
Word Identification	114	79	7 years 3months	1.8
Word Attack	107	67	7.1	1.5
Word Comprehension	87	22	6.6	K.7
Passage Comprehension	99	45	6.7	1.0
Total Reading Cluster Score	103	59	6.11	1.2

Peabody Picture Vocabulary Test (PPVT) – This norm-referenced test assesses receptive vocabulary and listening comprehension. The student achieved a standard score of 101, or 62nd percentile, showing average performance relative to peers. Other scores included a stanine of 6, NCE of 56, and a 95% confidence interval from 96 to 112, indicating high confidence in the true score's accuracy (Table 5).

Table 5.
PPVT Scores.

Score Type	Value
Standard Score	101
Percentile Rank	62
Stanine	6
Normal Curve Equivalent (NCE)	56
Raw Score (PPVT-R)	93
95% Confidence Interval	96 - 112
Interpretation	Average range

3. Diagnostic Snapshot - Initial Reading Assessment Profile

Based on the results of the administered diagnostic assessments, a comprehensive initial reading profile was established for the student. This initial diagnostic snapshot guides instructional planning by identifying priorities for explicit instruction in phonemic awareness, foundational reading skills, and ongoing support for oral and inferential comprehension.

Gender: Male

Age: 6 years, 9 months

Grade: 1

Tests Administered:

Graded Word Recognition, Sight Word Recognition, Phonics Pattern Assessment, QRI - Passage Comprehension, Listening Comprehension, Oral Reading, Prosody Evaluation, Elementary Reading Attitude Survey, WRMT (Woodcock Reading Mastery Test), PPVT (Peabody Picture Vocabulary Test). See Table 6.

Table 6.
Test Battery Results Summary.

Assessment Area	Result
Graded Word Recognition	Frustration Level – Pre-primer
Sight Word Recognition	Inconsistent recognition of irregular words (e.g., said, came)
Phonics Pattern Assessment	Gaps in vowel teams (e.g., out, now) and r-controlled vowels
QRI Word Recognition in Context	Frustration Level – Pre-primer (Narrative)
QRI Passage Comprehension	Frustration Level – Pre-primer (Narrative)
Listening Comprehension	Primer Level (Narrative Text)
WRMT Word Identification	Grade Equivalent – 1.8
WRMT Word Attack	Grade Equivalent – 1.5
WRMT Word Comprehension	Grade Equivalent – K.7
WRMT Passage Comprehension	Grade Equivalent – 1.0
PPVT Receptive Vocabulary	Average Range – Percentile Rank: 62
Oral Reading Behaviors of Students	
Behavior	Observation
Reading Rate	Normal ✓ Slow Fast
Phrasing	Appropriate ✓ Inappropriate (word-by-word)
Expression	Appropriate ✓ Inappropriate (monotonous)
Confidence Level	Confident Dialect-based✓ Inappropriate
Finger pointing at text	Corresponds No correspondence✓
Anxiety Level	Relaxed Tensed ✓
Easily Distracted	Yes
Frequent letter reversals	No
Sub-vocalizes	No (lip movement, murmurs, or whispers during silent reading)
Repeats words, phrases, or sentences	Yes
Omits words, phrases, or sentences	No

Adds words, phrases, or sentences	Yes
Substitutes words, phrases, or sentences	Yes
Other Observations	(Insert notes here)

3.1. Overall Summary: Areas of Strength (S) and Challenge (C)

Table 7.

Overall Summary of student strengths (S) and Challenges (C).

Area of Focus	Indicators and Notes (S = Strength, C = Challenge)
Self-Esteem (C)	Confidence, attitude
Comprehension (C)	Literal, non-literal, narrative, and expository texts, main idea, classification and sequencing, inferencing, cause and effect, self-monitoring, and other
Decoding (C)	Letter recognition, phonemes, blends, digraphs, vowel diphthongs, word analysis, consonant clusters, word initial/medial/final sounds, word endings, inflection, other
Writing (C)	Content, expression, conveying ideas, coherence, spelling, grammar, mechanics, punctuation

3.1.1. Strengths

The student demonstrates enthusiasm for literacy activities, particularly when being read to, and shows a strong willingness to learn. He occasionally self-corrects when encountering semantic or syntactic inconsistencies, indicating emerging self-monitoring skills. He makes efforts to decode unfamiliar words using phonics strategies and effectively employs both visual and contextual cues to support word recognition. Additionally, he engages positively in choral reading activities, suggesting that collaborative reading enhances his motivation and participation.

