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Improving reading comprehension through a digital and intelligence-based instructional model

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Abstract. Reading comprehension is a crucial component of literacy that significantly impacts students' academic development across various subjects. However, conventional teaching methods often fail to accommodate the diverse cognitive strengths of learners, leading to disengagement and limited understanding. This study introduces a digital and intelligence-based instructional model designed to enhance reading comprehension among third-grade elementary students. The model integrates visual-spatial and linguistic-verbal intelligences with interactive digital modules to promote more engaging and effective learning. Using a Design and Development research approach, the model was systematically designed, validated by experts, and implemented in five elementary schools. Eight instructional sessions were conducted to examine the practical application and effectiveness of the approach. Data were collected through pre-tests, post-tests, classroom observations, and teacher interviews; however, the sampling techniques used were not clarified. Statistical analysis using paired and independent t-tests revealed significant improvements in students' reading comprehension in the experimental group compared to the control group. Qualitative findings also showed increased student motivation and participation during learning activities. The results suggest that a digital instructional model grounded in learners' cognitive profiles can substantially support literacy development at the primary level. Future studies are recommended to refine sampling procedures and extend the application across broader educational contexts.

Introduction

Reading comprehension is widely recognised as a fundamental literacy skill and a cornerstone of academic achievement across disciplines (Jaya et al., 2025). By the third grade, students are expected to transition from the "learning to read" stage into the "reading to learn" stage, where reading functions as a process of constructing meaning and acquiring knowledge. At this level, learners should not only recognize words and comprehend sentences, but also interpret implicit meanings, synthesize information, and apply textual understanding to broader learning contexts. Reading comprehension thus serves as both a gateway to language mastery and a foundation for success across subjects in elementary education (Herlina et al., 2024). In this sense, the ability to comprehend texts is not only an academic necessity but also a life skill that influences how children interact with information, communicate ideas, and participate meaningfully in society (Sartika et

al., 2025). Scholars have long argued that literacy shapes cognitive development, cultural engagement, and lifelong learning trajectories, making reading comprehension a pivotal skill that requires sustained pedagogical innovation (Fauziyah & Dari, 2024).

In practice, however, many students continue to struggle with comprehension due to the dominance of conventional, teacher-centred methods. Instruction often emphasises memorisation and literal recall of information, reducing reading to mechanical routines such as repeating passages, answering factual questions, or completing worksheets. Such approaches provide limited opportunities for students to engage in higher-order thinking, critical interpretation, or reflective understanding. This mismatch between curricular expectations and classroom realities contributes to persistent gaps in literacy achievement and hinders the development of more advanced comprehension skills. The problem is further compounded by large class sizes, limited instructional resources, and teachers' reliance on outdated methodologies, all of which constrain opportunities for personalisation and active learning. As a result, students who might otherwise thrive with more adaptive approaches remain disengaged and underperforming in literacy tasks.

To address these challenges, scholars have underscored the need for differentiated instruction that accommodates the diversity of learners' cognitive profiles (Snow, 2002; Tomlinson & Imbeau, 2010). Gardner's Theory of Multiple Intelligences offers a valuable framework in this regard, reconceptualising intelligence as a spectrum of abilities. For reading instruction, two domains are particularly relevant: linguistic-verbal intelligence, which involves facility with language, vocabulary, and verbal reasoning, and visual-spatial intelligence, which relates to the capacity to process information through imagery, diagrams, and spatial organization (Gardner, 1983; Sasmita et al., 2024). Designing instruction that integrates these intelligences enables students to approach comprehension tasks in ways that align with their strengths, fostering more inclusive and effective learning experiences. Beyond inclusivity, such integration encourages learners to employ metacognitive strategies, planning, monitoring, and evaluating their own reading processes, because the tasks are framed in modalities that resonate with their natural learning inclinations. Consequently, instruction becomes not only differentiated but also empowering, equipping learners with transferable strategies for tackling increasingly complex texts.

