

Curriculum Alignment Based on Comprehensive Assessment to Address Reading Difficulties in Inclusive Elementary Classrooms

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Abstract

This study was motivated by students' reading difficulties in inclusive classrooms and the limited implementation of differentiated learning within the Merdeka Curriculum. The study aimed to describe the outcomes of academic and developmental assessments of students with reading difficulties, analyze factors influencing reading challenges, and develop curriculum alignment based on these assessments. This study used a qualitative case study design. The study focused on a first-grade student in an inclusive elementary school who exhibited persistent reading difficulties. Data were obtained from multiple sources, including classroom teachers, school principals, and the student, through observations, in-depth interviews, academic and developmental assessments, and documentation. The collected data were analyzed using the interactive model of Miles and Huberman, which includes data reduction, data display, and conclusion drawing. The findings revealed that reading difficulties were influenced by phonological, cognitive, motor, and emotional factors. Curriculum alignment based on comprehensive assessment resulted in more realistic learning objectives, structured instructional strategies, and increased student engagement. The study concludes that comprehensive assessment plays a crucial role as a foundation for curriculum alignment to support effective reading instruction in inclusive elementary classrooms.

Keywords

Dyslexia; Inclusive Elementary Schools; Independent Curriculum; Reading N

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1. INTRODUCTION

In the context of modern education, inclusive education has emerged as a response to student diversity, ensuring that every individual has the same opportunity to develop regardless of their physical, intellectual, or social background. Inclusive education is an approach that affirms that all students, including those with special needs, deserve to receive educational services within a system that is equal, fair, and respects the dignity of each individual. The main principle is to ensure that every child, regardless of their physical, intellectual, social, emotional, or religious conditions, has equal opportunities to access high-quality education in a supportive environment (Sukroni, 2025). This concept is based on the view that diversity is a positive element in the learning process, not an obstacle.



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Therefore, an inclusive curriculum, teaching methods, and evaluation mechanisms are needed so that all students can learn and develop optimally (Amka, 2025). Inclusive education is not merely about accommodating students with special needs in the classroom, but rather providing methods that support their growth, learning, and success (Phytanza, 2023). The success of this educational commitment depends on all parties, especially teachers, who must have the knowledge, skills, and strategies to address diverse learning needs, including encouraging students to participate actively. Inclusive education provides students with special needs, including those with dyslexia, opportunities to study in public schools. However, in practice, they still face various obstacles in following the learning process optimally. Hence, the Independent Curriculum offers flexibility, allowing students to develop their potential and learning interests in line with their needs (Wafa et al., 2023). In this context, the Merdeka Curriculum strongly supports inclusive education because it gives teachers the flexibility to tailor learning materials to individual student needs, enables collaborative projects involving all participants without discrimination, and encourages formative evaluation that focuses on personal progress rather than uniform standards.

The Merdeka Curriculum is a learning design that emphasizes the development of students' talents and interests. This curriculum was developed to restore the learning process, which had been disrupted, and to provide greater flexibility in its implementation. The main focus of the Merdeka Curriculum is on mastering essential competencies, strengthening character, and developing skills that are relevant to students (Afriana, 2025). Teachers are also given the freedom to choose and utilize various learning resources to tailor the learning process for needs and interests of students (Anggriani et al., 2020). The Merdeka Curriculum is a significant step in the development of the Indonesian education curriculum because it is designed to make the learning process more effective and efficient. For educators, the implementation of this curriculum provides an opportunity to recognize students' potential more comprehensively, while also allowing learning to be structured in a way that is more relevant and meaningful to the needs of students (Faelasup & Rizky Handayani, 2025). This makes the curriculum more conducive to inclusive education.

The Merdeka Curriculum, which is now being implemented in various elementary schools, provides more opportunities for differentiated learning. The implementation of the Merdeka Curriculum opens the opportunity for teachers to differentiate learning, namely by adjusting the material, processes, and assessment formats according to each student's level of readiness, interests, and learning characteristics. This curriculum emphasizes flexibility, pedagogical freedom, and the use of diagnostic assessments as the basis for learning planning (Kurniawan, 2025). However, in practice, teachers in regular schools still face several challenges when dealing with students with diverse learning needs, including those with dyslexia. These challenges include limited knowledge of specific learning difficulties, minimal training in implementing informal assessments, and the lack of comprehensive technical guidelines for designing adaptive curricula for students with special needs in inclusive classroom environments (Pranyoto, 2025). This situation has led many teachers to make only minor adjustments without strong assessment data. Research conducted by Rakhmawati et al. (2019) shows that teachers still face various obstacles in implementing the Merdeka Curriculum, ranging from difficulties in analyzing learning outcomes, formulating learning objectives and developing teaching modules, designing learning strategies and methods, optimally utilizing technology and teaching media, dealing with limited student books and extensive material, to determining project models, allocating time for project-based learning, and determining the appropriate type of assessment in the implementation of the project (Rakhmawati et al., 2019).