3.1.2. Challenges

The student demonstrates limited sight word vocabulary, which impacts reading fluency. He requires extended time to decode words, often leading to a loss of overall passage comprehension. His slow reading pace, coupled with a short attention span, hinders sustained engagement with text. While he shows familiarity with consonant sounds, his knowledge of vowel sounds remains underdeveloped. Additionally, he exhibits reluctance toward writing tasks, which may reflect underlying challenges with written expression or confidence.

4. Intervention Design

The 12-week intervention program delivered a total of 12 instructional hours, drawing upon well-established theoretical frameworks such as Ehri's (2005) sight word learning theory, Perfetti's (1985) verbal efficiency theory, and Stanovich's (1986) interactive-compensatory model. Instruction focused on enhancing word recognition, reading comprehension, and the student's confidence in his reading abilities. The approach was evidence-based, explicit, and systematically structured, addressing foundational reading skills and progressing toward more advanced competencies. Throughout the intervention, the student received clear instructional guidance, opportunities to practice independently, and timely corrective feedback, ensuring alignment with best practices in reading development.

Because the student's instructional level for sight words could not be clearly determined from the initial assessment, further evaluation was needed. Particular emphasis was placed on assessing the student's reading skills in the context of continuous text, rather than isolated word lists, to better inform targeted intervention.

4.1. Goals for Targeted Instructional Intervention

- Word Recognition (Decoding Skills)

- Comprehension
- Affective goals (Self-Esteem and Confidence)

Goals for targeted instructional intervention include three main areas: word recognition (decoding skills), comprehension, and affective goals such as building self-esteem and confidence.

Based on the outcomes thus far, three goals for targeted instructional intervention were designed to address the students' specific reading needs in a structured and supportive way. Instruction prioritized systematic teaching of high-frequency sight words to enhance decoding skills. Alongside this, explicit phonics instruction and orthographic mapping strategies were implemented to strengthen the students' ability to decode unfamiliar words and understand the relationship between sounds and letters. The integrated approach also ensured ongoing, repeated practice within meaningful connected text, so the student could build comprehension, fluency, and transfer word recognition skills into real reading experiences. This comprehensive method supported the transfer and generalization of foundational reading skills, aiming to lay a solid foundation for reading success and to promote confident, independent literacy development.

This integrated instructional approach of systematic sight word practice, use of context clues, morphological analysis, and phonics reinforcement provided a comprehensive foundation for both reading fluency and accuracy, supporting the student in becoming an independent and confident reader.

- Systematic sight word instruction
- Context clue utilization strategies
- Morphological analysis for multisyllabic words
- Phonics pattern reinforcement

Systematic sight word instruction utilized Ehri's (2005) orthographic mapping approach, focusing on connecting phonemes to graphemes to establish secure sight word memories. High-frequency words were introduced in small sets with emphasis on letter-sound connections, word structure analysis, and multiple exposure opportunities through reading and spelling activities. High-frequency words were introduced in small, manageable sets with explicit focus on letter-sound relationships, word structure analysis, and repeated exposure through multimodal reading and spelling activities. The following instructional strategies were used during the instructional intervention:

4.2. Predictive Picture Walk and Flashcard Practice

Instruction began with the use of sight word flashcards, integrating them into contextualized book reading experiences. Each session started with previewing a book title and engaging the student in a predictive discussion based on the title and illustrations. A picture walk was conducted to activate prior knowledge and vocabulary. From these texts, targeted sight words were selected for instruction. The student practiced reading these words through flashcards. Books were chosen to be accessible for independent reading with minimal scaffolding. Over time, instruction emphasized increasing the speed and automaticity of sight word recognition. Words that remained difficult were set aside for targeted review in later sessions.

