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The Implementation of a Multisensory Approach on Overcoming Vocabulary Learning Difficulties Among Dyslexic Junior High School Students

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Abstract

This study explores the implementation of a multisensory approach in teaching vocabulary to dyslexic students in an inclusive junior high school English classroom in Indonesia. The research employed a qualitative case study involving one English teacher selected through purposive sampling. Data were collected through semi-structured interviews, document analysis of lesson plans, and non-participant classroom observations. The data were analyzed using thematic analysis with methodological triangulation to ensure credibility. The findings revealed that multisensory elements were present in classroom practice, particularly through visual and auditory activities such as PowerPoint presentations, pronunciation modeling, and repetition exercises. However, kinesthetic and tactile components were limited and were not systematically integrated into the instructional process. Vocabulary learning was also embedded within grammar-focused lessons rather than being explicitly structured as a lexical learning objective. These findings indicate that although multisensory techniques were used in the classroom, their implementation remained implicit and did not yet reflect a structured multisensory instructional framework. The study highlights the need for more deliberate multisensory instructional design to support vocabulary development among dyslexic learners in inclusive EFL classrooms.

1. Introduction

Vocabulary mastery plays a crucial role in English as a Foreign Language (EFL) learning because it supports learners' ability to comprehend texts, express ideas, and participate in communication. However, vocabulary acquisition is widely recognized as one of the most challenging aspects of EFL learning. According to Nation (2022) and Schmitt (2022), vocabulary learning involves complex cognitive processes such as word form recognition, phonological–semantic mapping, and long-term memory consolidation. These processes often pose difficulties for many learners, particularly in foreign language contexts.

Previous studies have highlighted the importance of instructional strategies in facilitating vocabulary acquisition among EFL learners. In the Indonesian context, several recent studies have reported that innovative learning strategies can support vocabulary development. For example, Ahmad Alqawwiy and Salmiah (2025) found that puzzle-based learning increased student engagement in vocabulary learning. Similarly, Sabila and Salmiah (2025) reported that mobile-assisted applications supported vocabulary acquisition through interactive repetition activities. Other studies have also shown that varied instructional approaches can enhance students' vocabulary learning outcomes.

However, instructional strategies that are effective for general EFL learners may not necessarily address the learning needs of students with specific learning difficulties, particularly students with dyslexia. Dyslexia is a neurodevelopmental condition characterized by persistent difficulties in phonological processing, word recognition, and working memory (Peterson & Pennington, 2021). These difficulties directly influence vocabulary learning, as students with dyslexia often struggle to retain new words, differentiate phonologically similar vocabulary items, and establish stable connections between word forms, sounds, and meanings (Snowling & Hulme, 2021).

Because of these cognitive characteristics, conventional vocabulary instruction that relies heavily on memorization or written input may not sufficiently support dyslexic learners. Consequently, alternative instructional approaches that accommodate different sensory pathways are required to facilitate vocabulary learning for students with dyslexia.

One approach that has been widely recommended is the multisensory approach. Multisensory instruction integrates visual, auditory, kinesthetic, and tactile modalities in the learning process, allowing learners to process language input through multiple sensory channels (Birsh & Carreker, 2021). Research suggests that multisensory learning can strengthen memory retention and support language acquisition, particularly for learners who experience phonological processing difficulties.

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Despite the increasing interest in vocabulary learning strategies in EFL contexts, limited studies have specifically examined how multisensory approaches are implemented in teaching vocabulary to dyslexic students in inclusive junior secondary classrooms. Most previous studies focus either on general vocabulary learning strategies or on reading interventions for dyslexia. Consequently, there is still limited empirical understanding of how multisensory instructional principles are applied in everyday EFL classroom practices for dyslexic learners.

Therefore, this study aims to explore how a multisensory approach is implemented in teaching vocabulary to dyslexic junior high school students and to identify the challenges encountered during its implementation in an inclusive classroom context.

2. Method

This study employed a qualitative case study design to explore how a multisensory approach was implemented in teaching vocabulary to dyslexic students in an inclusive classroom. A qualitative case study allows researchers to investigate instructional practices within real-life classroom contexts using multiple sources of evidence (Harrison et al., 2020).

The research was conducted in an inclusive junior secondary school where students with learning difficulties, including dyslexia, studied alongside their peers in regular English classrooms. A single English teacher was selected as the participant through purposive sampling due to her experience in teaching students with diverse learning needs. Focusing on one participant enabled an in-depth exploration of classroom instructional practices.