In the context of the Merdeka Curriculum in Indonesia, diagnostic assessment and differentiated learning are key principles. However, their implementation remains uneven, especially in integrating assessment results into curriculum alignment. Basic literacy skills, especially early reading, are the foundation for student learning success at all levels of education (Purwanto et al., 2021). In Indonesia, various national reports indicate that student literacy achievement remains low. National Assessment

data in recent years show that many early elementary school students have not reached the minimum competency standards in reading, particularly in understanding simple information in short texts (Afghani, 2022). These findings confirm that literacy problems are not only caused by a lack of reading habits but also by diverse learning abilities that have not been identified early. Reading difficulties that are not addressed immediately can develop into long-term academic barriers, including low academic self-confidence and poor learning performance across subjects. The lack of appropriate learning strategies for students with dyslexia can make it difficult for them to follow regular classroom instruction (Monahan et al., 2025).

Among the various learning difficulties, dyslexia is one of the most common specific learning disorders found in school-age children. Dyslexia is understood as a developmental disorder arising from the interaction of biological and environmental factors, specifically characterized by difficulties in phonological processing, including recognizing letters, associating letters with their sounds, and correctly analyzing syllables and words (Molen, 2024). Children with dyslexia have normal intelligence but exhibit significant delays in reading and writing. They are at risk of experiencing psychosocial effects such as frustration, academic anxiety, and other problems if they do not receive appropriate support. Therefore, early identification through comprehensive assessment is essential to ensure that students receive appropriate assistance and intervention. Dyslexia is one type of special need that is often identified but not fully understood by teachers. Dyslexia is a specific learning disorder stemming from neurological factors, characterized by difficulties in reading, writing, and spelling that are not commensurate with the student's intellectual capacity. Children with dyslexia require structured and continuous learning strategies because the way they process and understand letter symbols differs significantly from that of other children (Amka, 2025).

Research by Snowling (2020) found that oral language problems among individuals diagnosed with dyslexia are not limited to the phonological domain. As a result, children with poor reading skills also have poor reading comprehension skills. The development of reading skills is a complex process that begins with learning the relationship between written symbols and sounds. Before entering the reading stage, children generally already have phonological knowledge, namely an awareness of the sounds in words that has developed well and is integrated with semantic understanding or word meaning (Snowling, 2020). The development of reading is a complex process that requires children to understand the relationship between writing and sound to form meaning. Before reading, children already have phonological knowledge that is connected to their understanding of word meaning. In the reading process, they must accurately map orthography to phonology. Dyslexia occurs when there is a disturbance in symbol processing due to changes in the structure and function of the left-brain area that plays a role in language and reading networks (Molen, 2024).

In addition, working memory plays an important role in reading and spelling, as phonological working memory allows individuals to hold a sequence of sounds for further processing temporarily. Good phonological working memory capacity helps students remember the sequence of sounds in words, which is a crucial aspect of language skill development. Children with dyslexia often have lower phonological working memory capacity than children without learning difficulties (Moncada-Torres et al., 2021). This makes it difficult for them to perform tasks involving the manipulation of sounds or phonological symbols, which underpin reading and writing skills. On the other hand, the Universal Design for Learning (UDL) framework emphasizes the need to present material in various forms of representation to accommodate diverse learning profiles. According to Stephens (2025), UDL provides a comprehensive framework for designing learning environments and providing inclusive instruction for all learners regardless of their differences in abilities, backgrounds, or learning styles (Stephens, 2025).

Field conditions show that teaching in regular classrooms does not fully accommodate the individual needs of students with reading difficulties. Teachers do not yet have systematic diagnostic assessment procedures, so the identification of students' difficulties still depends on general

observations and informal reports. During the learning process, students often seem to guess letters, experience confusion when reading syllables, and show anxiety when asked to engage in literacy activities. Meanwhile, classroom learning proceeds at the same pace for all students, without adapting the material, steps, or learning media to their specific difficulties. Teachers also said that the Merdeka Curriculum's teaching modules remain general and do not address students' specific needs, particularly in phonology and fine motor skills. This situation reveals a gap between the principles of differentiated learning in the Merdeka Curriculum and the learning practices in the field, underscoring the need for comprehensive assessment as a basis for curriculum alignment.