4.3. Manipulatives with Magnetic Letters

For building sight word vocabulary, magnetic letters were used to enhance phoneme-grapheme mapping. The student was first asked to identify, spell, and pronounce each word. Then, the tutor mixed up the letters, and the student reconstructed the word, reinforcing orthographic patterns through kinesthetic and visual engagement. This hands-on manipulation supported both decoding and encoding processes.

4.4. Sight Word Board Game - "Home Run."

The "Home Run" board game, themed around baseball, was designed to enhance sight word learning for early readers. Featuring a 3x3 grid of high-frequency words paired with baseball images, it

leverages the students' interest to aid automatic word recognition and reading fluency. It is ideal for use in literacy centers, small groups, or game-based activities. The game's visuals and familiar theme promote engagement and retention, supporting research-based early literacy practices.

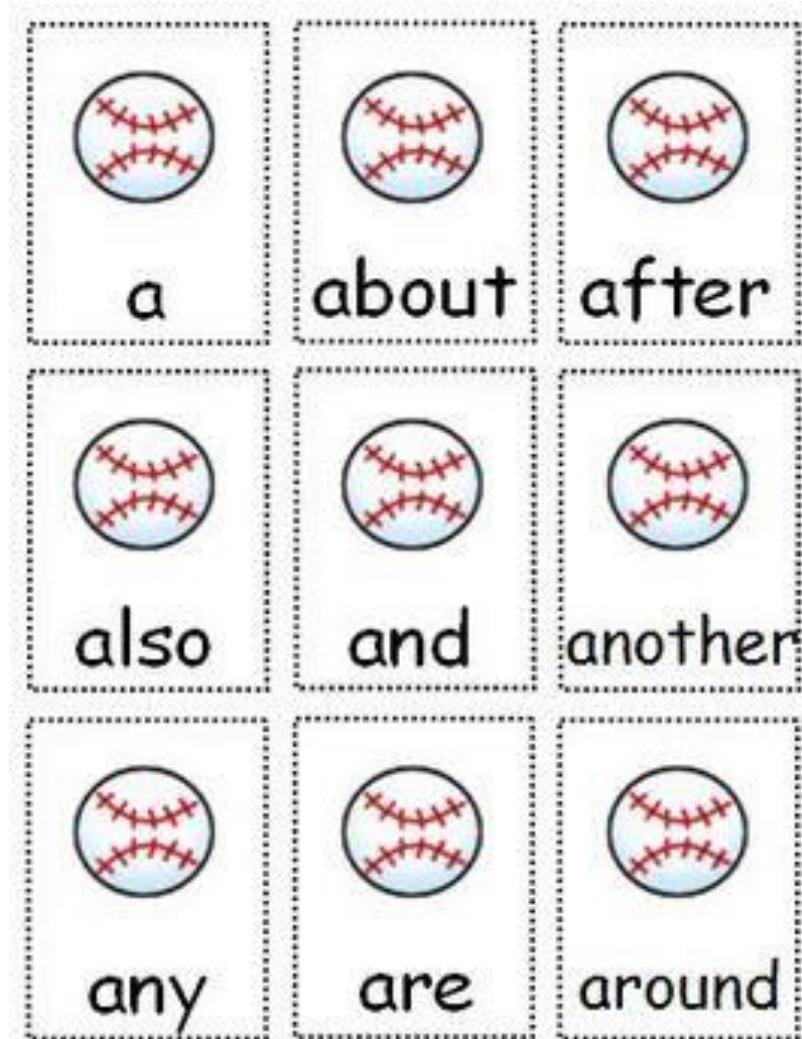


Figure 1.
Baseball-themed sight word cards used in the “Home Run” game.