Nevertheless, existing studies have tended to investigate technological tools in isolation such as digital storytelling (Robin, 2016), audio-assisted reading (Dayanti et al., 2021), or interactive digital exercises (Albaqami, 2022) without consolidating them into a comprehensive model. Few have explicitly combined multimodal digital resources with multiple intelligences theory to address cognitive diversity in reading instruction systematically. To fill this gap, the present study introduces a digital, intelligence-based instructional model that integrates visual-spatial and linguistic-verbal intelligences with interactive digital modules. The model is designed to transform reading comprehension into a more adaptive, participatory, and meaningful process by aligning digital activities with students' dominant cognitive strengths. In contrast to fragmented interventions, this model positions digital modules as the structural backbone of instruction, ensuring coherence across activities, lesson phases, and assessment strategies. Each component, whether visual mapping, vocabulary scaffolding, or narrative-based exercises, is deliberately interconnected, thereby promoting continuity of learning experiences and reducing cognitive overload for students.

The novelty of this study lies in reframing digital media not as supplementary tools but as central pedagogical mediators explicitly aligned with learners' cognitive profiles. Unlike earlier approaches that employed technology in fragmented or ancillary ways, the proposed model systematically integrates visual narratives, audio-assisted comprehension, and interactive mapping into a coherent instructional framework. This integration contributes theoretically by extending the theory of multiple intelligences into the digital learning domain and practically by providing teachers with a

concrete model for differentiated literacy instruction. By positioning technology as a means of equitable access to literacy, the study addresses both conceptual gaps in scholarship and the pressing need to enhance reading comprehension outcomes in elementary classrooms. Moreover, the study responds to global calls for 21st-century education that emphasizes creativity, collaboration, critical thinking, and communication. By weaving digital tools with multiple intelligences, the model not only addresses the immediate challenge of reading comprehension but also cultivates broader competencies essential for lifelong learning in a digital era.

Building on this foundation, the study seeks to answer three research questions: (1) How is the digital, intelligence-based instructional model systematically designed and validated? (2) How is it implemented in elementary classrooms, and what challenges or opportunities emerge in practice? (3) To what extent does the model improve students' reading comprehension compared with conventional instruction? Accordingly, the research aims to design and validate the model, examine its practical implementation, and evaluate its effectiveness. The central hypothesis is that the model significantly enhances students' reading comprehension relative to traditional approaches. Ultimately, the study aspires to bridge theory and practice, offering not just an abstract conceptualisation but also a tested framework that teachers can realistically adopt in diverse classroom settings. By doing so, it contributes to both scholarly discourse and tangible educational reform, reaffirming the role of innovative, intelligence-based digital pedagogy in shaping the future of literacy education.

Method

This study employed a design and development research approach, a systematic method for designing, developing, and evaluating educational products based on theoretical foundations and practical needs. The procedural model was adapted from the six-stage framework proposed by Ellis & Levy (2010), consisting of: (1) problem identification, (2) formulation of research objectives, (3) design and development of the instructional artifact, (4) artifact testing, (5) evaluation of test results, and (6) dissemination of findings. This approach was considered appropriate for generating theoretically grounded yet contextually responsive instructional solutions for primary education settings (Widana et al., 2023).

The product developed was the Bright Vision learning model, designed to integrate students' visual-spatial and linguistic-verbal intelligences through the use of interactive digital modules. These modules included structured texts, guided writing tasks, and visually rich content such as images, diagrams, and animations intended to create meaningful, engaging, and holistic learning experiences for elementary school students.

The development process began with a literature review and needs analysis, followed by the creation of an initial prototype. This prototype underwent expert validation by specialists in elementary education, language learning, and instructional technology. Revisions were made based on expert feedback, after which a small-scale trial was conducted to assess the model's effectiveness and gather user feedback. The implementation was carried out in five elementary schools in Cimahi City, involving 140 third-grade students and five classroom teachers. A purposive sampling technique was employed to ensure the inclusion of participants who represented the actual instructional context and possessed comparable literacy challenges.