In Indonesia, research on learning for students with dyslexia is beginning to develop. However, most of it still focuses on specific learning methods, such as systematic phonics, multisensory approaches, and visual media. Studies on comprehensive curriculum alignment based on academic assessment and development results are still very limited, especially in the context of the Merdeka Curriculum, which requires teachers to differentiate learning based on individual needs. This research gap underscores the importance of this study, which aims to present a systematic description of how assessment, needs analysis, and curriculum alignment are carried out in an integrated manner for students with indications of dyslexia in inclusive elementary schools. The limitations of previous studies in directly linking assessment data to curriculum adaptation practices underscore the need for more applied studies grounded in real classroom contexts.

This study is novel in the context of basic education and inclusive education in Indonesia, particularly in the implementation of the Merdeka Curriculum. Unlike previous studies, which generally focused only on the effectiveness of phonics methods, the use of multisensory media, or teaching strategies for children with dyslexia, this study offers a comprehensive curriculum alignment model based on integrated academic and developmental assessments of students. The novelty of this research lies in its holistic approach, which combines data on phonological abilities, working memory, motor coordination, social-emotional abilities, and academic profiles to inform learning adaptations aligned with the characteristics of the Merdeka Curriculum. However, the implementation of the Independent Curriculum has not fully overcome the learning difficulties experienced by students with dyslexia, so more adaptive and innovative learning strategies are needed (Dewi et al., 2023). This kind of integrated approach is still limited in research in Indonesia, especially in the context of regular inclusive classrooms that do not specifically address students with specific learning disabilities. Furthermore, this study bases its assessment on the main basis for setting learning objectives, selecting materials, choosing teaching strategies, and conducting formative evaluation. The integration of curriculum assessment aligns with the direction of the Merdeka Curriculum policy, but has not been empirically studied much in the literature. Thus, this study offers a new perspective on how public elementary schools can apply the principle of differentiation based on individual needs in a tangible, measurable way. Although inclusive education policies have been widely developed, their implementation in practice has not yet optimally accommodated the needs of students with dyslexia (Langeveldt & Pietersen, 2024).

Based on this background, this study aims to: (1) describe the academic assessment results and development of students with reading difficulties, (2) analyze the factors that influence students' reading difficulties, and (3) develop and evaluate the alignment of the curriculum applied in early reading learning in the Merdeka Curriculum. This study is expected to contribute to inclusive education practices in elementary schools and serve as a reference for teachers in designing learning experiences that are responsive to students' specific needs. Thus, this study also seeks to strengthen the implementation of the Merdeka Curriculum by applying differentiation principles grounded in individual needs.

2. METHODS

This research method was designed to produce an in-depth description of the assessment process, learning needs analysis, and curriculum alignment applied to students with reading difficulties (dyslexia) in the context of the Merdeka Curriculum. This study used a qualitative case study design. This design was chosen based on the research objective, which focuses on comprehensively understanding the phenomenon in its natural context and on exploring students' individual conditions in depth. The case study produced by this research provides detailed information on learning behaviors, supporting and inhibiting factors, and curriculum practices in inclusive classrooms (Cantika, 2025). This research was conducted at SDN 204 Cidadap Bandung, an elementary school that implements inclusive education within the Merdeka Curriculum framework. The study population consisted of all first-grade students at SDN 204 Cidadap Bandung. The research involved one first-grade student who showed reading difficulties. The subject was selected purposively based on characteristics relevant to the research focus: students who experienced consistent reading difficulties and required learning adjustments, and a school that had implemented an independent and inclusive curriculum, which is appropriate for a qualitative case study research focused on specific, in-depth phenomena. The data sources in this study included primary data collected from students, classroom teachers, and school principals, as well as secondary data derived from school documents and curriculum records.