Data were collected from three sources: semi-structured interviews, document analysis, and non-participant classroom observation. The semi-structured interview explored the teacher's instructional practices, teaching media, challenges, and strategies used in teaching English. Document analysis was conducted on lesson plans (RPP) to identify the presence of multisensory elements in instructional planning. Classroom observations were carried out to examine how vocabulary teaching strategies were implemented during actual learning activities.

The research instruments included a semi-structured interview guide, a document analysis checklist, and a classroom observation checklist based on the multisensory modalities of visual, auditory, kinesthetic, and tactile learning. The use of multiple data sources enabled methodological triangulation to strengthen the credibility of the findings.

Data were analyzed using thematic analysis following Braun and Clarke (2021). The analysis involved several stages: familiarization with the data, coding relevant information, identifying emerging themes, reviewing patterns across data sources, and interpreting the findings in relation to the theoretical framework.

To ensure research trustworthiness, the study applied credibility, dependability, confirmability, and transferability criteria. Credibility was enhanced through data triangulation, while detailed documentation of research procedures supported dependability. Ethical considerations included obtaining informed consent, maintaining participant confidentiality, and ensuring that the data were used solely for academic purposes.

3. Result

Implicit Presence of Multisensory Components

The findings indicated that multisensory elements were present in vocabulary instruction; however, they were not implemented as a structured pedagogical framework. Interview data revealed that the teacher frequently used visual and auditory strategies during vocabulary instruction. As the teacher explained, *"Saya biasanya menggunakan PowerPoint untuk menampilkan kosakata dan meminta siswa mengulanginya beberapa kali supaya mereka ingat."* This practice shows the use of visual presentation and oral repetition to reinforce vocabulary learning.

Document analysis supported this finding. The lesson plan included PowerPoint slides as instructional media and dialogue activities in the main learning stage. However, the learning objectives primarily focused on tense mastery rather than explicit vocabulary development. Classroom observation also confirmed that vocabulary items were introduced through projected slides followed by choral repetition and short dialogue practice. Although several sensory modalities appeared during instruction, they were not systematically sequenced or intentionally integrated to strengthen vocabulary learning.

Curriculum-Driven Vocabulary Instruction

The analysis also revealed that vocabulary instruction was largely shaped by curriculum requirements. Interview responses indicated that the teacher relied on the school module when planning lessons. As stated by the teacher, *"Saya mengikuti modul yang sudah disiapkan sekolah supaya sesuai dengan kurikulum."* Consequently, vocabulary was typically introduced as part of grammar explanations rather than as an independent learning focus.

Document analysis further showed that lesson objectives emphasized grammatical structures, while vocabulary appeared mainly within example sentences and dialogue activities. Classroom observation confirmed that students practiced vocabulary through controlled drills related to sentence patterns. No extended activities such as vocabulary categorization, semantic mapping, or cumulative review were observed. These findings suggest that vocabulary learning functioned primarily as a supporting element within grammar focused instruction.

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Predominance of Visual Auditory Strategies

Another theme that emerged from the analysis was the dominance of visual and auditory instructional strategies. Interview data indicated that the teacher frequently relied on slide presentations and repetition. The teacher stated, *"Saya lebih sering menggunakan slide dan pengulangan supaya siswa cepat hafal."*

This pattern was also reflected in the lesson plan, which listed PowerPoint presentations and oral explanation as the primary instructional media. During classroom observation, vocabulary items were introduced through projected text followed by teacher modeling and collective repetition. Students were then asked to read short dialogues containing the target vocabulary.

Although role-play activities were occasionally conducted, they mainly involved reading scripted dialogues rather than physically demonstrating meaning. Writing activities were also limited to copying vocabulary into notebooks. These findings indicate that visual and auditory input dominated vocabulary instruction, while kinesthetic and tactile activities were used less frequently.

Contextual Constraints in Vocabulary Instruction

The final theme concerned contextual factors that influenced instructional practices. Interview data revealed that the teacher faced challenges related to diverse student abilities and limited instructional time. As the teacher explained, *"Tantangannya perbedaan kemampuan siswa… ada yang cepat paham, ada yang perlu diulang-ulang."* She also mentioned that time constraints required her to complete the planned material within the allocated schedule.

Observation findings supported this statement. Some students required additional clarification during vocabulary activities, and the teacher provided repeated explanations to support their understanding. However, document analysis showed that the lesson plan did not explicitly include differentiated activities for students with varying learning needs. All students followed the same instructional sequence during the lesson.

These findings suggest that although the teacher recognized the diversity of student abilities, instructional adaptation occurred informally during classroom interaction rather than through structured lesson planning.