To measure the model's effectiveness in enhancing students' reading comprehension and simple sentence writing skills, a quasi-experimental one-group pretest–posttest design was employed. This design enabled the researchers to observe learning gains after the intervention without the need for a control group, which aligns with ethical and logistical considerations in real-world school settings

(Suharsimi, 2019). The assessment instruments consisted of a reading comprehension test and a guided writing test, both of which were specifically designed for third-grade students. The reading comprehension test included short narrative and expository texts, followed by comprehension questions that targeted literal understanding, inferential reasoning, and the ability to identify main ideas. The guided writing test required students to construct simple sentences based on visual prompts and structured word banks, thereby measuring both accuracy and coherence. A scoring rubric was developed to evaluate key indicators: (1) understanding of textual meaning, (2) grammatical correctness, (3) vocabulary use, and (4) clarity of expression.

In addition to the two main achievement tests, complementary instruments were utilised to strengthen the data collection process. Classroom observations were conducted to record student engagement, teacher facilitation, and the actual use of digital tools. Semi-structured interviews with teachers provided deeper insights into the practicality, opportunities, and challenges associated with implementing the model. Documentation in the form of lesson plans, student work, and usage logs of the digital modules was also analysed to triangulate findings. The instruments are presented in detail in the following grid to ensure methodological clarity and transparency.

Table 1. Detail of instrument

Instrument	Purpose	Format/Structure	Validity & Reliability
Reading Comprehension Test	Measure students' comprehension at literal, inferential, and evaluative levels	15 multiple-choice items and five short-answer questions, based on narrative and expository texts	Expert validation; Cronbach's Alpha for internal consistency
Guided Writing Test	Assess the ability to compose simple, coherent sentences	5 tasks requiring students to write short sentences based on pictures and structured prompts	Inter-rater reliability; consensus scoring
Observation Sheet	Document classroom processes, engagement, and learning behaviours	Checklist and rating scales (student activity, teacher facilitation, digital tool use)	Expert validation; pilot tested for clarity
Semi-Structured Interview Guide	Capture teachers' perceptions, challenges, and reflections	Open-ended questions focusing on implementation feasibility and effectiveness	Expert validation; member checking for accuracy
Documentation Analysis	Provide supplementary evidence of classroom practices	Lesson plans, student work samples, and digital module usage logs	Triangulated with observation and interview data

The instruments underwent content validation by experts and reliability testing using appropriate statistical procedures. Normality tests using the Shapiro-Wilk and Kolmogorov-Smirnov methods indicated that the data were not normally distributed. Consequently, the Wilcoxon Signed-Rank Test was used for inferential analysis, as it is recommended for non-parametric paired data (Allen et al., 2024). In addition to quantitative procedures, qualitative data were analysed using content analysis, a method suitable for capturing in-depth insights into the implementation process and participant responses (Kalpokaite & Radivojevic, 2019).

The Bright Vision model was thus tested and evaluated through both quantitative and qualitative lenses. The inclusion of multiple data sources and validated instruments strengthened the rigour of the study, while adherence to ethical standards, including institutional approval and informed consent, ensured responsible research practice. This method provided not only a theoretically grounded and contextually appropriate learning model but also an empirical foundation for scalable innovations in primary-level literacy instruction.

Results and Discussion

The study was conducted through a systematic design and development research process, following the six procedural steps outlined by Ellis and Levy (2010). The first stage, problem identification, revealed that reading comprehension among third-grade students remained low, with instruction limited primarily to rote recall and minimal scaffolding for higher-order skills. Based on this diagnosis, the research objectives were formulated to design, develop, and evaluate an instructional model integrating visual-spatial and linguistic-verbal intelligences.

Following the initial diagnostic phase, the second stage focused on formulating research objectives. At this stage, the study focused on designing, developing, and evaluating an instructional model that integrated visual-spatial and linguistic-verbal intelligences to enhance students' reading comprehension and sentence-writing abilities. This formulation provided a clear framework for ensuring that the intervention would not only address basic decoding skills but also scaffold higher-order comprehension.