This research was conducted in three main stages, namely (1) data collection and comprehensive assessment, (2) program development and curriculum alignment, and (3) implementation and evaluation of the alignment results. These three stages were designed to obtain a comprehensive picture of student needs, formulate relevant curriculum adaptations, and assess their significance in the context of early reading learning in the Merdeka Curriculum. The first stage was data collection and comprehensive assessment, which included in-depth interviews with classroom teachers and school principals to gather information on the learning process, student challenges, and school policies related to inclusive services. In addition, academic and developmental assessments were conducted on students with reading difficulties, covering phonological skills, reading accuracy and fluency, working memory, motor coordination, and socio-emotional aspects that affect literacy activities. The assessment data were analyzed to identify students' strengths and weaknesses as a basis for determining individual learning needs. The second stage is program development and curriculum alignment, which is done by linking the assessment results to the components of the Merdeka Curriculum. At this stage, researchers and teachers develop tailored learning objectives, select relevant learning materials and activities, and design learning strategies and media based on student needs. Curriculum alignment also includes modifying learning steps, time allocation, and formative assessment methods better to support continuous monitoring of students' reading ability development. The third stage is the implementation and evaluation of curriculum alignment, which is carried out through the application of learning designs in regular classes. During the implementation process, researchers observed student engagement, teacher responses, and the suitability of learning strategies to student needs profiles. Evaluation was conducted through teacher reflection, analysis of student work, and the development of reading skills observed from meeting to meeting. The evaluation results were used to assess the effectiveness of curriculum alignment and provide recommendations for improvement in the next stage.

Data in this study were obtained from multiple sources, including the student as the main subject, classroom teachers, and the school principal. These sources were selected to provide comprehensive information regarding the student's academic abilities, learning behavior, and the implementation of inclusive learning practices. Data collection was conducted using four main techniques, namely classroom observations, in-depth interviews, academic and developmental assessments, and documentation. Observations were conducted in the classroom during instruction to identify students' learning behaviors, responses to instructions, and the teaching strategies used by teachers. In-depth interviews were conducted with classroom teachers to gather information on students' developmental

histories, academic abilities, frequently encountered difficulties, and prior learning efforts. Academic assessments covered early reading, basic writing, and arithmetic skills to obtain an objective picture of students' academic profiles. Developmental assessments included basic cognitive, social-emotional, and motor coordination skills relevant to literacy. Documentation included curriculum documents, student records, and student learning outcomes.

The research instruments consisted of learning behavior observation sheets, semi-structured interview guidelines, early literacy assessment instruments, writing instruments, counting instruments, developmental assessment instruments (basic cognitive, social-emotional, motor, visual perception, auditory perception, and haptic perception), and student learning outcome documents. The use of these instruments aimed to produce rich, complementary data, thereby strengthening the validity of the findings through the triangulation of sources and techniques. Data were analyzed using the interactive model of Miles and Huberman, which consists of three main stages: data reduction, data display, and conclusion drawing (Maulida, 2024). In the data reduction stage, information from observations, interviews, and assessments was categorized according to the research focus. Data were presented in narrative and tabular form to provide a structured overview of the findings. Conclusions were drawn through repeated verification to ensure that the findings accurately reflected field conditions. This analysis process allowed researchers to identify patterns, relationships between variables, and implications for the necessary curriculum alignment.

3. FINDINGS AND DISCUSSIONS

Findings

Results of Academic Assessment and Student Development

The assessment results show that students' academic abilities and development are still at a stage that requires intensive intervention, especially in reading. In terms of phonological awareness, students appear to have difficulty identifying the initial and final sounds of words and are unable to combine phonemes into syllables consistently. This condition is evident in students' tendency to guess sounds based on letter shapes rather than through the proper process of phonological decoding. These difficulties also affect reading accuracy, where students still often substitute letters (e.g., reading the letter b as d), omit letters, and reverse the position of letters in words. This instability in accuracy indicates that the representation of letter sounds has not yet been firmly established. In the cognitive domain, the assessment indicates that students' phonological working memory falls in the low range. This can be seen in the students' inability to maintain a simple sequence of sounds for a short period, leading them to easily lose focus when asked to read long syllables or consecutive words. Fine motor skills also show limitations, especially in holding a pencil and controlling hand movements when writing, which affects the speed and neatness of their writing. These findings are relevant because fine motor skills are one of the components that support reading and writing.

In terms of learning behavior, students often show fluctuations in attention, such as being easily distracted by sounds or movements around them and having difficulty maintaining attention for relatively short periods. This has a direct impact on their ability to follow multi-step instructions in literacy activities. During reading sessions, students appear to show performative anxiety, for example, appearing restless, avoiding eye contact, or asking to stop when asked to read new words. These emotional reactions reinforce the indication that reading activities are both a cognitive burden and a psychological pressure for students. Overall, the patterns of reading errors that emerge, such as letter reversals (b-d, p-q), phoneme additions or omissions, and difficulty combining sounds into words, indicate consistent obstacles in the decoding process. These findings provide a strong basis for concluding that students need a more structured, multisensory, and differentiated learning approach. The results of this assessment then serve as the primary basis for formulating students' learning needs