4.5. Morphological Analysis

Morphological analysis for multisyllabic words involved systematic instruction in how to recognize and break down prefixes, suffixes, and root words. Through targeted lessons and guided practice, the student learned strategies to identify meaningful parts of words, such as common roots and affixes, which not only helped him decode complex, unfamiliar words but also deepened his understanding of grade-level vocabulary. This instruction supported both reading accuracy and comprehension, as the student became more adept at deconstructing challenging words and grasping their meanings within context.

4.6. Phonics Pattern Reinforcement:

By explicitly teaching and practicing patterns, such as closed syllables (like "cat" or "basket"), open syllables (like "he" or "hero"), and vowel-consonant-e syllables (like "cake" or "take"), the student learned to recognize and decode a wide range of words. For example, in closed syllables, the vowel is typically short as in "dog," while in open syllables, the vowel is long as in "go." In vowel-consonant-e syllables, the silent 'e' at the end makes the preceding vowel long, as in "home" or "ride." Practicing these patterns with a variety of words helped the student generalize his decoding skills, read new words more fluently, and tackle multisyllabic words with increasing complexity.

4.7. Context Clue Utilization

The student was taught to utilize context clues, focusing on semantic, syntactic, and grapho-phonemic cues to support word recognition without compromising decoding accuracy. Through direct demonstration, the student learned to use surrounding text, sentence structure, and initial letter sounds to infer word meaning. He practiced with short passages, gaining independence as his confidence in using context clues effectively increased.

4.8. Think-Aloud Context Clue Walk

One effective strategy employed for teaching context clue utilization was the "Think-Aloud Context Clue Walk." In this approach, the teacher actively models their thought process while reading aloud, pausing at unfamiliar words to make visible how skilled readers use information from surrounding words, sentence meaning, and prior knowledge to make sense of new vocabulary. The teacher may verbalize questions ("What does this word remind me of?"), reason aloud through connections with other words and clues in the sentence, and demonstrate the use of semantic, morphological, and grapho-phonics patterns altogether. In this way, students see how context, word structure, and sound patterns work together in figuring out meaning.

This think-aloud method not only supports vocabulary growth but also cultivates students' metacognitive awareness (Xiao, 2016). By revealing the invisible process of figuring out unknown words and offering repeated opportunities to experience and discuss this strategy, students internalize flexible tools for tackling unfamiliar words on their own. Over time, they learn to actively draw meaning from context, break down word parts (prefixes, roots, suffixes), and apply phonics patterns, all of which deepen both their comprehension and decoding abilities across texts.

Table 8.

Examples of Context, Morphological, and Grapho-Phonic Cue Types with Instructional Illustrations.

Cue type	Illustration
Context Clues – Think Aloud	"Mom said I looked drowsy, so she told me to take a nap. Tutor pauses and says, "Hmm... what does <i>drowsy</i> mean? Let's look at the other words. Mom told me to take a nap. That's something we do when we're tired. So maybe <i>drowsy</i> means sleepy. That makes sense! And look, it starts with <i>dr</i> , like in <i>drum</i> , so I can sound it out, but the clues help too."
Morphological cues	The teacher presents the word <i>disagreement</i> . She writes it on the board and says, "Let's break this word into parts we know. <i>Dis</i> means not or opposite. <i>Agree</i> means to have the same opinion. <i>Ment</i> is a suffix that turns the verb into a noun, an action, or process. So, <i>disagreement</i> means the process of not agreeing or having a different opinion." Students then practice with words like <i>unhappiness</i> , <i>rebuild</i> , and <i>careless</i> by identifying prefixes, roots, and suffixes.
Grapho-phonics cues	Students receive a stack of word cards with words like <i>sunset</i> , <i>pilot</i> , <i>reptile</i> , <i>table</i> , <i>basket</i> , and <i>kitten</i> . They sort the cards into syllable type categories (e.g., closed syllables like <i>sun-set</i> and <i>kit-ten</i> , open syllables like <i>pi-lot</i> , silent-e like <i>rep-tile</i>). After sorting, they practice reading each word aloud, identifying the vowel sound and syllable pattern, and discussing how the syllable type affects pronunciation. The teacher may then guide students in decoding a longer multisyllabic word like <i>unbroken</i> by breaking it into syllables: <i>un</i> (prefix) + <i>bro</i> (open syllable) + <i>ken</i> (closed syllable).