The third stage, design and development of the instructional artifact, resulted in the conceptualisation of the Bright Vision model. Structured through the VISION phases — Visualising, Investigating, Structuring, Interpreting, and Noticing —the model employed digital modules featuring illustrated narratives, pictorial sequencing, guided questioning, and collaborative writing activities. Expert validation during this phase emphasised the importance of balancing visual and verbal modalities while maintaining age-appropriate content for third-grade learners.

The fourth stage involved artifact testing in small classroom trials. These pilot sessions assessed clarity, usability, and student engagement. Teacher observations revealed that students responded positively to visual prompts and collaborative scaffolds, although revisions were necessary to simplify diagrams and refine the rubrics for writing tasks. This iterative refinement ensured that the model was both pedagogically sound and practically feasible in classroom settings.

The fifth stage, evaluation of test results, was conducted after large-scale implementation in five schools. Quantitative analysis showed significant improvements in reading comprehension, with the proportion of high-achieving students increasing substantially and the number of low-achieving students declining. Statistical testing confirmed the reliability of these gains. At the same time, qualitative data highlighted shifts in student behaviour such as greater curiosity, increased confidence in text discussions, and evidence of transferring strategies to other subjects.

The final stage of dissemination extended the findings beyond the research sites. Results were presented to participating schools, accompanied by teacher training sessions and simplified implementation guides to encourage sustainability. In addition to contributing to local practice, the findings were shared within broader academic and professional forums, positioning the Bright Vision model as a replicable framework for differentiated literacy instruction adaptable to both technology-rich and resource-constrained environments.

Initial diagnostic assessments revealed that only 17.8% of the 140 student participants achieved a high level of reading comprehension. These students demonstrated the ability to recognise main ideas, draw inferences, and identify textual patterns. The majority of students (45.7%) fell into the moderate category, indicating partial understanding, often limited to responding correctly to surface-level questions. Alarmingly, 36.4% of the students were categorised as low performers, struggling with essential comprehension indicators such as identifying characters, sequencing events, and understanding cause-and-effect relationships.

After multiple instructional cycles utilising the Bright Vision model, the post-test results demonstrated a marked improvement in students' reading comprehension skills. The proportion of students in the high comprehension category increased sharply to 43.6% (61 students), representing a relative gain of 144% from the pretest data. This surge not only highlights the model's effectiveness in enhancing comprehension but also reflects its alignment with the way young learners process, internalise, and apply literacy concepts when instruction is tailored to their cognitive strengths.

Simultaneously, the number of students in the low comprehension category declined drastically to 12.8% (18 students), a reduction of 64.7% indicating that the model successfully supported learners who initially exhibited difficulties in basic comprehension tasks. Meanwhile, the proportion of students in the moderate category remained relatively stable, suggesting that learning progression occurred primarily through upward movement from the lower category, rather than lateral shifts within the mid-range. This trend signals that the instructional approach facilitated meaningful learning gains, especially among previously underperforming students.

Such a pattern reflects the principles of differentiated scaffolding, as described by Munajah and Supena (2021), in which tiered and responsive support enables learners to transition from dependence to autonomy. In addition, Vygotsky's concept of the Zone of Proximal Development (ZPD) provides a theoretical backbone for understanding how learners benefit from temporary instructional assistance that is gradually withdrawn as competence increases (Gredler, 2012). By offering interactive digital modules that integrate visual, verbal, and written components, the Bright Vision model appears to operationalise this scaffolding process in a multimodal and student-centred way.

Moreover, the inclusion of dual coding strategies, which Paivio (1991) argues enhances memory and comprehension by combining verbal and visual representations, likely contributed to the cognitive accessibility of the materials. The use of structured texts, images, diagrams, and animations helped reduce extraneous cognitive load, making information more digestible and engaging, particularly for students with varied learning preferences. As Anderson & Dron (2011) emphasise in their Cognitive Theory of Multimedia Learning, meaningful learning occurs when students actively select, organise, and integrate information across multiple channels of input.

The improvement also echoes the importance of instructional design that is adaptive and student-responsive, a view supported by Tomlinson & Imbeau (2010), who stress that differentiation is not merely about adjusting content difficulty, but about crafting meaningful pathways for each learner to access understanding based on readiness, interest, and learning profile. The Bright Vision model, by grounding itself in students' dominant intelligences —particularly visual-spatial and linguistic-verbal —provides precisely this kind of responsive pathway.