The findings above illustrate several patterns in the implementation of multisensory elements in vocabulary instruction within the observed inclusive classroom. Although visual and auditory strategies were frequently employed, the use of kinesthetic and tactile modalities remained limited. In addition, vocabulary learning tended to be embedded within grammar-focused instruction rather than being developed through explicitly structured lexical activities. These patterns indicate that multisensory components were present in classroom practice but were not systematically organized as an integrated instructional framework.

Furthermore, the findings suggest that instructional decisions were influenced not only by pedagogical considerations but also by contextual factors such as curriculum structure, time constraints, and heterogeneous student abilities.

These results therefore raise important questions regarding how multisensory principles are interpreted and operationalized in real classroom contexts. The following discussion section examines these findings in relation to current theoretical perspectives on multisensory structured literacy, vocabulary acquisition, and inclusive pedagogy.

4. Discussion

Implicit Multisensory Implementation in Vocabulary Instruction

The findings revealed that multisensory elements were present in vocabulary instruction; however, their implementation remained implicit rather than systematically structured. Although the Results section identified the use of visual slides, oral repetition, limited role-play, and writing activities, these practices appeared as routine instructional techniques rather than as components of an intentionally integrated multisensory framework.

Interview data indicated that the teacher frequently used PowerPoint presentations and repetition to introduce vocabulary items. This practice activated visual and auditory modalities but did not involve systematic sequencing or cumulative reinforcement. Classroom observations also showed that repetition was conducted collectively without structured phonological analysis or explicit connections between word forms, sounds, and meanings.

These findings align with previous research suggesting that the presence of multiple sensory modalities does not necessarily indicate structured multisensory instruction. Multisensory learning requires deliberate integration of visual, auditory, kinesthetic, and tactile modalities to strengthen lexical processing and memory retention (Birsh & Carreker, 2021). In the observed classroom, sensory modalities were present but functioned independently rather than as part of a coordinated instructional strategy.

Curriculum-Oriented Instruction and Limited Lexical Depth

Another important finding was that vocabulary instruction was largely influenced by curriculum requirements. The teacher explained that lesson planning followed the official school module to ensure alignment with the curriculum. As a result, vocabulary learning often appeared within grammar-focused lessons rather than being treated as an independent learning objective.

Document analysis confirmed that lesson objectives emphasized grammatical structures such as tense usage, while vocabulary items were introduced mainly through example sentences and dialogue activities. Classroom observations further showed that students practiced vocabulary through controlled drills without extended activities such as semantic mapping, word categorization, or cumulative vocabulary review.

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Research on vocabulary acquisition emphasizes that effective vocabulary learning requires repeated and meaningful exposure to lexical items (Nation, 2022; Schmitt, 2020). Without varied reinforcement activities, vocabulary instruction may remain limited to surface-level familiarity rather than deeper lexical understanding. Therefore, embedding vocabulary solely within grammar instruction may restrict opportunities for students to develop richer lexical knowledge.

Dominance of Visual–Auditory Modalities

The findings also demonstrated a predominance of visual and auditory instructional strategies in vocabulary learning activities. Vocabulary items were typically presented through projected text and teacher modeling, followed by choral repetition by students. Although such strategies are common in language classrooms, they primarily support short-term rehearsal rather than deeper lexical processing.

Kinesthetic and tactile modalities were used only occasionally. Role-play activities were limited to reading scripted dialogues, and writing tasks mainly involved copying vocabulary into notebooks. As a result, the distribution of sensory engagement across modalities remained uneven.

Studies on dyslexia highlight the importance of connecting phonological, orthographic, and semantic information during vocabulary learning (Ehri, 2020). Multisensory instruction can support this process by engaging multiple sensory channels simultaneously. However, when certain modalities dominate classroom practice, the potential benefits of multisensory learning may not be fully realized.

Contextual Constraints in Inclusive Classroom Practice

Contextual factors also influenced the depth of multisensory implementation. The teacher acknowledged differences in student learning abilities and limited instructional time. These constraints required the teacher to balance curriculum completion with classroom management.

Observation data showed that some students required repeated explanations during vocabulary practice. While the teacher provided additional support during classroom interaction, differentiated instructional strategies were not systematically included in lesson planning. All students followed the same sequence of learning activities regardless of their individual needs.

Inclusive education literature emphasizes that effective differentiation requires intentional instructional design rather than reactive adaptation (Florian, 2021). In the observed classroom, instructional adjustments occurred informally during teaching rather than being explicitly planned as part of a structured multisensory framework.