4.9. Building Confidence and Engagement through Structured Reading Support

One of the goals of the tutoring program was to enhance the students' self-esteem and confidence in reading. The tutor recognized that fostering a positive reading identity was essential to encouraging long-term engagement with texts. Rather than assigning books, the tutor invited the student to self-select from a curated set of high-interest, easy-to-read books that she brought to each session. This intentional practice ensured that all available books were within the student's independent or instructional reading level, minimizing the risk of frustration and supporting successful reading experiences. Research supports this approach; providing choice within structured parameters not only increases engagement but also improves reading motivation and comprehension (Guthrie & Humenick, 2004).

4.10. Picture Walk

Two primary strategies were implemented to support the student's reading growth and confidence. First, at the beginning of each session, the student was presented with four developmentally appropriate books and invited to choose one. Before reading, the tutor and student engaged in a picture walk; they read the title together, examined the cover image, and previewed the illustrations. This practice of activating schema and predicting content through images is consistent with research on effective prereading strategies (Clay, 1991; McGee & Richgels, 2011). The tutor observed that this process not only sparked the student's interest but also enabled him to read the texts with minimal support; it contributed to a sense of accomplishment and autonomy.

4.11. Choral Reading

The use of choral reading, where the tutor and student read aloud together, created a supportive, low-pressure environment, aiding fluency and confidence (Rasinski, 2012). As the tutor gradually reduced her volume, the student began to take the lead, aligning with Vygotsky's (1978) zone of proximal development. This strategy resulted in increased enthusiasm and independent reading behaviors not initially seen. Familiarity with the material and comfort with the process fostered greater engagement. The student showed eagerness and confidence in recognizing words during shared reading, viewing reading as a positive activity rather than a challenge. These outcomes support research that fluency practice in supportive settings boosts both decoding skills and reader self-perception (Allington, 2012; Gambrell, 2011).

4.11.1. Qualitative Behavioral Observations

Systematic qualitative observations throughout the intervention period revealed substantial changes in reading behaviors and metacognitive awareness. Qualitative observations were systematically recorded using structured observation protocols during each intervention session and formal assessment administration. Observational data focused on reading behaviors, strategy use, engagement indicators, and affective responses to reading tasks. The observational data identified the following behavioral changes in the student:

4.11.2. Engagement and Persistence Behaviors

- Increased willingness to attempt challenging texts, with observable reduction in avoidance behaviors when presented with grade-level materials.
- Increased attention span
- Improved self-regulation during reading tasks, including spontaneous use of fix-up strategies when comprehension broke down.

4.11.3. Metacognitive Awareness Development

- Increased verbalization of thinking processes during reading, including predictions, questions, and connections to prior knowledge.
- Enhanced monitoring of comprehension, with spontaneous recognition when understanding was compromised, or self-correction was made when semantically unacceptable miscues were made.
- Strategic selection of appropriate reading strategies based on text type and reading purpose.

4.11.4. Affective Response Changes

- Reduced observable anxiety during reading tasks, as evidenced by decreased fidgeting, improved posture, and more relaxed facial expressions.
- Increased positive verbalizations about reading activities, with comments such as "I can read this" and "That was interesting".
- Enhanced willingness to share reading experiences and book recommendations with peers and family members.

These findings indicate that the intervention's influence extended beyond measurable gains in reading skills to encompass meaningful shifts in the students' literacy identity, self-confidence, and intrinsic motivation. The observed behavioral changes suggest that the student developed not only greater competence in reading but also a more positive, engaged, and self-directed relationship with literacy as a purposeful and rewarding activity.