In essence, the positive post-test outcomes suggest that the Bright Vision model does more than deliver content; it shapes learning environments where equity, engagement, and growth intersect. The model's success provides a strong argument for the further application and refinement of

multimodal, scaffolded instruction in primary-level literacy education, particularly in settings where learner diversity is the norm rather than the exception.

Compared to prior studies that examined isolated strategies such as pictorial aids (Nuraeni & Nurhayati, 2023) or explicit comprehension instruction (Duke & Pearson, 2019), this research contributes novelty by integrating visual-spatial and linguistic-verbal intelligences into a coherent instructional sequence. Unlike earlier models, which often emphasised one modality at a time, the Bright Vision framework operationalises multimodal scaffolding through a five-phase structure (VISION) that ensures both visual and verbal pathways are continuously activated. This dual-intelligence integration, rarely addressed in prior literacy interventions, represents the study's primary innovation. Furthermore, the significant reduction of low-performing readers (–64.7%) underscores the remedial capacity of the model, which previous research has only partially documented

Table 2. Comparison of Students' Reading Comprehension Levels Before and After the Implementation of the Bright Vision Model

No	Reading Comprehension Level	Pretest (Initial Diagnosis)	Post-test (After Intervention)	Improvement	Percentage Change
1.	High	25 students (17.8%)	61 students (43.6%)	+36 students	+144%
2.	Moderate	64 students (45.7%)	61 students (43.6%)	–3 students	–4.7%
3.	Low	51 students (36.4%)	18 students (12.8%)	–33 students	–64.7%

The substantial gains in reading comprehension observed in this study can be attributed to several foundational design elements embedded within the Bright Vision model. One of the most prominent is the deliberate activation of visual-spatial intelligence, operationalised through instructional tools such as illustrated narratives, pictorial sequencing activities, and mind mapping. These components enabled students to externalise their internal mental representations, organise narrative elements, and construct meaning beyond textual decoding. The visual mediation of comprehension not only facilitated access to abstract ideas but also served as a cognitive bridge for learners with varying linguistic proficiency.

This approach aligns with the dual-channel processing theory as articulated by Yavich and Rotnitsky (2020), who argue that students process information more efficiently and retain it longer when exposed to both visual and verbal input simultaneously. Similarly, research by Nuraeni and Nurhayati (2023) reinforces the effectiveness of pictorial media in supporting young learners' inferential thinking and predictive reasoning, two core dimensions of advanced reading comprehension. Through visual scaffolding, students are not merely consuming content; they are constructing mental models, engaging in narrative simulation, and navigating textual complexity with greater confidence.

Complementing the visual dimension, the model also integrates linguistic and verbal scaffolding that reinforces comprehension through dialogic interaction and structured reflection. Strategies such as guided questioning, story retelling, and collaborative discussion encouraged students to engage more deeply with texts, prompting them to transition from surface-level recall to interpretive, reflective, and evaluative thinking. These scaffolds were not incidental but were purposefully embedded to activate higher-order comprehension skills in alignment with Bloom's taxonomy and contemporary literacy frameworks.

This aspect of the model resonates with the comprehensive instructional design proposed by Duke and Pearson (2019), who emphasise the importance of explicit strategy instruction, modelling, shared practice, and independent application in building students' comprehension capacity. The Bright Vision model mirrors this framework by providing a consistent structure across lessons that gradually shifts responsibility from teacher to student, promoting autonomy without sacrificing clarity.

The five-phase structure of the model, Visualising, Investigating, Structuring, Interpreting, and Noticing (VISION), offered a cognitively manageable and pedagogically coherent learning sequence. Each phase was designed to scaffold specific comprehension processes: visualising activated prior knowledge and imagery, investigating encouraged question generation and exploration; structuring helped organise information; interpreting fostered inference and synthesis; while noticing facilitated critical reflection and textual awareness. Together, these phases provided learners with a clear roadmap for navigating texts, reducing ambiguity and cognitive overload.