Practical Implications for Teaching Practice

The findings of this study provide several implications for English language teachers working in inclusive classrooms. First, vocabulary instruction for students with dyslexia may benefit from more structured multisensory activities

that intentionally integrate visual, auditory, kinesthetic, and tactile modalities. Examples of such activities include phoneme segmentation exercises, word manipulation using flashcards, movement-based vocabulary practice, and cumulative vocabulary review cycles.

Second, teachers may consider allocating specific instructional time for vocabulary development rather than embedding vocabulary solely within grammar instruction. Structured vocabulary activities can help strengthen connections between word form, pronunciation, and meaning, which are particularly important for learners with dyslexia.

By incorporating these strategies, teachers can create more inclusive learning environments that support diverse learner needs while maintaining classroom engagement.

Implications for Inclusive Education Policy

Beyond classroom practice, the findings also highlight broader implications for inclusive education policy. Teachers often face structural constraints such as limited instructional time and curriculum demands when implementing inclusive teaching strategies. Therefore, institutional support is essential to ensure that inclusive practices can be effectively applied in classrooms.

Educational institutions and curriculum developers may consider providing professional development programs that focus on structured multisensory instruction and differentiated teaching strategies. Training programs can help teachers develop practical skills in designing multisensory vocabulary activities and adapting instruction for learners with diverse needs.

In addition, curriculum frameworks for inclusive education may benefit from explicitly recognizing vocabulary development as a key component of language learning for students with learning difficulties. Such policy support can encourage more systematic integration of multisensory instructional principles in language classrooms.

5. Conclusion

This study examined how a multisensory approach was implemented in vocabulary instruction within an inclusive junior secondary classroom. Based on triangulated thematic analysis, the findings indicated that multisensory elements were operationally present but implicitly enacted. Visual and auditory modalities dominated classroom practice, while kinesthetic and tactile components were limited in scope and depth. Vocabulary instruction was strongly influenced by module-driven objectives, positioning lexical development within grammar-focused lessons rather than as an explicitly structured target. Although the teacher demonstrated awareness of diverse learner needs, differentiated multisensory reinforcement strategies were not systematically embedded in lesson planning.

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These findings answer the research question by clarifying that multisensory vocabulary instruction in the observed context functioned as a set of instructional techniques rather than as a fully integrated structured multisensory framework. The study contributes theoretically by distinguishing between multisensory modality use and structured multisensory pedagogy. However, this research was limited to a single-case context involving one teacher and one classroom, which may restrict broader generalization.

The findings should therefore be interpreted within the specific institutional and contextual setting examined. Future research is recommended to explore intervention-based studies that implement structured multisensory vocabulary frameworks in inclusive classrooms. Comparative studies across multiple schools may also provide broader insights into implementation variability. Practically, professional development programs focusing on explicit phonological segmentation, cumulative lexical reinforcement, and differentiated multisensory scaffolding are recommended to enhance instructional alignment with structured literacy principles.

6. References

Ahmad Alqawwiy, T., & Salmiah, M. (2025). *Puzzle based learning through Figgerits application to enrich EFL student vocabulary: Students' perceptions. FRASA: English Education and Literature Journal*, 6(2), 201–215.

Alghamdi, A. (2022). The effectiveness of multisensory instruction in teaching English reading to students with learning difficulties. *International Journal of Instruction*, 15(2), 873–890.

Andini, J., & Salmiah, M. (2024). *The effect of Duolingo on eighth-grade students' vocabulary mastery. Indonesian EFL Journal*, 10(2), 247–254

Birsh, J. R., & Carreker, S. (2021). *Multisensory teaching of basic language skills* (4th ed.). Baltimore, MD: Paul H. Brookes Publishing.

Dahlan, A., & Suparno. (2025). *Improving reading skills of dyslexic students in remote areas through a multisensory alphabet wheel intervention*. Jurnal Teknologi Pendidikan: Jurnal Penelitian dan Pengembangan Pembelajaran.

Fadlah Putri Sabila & Salmiah, M. (2025). *Improving EFL students' vocabulary acquisition: A phenomenological study on the use of the "DuoCards" mobile application. Leksika: Jurnal Bahasa, Sastra dan Pengajarannya*, 19(2), 76–87.

Fitriani, S. S., & Nurhidayat, E. (2022). Multisensory approach in teaching reading to students with dyslexia. *Journal of Special Education and Rehabilitation*, 23(3–4), 45–55.

Fletcher, J. M., Lyon, G. R., Fuchs, L. S., & Barnes, M. A. (2021). *Learning disabilities: From identification to intervention* (2nd ed.). New York, NY: Guilford Press.