5. Results and Discussion

This case study illustrates the multifaceted and dynamic nature of reading interventions designed for students with persistent literacy challenges. Across a 12-week implementation period, the individualized, evidence-based instructional model produced measurable improvements in reading proficiency, particularly in decoding accuracy, word recognition, and reading fluency. The positive outcomes reinforce the efficacy of differentiated, data-driven instruction tailored to students' assessed linguistic and cognitive profiles.

Equally significant were the metacognitive and affective outcomes. The intervention fostered heightened reading engagement, reduced anxiety, and increased self-efficacy through structured, confidence-building components, including student-directed text selection and choral reading. Immersion in linguistically rich and meaningful texts deepened the learners' ability to make semantic and morphological connections between familiar and unfamiliar vocabulary items, thereby supporting language comprehension and semantic integration.

Although the student demonstrated marked growth, progressing from a frustration level to near independence with pre-primer word lists, residual difficulty with irregular word recognition highlighted the ongoing need for explicit, systematic, and sustained instruction. These findings underscore the complex interplay between phonological, orthographic, and semantic processes and the necessity of flexible, iterative intervention informed by continuous assessment and progress monitoring.

5.1. Practical Implications

The outcomes of this intervention hold important implications for educators and literacy specialists designing programs for children with significant reading difficulties. Central to the intervention's effectiveness was a diagnostic-to-instruction model in which comprehensive initial assessments identified specific areas of need, and instructional design was precisely aligned with those assessments. Instructional decision-making was grounded in key theoretical frameworks, notably Ehr's (2005) model of orthographic mapping and Samuels' (1979) repeated reading methodology, both of which emphasize the reciprocal development of automaticity, accuracy, and comprehension.

A multi-component structure integrating phonological awareness, word recognition, comprehension, and affective dimensions contributed to holistic literacy gains. Systematic progress monitoring enabled timely instructional adjustments, while affective supports, such as explicit modeling of success, collaborative reading, and positive reinforcement, helped reduce reading anxiety and elevate motivation. The results affirm the value of approaches that simultaneously target cognitive, linguistic, and emotional aspects of literacy development to foster a resilient and confident reading identity. For broader scalability and sustainability, adapting the central components, explicit instruction in word recognition, comprehension, and affective engagement strategies, can extend the intervention's reach while maintaining fidelity. Embedding these components within school-wide literacy blocks and leveraging paraprofessional support offer practical pathways for wider implementation. Group-based strategies, such as guided choral reading and morphology-focused word study, can further enhance differentiated instruction without compromising theoretical integrity. Finally, ongoing professional learning and coaching remain essential for ensuring that teachers possess the deep linguistic knowledge and pedagogical expertise required to implement these evidence-based practices effectively at scale.

5.2. Limitations and Directions for Future Research

While the outcomes of the case study are promising, several limitations exist. As a single-case design with one first-grade student, the findings lack generalizability across diverse populations and contexts. The student's unique profile, including cognitive ability and family history of reading issues, might affect intervention responsiveness differently in other learners. The individualized, intensive intervention over 12 weeks with a reading specialist questions its feasibility and scalability in typical education settings with limited resources. The short duration also limits conclusions on long-term sustainability, and external factors like parental involvement were not considered. Future research should explore similar interventions in group settings, assess long-term effects, and identify optimal intervention components for broader applicability. Examining factors like teacher training and family engagement could further illuminate intervention success factors.

6. Conclusion

This study demonstrates that intensive, individualized reading intervention integrating theory-driven instruction and affective support can produce substantive gains in both reading performance and learner disposition. The findings reinforce that reading development is a complex, multi-dimensional process requiring sustained intervention, continuous progress monitoring, and adaptive instructional design. Cognitive and affective components, including explicit, systematic instruction, metacognitive strategy use, and confidence-building practices, emerged as critical to improving literacy outcomes and student engagement. Moreover, providing opportunities for choice, fostering self-efficacy, and cultivating a positive reading identity were central to sustaining motivation and effort. Collectively, these results affirm the efficacy of tailored, evidence-based interventions in promoting meaningful literacy growth and highlight the necessity of ongoing, responsive support for students with persistent reading challenges.