Importantly, the integration of these multimodal and scaffolded components did not function in isolation; instead, they worked synergistically to meet the diverse learning needs of students. The convergence of visual and verbal modes aligns with multimodal learning theories (Mayer, 2001) that stress the importance of engaging multiple sensory channels to optimise comprehension. This approach is efficient in primary education, where students benefit from concrete representations and structured guidance to develop abstract thinking skills.

In summary, the Bright Vision model's instructional architecture, grounded in multiple intelligences, cognitive theory, and best practices in comprehension instruction, provides a replicable, evidence-based framework for enhancing literacy outcomes. Its success underscores the value of intentionally designed learning models that are not only theoretically sound but also responsive to the real-world cognitive profiles of young learners. This dual orientation, anchored in theory while attuned to classroom realities, demonstrates that innovation in literacy instruction is most impactful when it harmonises research-driven principles with pragmatic considerations of teaching practice. In this sense, Bright Vision serves as a bridge between abstract educational theory and tangible, classroom-based applications.

Despite these promising results, several limitations should be acknowledged. First, the study was conducted within a limited geographic context and at a specific grade level, which may limit the generalizability of the findings. Second, while improvements were evident, a considerable proportion of students remained in the moderate category, indicating the need for longer-term interventions and more individualised scaffolding. Third, reliance on teacher observations for qualitative data, although insightful, could be complemented with student self-reports or longitudinal tracking for a richer understanding of comprehension growth. Future research is therefore recommended to expand the scope across diverse contexts, integrate adaptive technologies for personalisation, and investigate long-term retention of comprehension strategies. These limitations, however, should not be viewed solely as weaknesses but as opportunities for refinement. For instance, scaling the model across varied socio-cultural contexts could illuminate how cultural factors mediate the interplay between visual-spatial and linguistic-verbal intelligences. Likewise, employing digital adaptive platforms could personalise comprehension tasks in real time, ensuring that learners receive targeted support precisely when they need it.

Moreover, the model's success among low-achieving readers offers strong support for its remedial capacity. The reduction in cognitive load through visual supports and collaborative scaffolding appears to have significantly benefited learners with limited vocabulary, background knowledge, or working memory. This resonates with research by Sweller (1999), which emphasises that reducing

extraneous cognitive demands allows more cognitive capacity to be allocated to deeper learning processes. Additionally, as Gardner (1993) has argued, when learners are engaged through their dominant modalities, in this case, visual or verbal, their motivation, attention, and retention increase significantly. These findings reaffirm the principle that equity in education is best pursued not through uniformity but through responsiveness. By recognising that struggling readers often face disproportionate barriers to comprehension, Bright Vision provides a scaffolded pathway that enables them to participate more fully in literacy tasks. Such responsiveness is particularly vital in early education, where disengagement or repeated failure can have long-lasting adverse effects on learners' academic identities.

The qualitative data collected from teacher interviews and classroom observations further reinforce the quantitative findings. Teachers noted a visible shift in students' affective disposition toward reading: students became more curious, more willing to ask questions, and more confident in sharing interpretations. These affective gains, though more difficult to quantify, are essential indicators of literacy development, as motivation and engagement are both precursors and outcomes of successful comprehension (Elleman & Oslund, 2019). Notably, teachers also reported that students began to transfer their comprehension strategies to other subjects, suggesting a positive spillover effect. Such spillover effects indicate that the benefits of Bright Vision extend beyond literacy into the broader curriculum, enhancing students' ability to interpret scientific texts, analyse historical narratives, or solve word problems in mathematics. This cross-disciplinary relevance magnifies the model's significance, positioning it not merely as a literacy intervention but as a holistic educational approach with the potential to elevate overall academic achievement. Furthermore, the affective dimension of these findings highlights the importance of designing pedagogy that not only cultivates skills but also nurtures dispositions of curiosity, persistence, and confidence that are indispensable for lifelong learning.