Fujita, R. (2024). *The effectiveness of multisensory approaches in teaching reading to children with dyslexia*. International Journal of Literacy and Education.

Ghani, M. A., & Ahmad, A. (2023). The impact of multisensory teaching strategies on reading comprehension of students with dyslexia. *International Journal of Learning, Teaching and Educational Research*, 22(6), 198–214.

Hanafi, S. H., Raflesia, C., Katili, F., & Ratunguri, Y. (2025). *Penggunaan model pembelajaran multisensori untuk mempengaruhi kemampuan membaca dan menulis siswa dengan hambatan disleksia*. Jurnal KIBASP.

Harahap, N. H., & Salmiah, M. (2025). *Pre-service English teachers' perceptions of the effectiveness of using the Gizmo application to enrich English vocabulary. Pendas: Jurnal Ilmiah Pendidikan Dasar*, Vol. 10 No. 03 (2025).

Hudson, R. F., Torgesen, J. K., Lane, H. B., & Turner, J. C. (2021). Research-based reading interventions for students with dyslexia. *Reading and Writing Quarterly*, 37(5), 456–472.

Jannah, R., & Shalihah, R. (2025). *Tinjauan literatur: efektivitas penggunaan metode multisensori dalam pembelajaran membaca untuk anak disleksia di sekolah inklusi*. JIMAD.

Kormos, J., & Michel, M. (2022). Teaching languages to learners with specific learning differences. *Language Teaching*, 55(4), 1–15.

Lee, J., & Yoon, S. Y. (2024). Digital multisensory reading intervention for learners with dyslexia. *Computers & Education*, 198, 104742.

Nijakowska, J., & Łockiewicz, M. (2021). Foreign language learning difficulties and dyslexia. *Journal of Research in Special Educational Needs*, 21(1), 3–12.

O'Brien, B. A., & Yeatman, J. D. (2021). Bridging brain and behavior in developmental dyslexia. *Current Directions in Psychological Science*, 30(2), 126–133.

Pratiwi, D., & Anwar, K. (2025). Teachers' perceptions of multisensory instruction for dyslexic students in English classes. *Journal of Inclusive Education*, 29(2), 245–260.

Putri, N. A., & Widodo, H. P. (2024). Teaching English to students with dyslexia in inclusive classrooms: Teachers' challenges and strategies. *TESOL Journal*, 15(1), e740.

Rahman, M. M., & Pandian, A. (2021). Dyslexia in ESL and EFL contexts: Emerging perspectives. *Asian EFL Journal*, 28(1), 89–104.

Siregar, R., & Marlina, L. (2022). Implementing multisensory strategies for dyslexic learners in inclusive classrooms. *Indonesian Journal of Educational Research*, 7(2), 112–120.

Snowling, M. J., Hulme, C., & Nation, K. (2020). Defining and understanding dyslexia: Past, present and future. *Oxford Review of Education*, 46(4), 501–513.

Solin, R., & Salmiah, M. (2025). *Lingo Learn application as students' learning tool to enrich vocabulary: Students' perspectives. English Learning Innovation*, 6(1), 166–175.

Syerlyana, A., Islami, R. M., Yanti, F. R., Kusmana, S., & Rahayu, I. (2025). *Application of multisensory strategies in differentiated classroom learning to overcome reading delay in elementary school students*. JTP - Jurnal Teknologi Pendidikan.

Thompson, P. A., Hulme, C., Nash, H. M., Gooch, D., Hayiou-Thomas, E., & Snowling, M. J. (2022). Developmental dyslexia: Predicting individual risk. *Journal of Child Psychology and Psychiatry*, 63(1), 79–90.

ISSN 2338-4778 (Print)
ISSN 2548-4192 (Online)

Wahyuni, S., & Lestari, D. (2023). Multisensory-based instruction to improve English vocabulary mastery of dyslexic students. *Journal of English Language Teaching and Linguistics*, 8(1), 101–115.

Washburn, E. K., Joshi, R. M., & Cantrell, E. S. (2021). Teacher knowledge and practice in reading instruction for students with dyslexia. *Annals of Dyslexia*, 71(2), 215–234.

Yusuf, Y. Q., & Yusuf, F. N. (2024). Multisensory approach in EFL classrooms: Supporting learners with reading difficulties. *Studies in English Language and Education*, 11(1), 65–80.

Zainuddin, Z., & Perera, C. J. (2023). Multisensory learning design for vocabulary acquisition among EFL learners with learning difficulties. *Education and Information Technologies*, 28(3), 3115–3134.