Transparency:

The author confirms that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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References

Allington, R. L. (2012). *What really matters for struggling readers: Designing research-based programs* (3rd ed.). Boston, MA: Pearson.

Clay, M. M. (1991). *Becoming literate: The construction of inner control*. Portsmouth, NH: Heinemann.

Ehri, L. C. (2005). Learning to read words: Theory, findings, and issues. *Scientific Studies of Reading*, 9(2), 167-188. https://doi.org/10.1207/s1532799xssr0902_4

Gambrell, L. B. (2011). Seven rules of engagement: What's most important to know about motivation to read. *Reading Teacher*, 65(3), 172-178. <https://doi.org/10.1002/TRTR.01024>

Guthrie, J. T., & Humenick, N. M. (2004). *Motivating students to read: Evidence for classroom practices that increase motivation and achievement*. In J. T. Guthrie, A. Wigfield, & K. C. Perencevich (Eds.), *Motivating reading comprehension: Concept-oriented reading instruction*. Mahwah, NJ: Lawrence Erlbaum Associates.

Guthrie, J. T., & Wigfield, A. (2000). *Engagement and motivation in reading*. In M. L. Kamil, P. B. Mosenthal, P. D. Pearson, & R. Barr (Eds.), *Handbook of reading research*. Mahwah, NJ: Erlbaum.

McGee, L. M., & Richgels, D. J. (2011). *Designing early literacy programs: Strategies for at-risk preschool and kindergarten children*. New York: Guilford Press.

McKenna, M. C., & Kear, D. J. (1990). Measuring attitude toward reading: A new tool for teachers. *The Reading Teacher*, 43(9), 626-639.

McKenna, M. C., Kear, D. J., & Ellsworth, R. A. (1995). Children's attitudes toward reading: A national survey. *Reading Research Quarterly*, 30(4), 934-956. <https://doi.org/10.2307/748205>

National Reading Panel. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction*. National Institute of Child Health and Human Development. Retrieved from <https://www.nichd.nih.gov/sites/default/files/pubs/nrp/Documents/report.pdf>

Perfetti, C. A. (1985). *Reading ability*. New York: Oxford University Press.

Rasinski, T. V. (2012). Why reading fluency should be hot! *The Reading Teacher*, 65(8), 516-522. <https://doi.org/10.1002/TRTR.01077>

Samuels, S. J. (1979). The method of repeated readings. *The Reading Teacher*, 32(4), 403-408.

Scammacca, N. K., Roberts, G., Vaughn, S., & Stuebing, K. K. (2015). A meta-analysis of interventions for struggling readers in grades 4-12: 1980-2011. *Journal of Learning Disabilities*, 48(4), 369-390. <https://doi.org/10.1177/0022219413504995>

Scanlon, D. M., Anderson, K. L., & Sweeney, J. M. (2016). *Early intervention for reading difficulties: The interactive strategies approach*. New York: Guilford Press.

Scarborough, H. S. (2001). *Connecting early language and literacy to later reading (dis)abilities: Evidence, theory, and practice*. In S. B. Neuman & D. K. Dickinson (Eds.), *Handbook of early literacy research*. New York: Guilford Press.

Stanovich, K. E. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly*, 21(4), 360-407. <https://doi.org/10.2307/747348>

Torgesen, J. K. (2002). The prevention of reading difficulties. *Journal of School Psychology*, 40(1), 7-26. [https://doi.org/10.1016/S0022-4405\(01\)00092-9](https://doi.org/10.1016/S0022-4405(01)00092-9)

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Wanzek, J., Stevens, E. A., Williams, K. J., Scammacca, N., Vaughn, S., & Sargent, K. (2018). Current evidence on the effects of intensive early reading interventions. *Journal of Learning Disabilities*, 51(6), 612-624. <https://doi.org/10.1177/0022219418775110>

Xiao, W. (2016). *Using thinking aloud to enhance poor readers' vocabulary knowledge and comprehension*. Paper presented at the 2016 International Conference on Humanity, Education and Social Science (pp. 74-78). Atlantis Press.