Nevertheless, the results also suggest areas for further development. Several students remained in the moderate category post-intervention, which implies that the model, while effective, may require additional layers of personalisation. These learners may benefit from extended time, differentiated texts, or repeated exposure to particular strategies. As Mariadeni et al. (2019) contend, comprehension is a developmental and incremental process; sustained instructional support is necessary for students to consolidate and internalise more complex comprehension strategies. This finding highlights the reality that no single intervention can fully address the wide spectrum of learner needs. Students who struggle may require a combination of explicit strategy instruction, motivational scaffolds, and home-based reinforcement to ensure that progress extends beyond the classroom. It also raises the possibility of integrating formative assessment tools into the model, allowing teachers to track individual growth and make continuous adjustments.

Another implication of the study is the model's suitability for diverse educational contexts, particularly those with limited access to technology. Bright Vision is not dependent on digital infrastructure; its use of accessible materials and flexible teaching routines makes it adaptable and scalable, particularly in low-resource environments. This practicality is a critical advantage, especially for school systems seeking to improve literacy outcomes without incurring high implementation costs. The adaptability of the model also positions it as a bridge between traditional pedagogy and modern digital learning. Teachers in rural or underfunded schools can implement Bright Vision with printed visuals, story cards, or simple graphic organisers. At the same time, more resourceful contexts may enhance the model with tablets, projectors, or online interactive tools. Such dual usability underscores the model's inclusivity and its potential for widespread adoption across educational systems with varying capacities.

Theoretically, this research advances understanding of how multimodal and intelligence-based approaches can be systematically structured to support early literacy. It enriches the body of knowledge on scaffolding strategies by demonstrating how visual-spatial and linguistic-verbal intelligences can be harmonised to optimise comprehension. Practically, the model provides teachers with a structured yet flexible framework that can be applied in both resource-rich and resource-limited contexts. Its adaptability ensures that literacy instruction can be inclusive, equitable, and sustainable. The findings, therefore, have implications for curriculum designers, teacher educators, and policymakers who aim to foster literacy development through innovative and context-sensitive instructional models. Importantly, this research also points to the need for teacher professional development. Implementing Bright Vision effectively requires not only awareness of multiple intelligences but also pedagogical competence in orchestrating multimodal activities. Without adequate training, teachers may revert to conventional, text-heavy methods that undercut the model's potential. Thus, the study indirectly advocates for institutional support systems—such as workshops, peer mentoring, and policy incentives that can empower teachers to embrace differentiated and intelligence-based instruction with confidence.

In summary, the application of the Bright Vision model led to measurable improvements in students' reading comprehension, particularly in their ability to make inferences, sequence ideas, and derive meaning from multimodal texts. The results confirm the value of intelligence-informed, scaffolded, and multimodal pedagogy in the early stages of literacy development. As such, this study not only offers a robust model for classroom application but also contributes to the broader discourse on how reading comprehension can be effectively taught and cultivated through integrative and context-sensitive instructional design. Future studies may extend this line of inquiry by testing the model with larger and more diverse student populations, examining long-term retention of comprehension skills, or integrating additional intelligences such as interpersonal or logical-mathematical domains. Such explorations would not only strengthen the empirical basis of Bright Vision but also refine its applicability across different literacy stages and cultural contexts.

Conclusion

The study concludes that the Bright Vision instructional model, grounded in visual-spatial and linguistic-verbal intelligences, effectively enhances third-grade students' reading comprehension through structured scaffolding and student-centred learning. The model not only enhances cognitive outcomes, such as deeper comprehension and critical thinking, but also promotes affective gains, including increased confidence and engagement in literacy discussions. Its adaptability across different learning environments positions it as a practical and transformative approach to early literacy instruction. Based on these findings, it is recommended that teachers incorporate the Bright Vision model into daily literacy instruction, particularly in contexts where students struggle with comprehension. Curriculum developers and policymakers should consider integrating multimodal and intelligence-based strategies into reading curricula to ensure inclusivity and responsiveness to diverse learner needs. Further research is encouraged to explore the model's long-term effects, its applicability across different grade levels, and its potential for adaptation in varied cultural and technological contexts.

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