and determining the direction of curriculum alignment at the next stage. In terms of learning behavior, students often show fluctuations in attention, such as being easily distracted by sounds or movements around them and having difficulty maintaining attention for relatively short periods. This has a direct impact on their ability to follow multi-step instructions in literacy activities. During reading sessions, students appear to show performative anxiety, for example, appearing restless, avoiding eye contact, or asking to stop when asked to read new words. These emotional reactions reinforce the indication that reading activities are both a cognitive burden and a psychological pressure for students. Overall, the patterns of reading errors that emerge, such as letter reversals (b–d, p–q), phoneme additions or omissions, and difficulty combining sounds into words, indicate consistent obstacles in the decoding process. These findings provide a strong basis for concluding that students need a more structured, multisensory, and differentiated learning approach. The results of this assessment then serve as the primary basis for formulating students' learning needs and determining the direction of curriculum alignment at the next stage.

Analysis of Learning Needs and Factors Causing Reading Difficulties

Based on the assessment results, the students' learning needs indicate that their reading difficulties are not caused by a single factor but by a combination of phonological, cognitive, motor, and socio-emotional factors. The most dominant difficulty is in phonological processing, especially in distinguishing, remembering, and combining sounds. This condition indicates that students need reading instruction focused on strengthening phonemic awareness through more structured, repetitive activities. In addition, poor phonological working memory exacerbates decoding difficulties, so learning strategies need to provide simpler, step-by-step steps accompanied by visual and kinesthetic support to aid information retention. Other factors related to fine motor skills, such as hand-eye coordination, affect writing ability. These obstacles make it difficult for students to participate in literacy activities that require both accuracy and speed, necessitating modifications to writing activities. This includes the use of larger media, ergonomic writing tools, and activity structures that do not require lengthy written output. Motor obstacles, combined with weak phonology, indicate that learning must integrate visual-motor exercises into the early reading process.

In terms of learning behavior, students struggle to regulate attention and control emotions, which affects their reading performance. Fluctuations in focus make it easy for students to lose context while reading, while anxiety when asked to read in front of teachers or friends causes students to avoid literacy tasks. This condition confirms that students' learning needs are not only related to technical reading skills but also require emotional support, including reinforcing a sense of security, providing opportunities for practice without pressure, and learning strategies that minimize anxiety. When viewed comprehensively, these factors indicate that students' reading difficulties are not caused solely by a lack of exposure to learning, but rather by the classroom learning system not yet fully providing adaptations that align with students' individual needs. The curriculum used by teachers remains uniform, while students need a differentiated approach that includes sound manipulation, visual-motor support, reinforcement of working memory, and a more emotionally supportive learning environment. Therefore, curriculum alignment is necessary to ensure that objectives, materials, methods, and assessments truly accommodate students' learning characteristics.

Curriculum Alignment Based on Assessment Results

Curriculum alignment was carried out in response to the assessment findings, which showed that students' learning needs could not be met through the general version of the Merdeka Curriculum teaching modules. Therefore, the curriculum was adjusted across four main components: learning objectives, materials, learning strategies, and formative assessment. This alignment not only focuses on early reading competencies but also considers cognitive, motor, and social-emotional factors that influence students' reading performance. To align with learning objectives, more specific, measurable objectives were formulated based on students' initial abilities. While in the regular teaching module,

students are expected to read simple words and sentences; in the adapted version, the objectives focus on mastering prerequisite skills, such as distinguishing sounds, combining phonemes into syllables, and recognizing certain letter patterns. These objectives are set in accordance with the principle of differentiation in the Merdeka Curriculum, which holds that each individual's starting point determines student learning outcomes.

In the learning materials, the curriculum is aligned by providing simpler, more concrete, and repetitive content. The material is reduced from long words and sentences to guided syllables, vowel-consonant patterns, and high-frequency words. In addition, visual material is reinforced through letter cards, phonics manipulatives, and multisensory media that allow students to feel the relationship between sounds and letters. This multisensory approach was chosen because it can reduce cognitive load and help students with low working memory to process information more stably. Alignment was also carried out in learning strategies, which were directed to be more structured, gradual, and explicit. Teachers were given a learning step plan that started with phonological warm-up activities, sound recognition exercises, phoneme blending, and repeated-syllable reading. The "I do - We do - You do" strategy was applied to provide gradual support while ensuring that students were not immediately left to complete tasks that they were not yet ready to do independently. In addition, instructions were simplified, task durations were broken down into shorter segments, and positive reinforcement was used to maintain students' emotional regulation.

In terms of formative assessment, teachers conduct regular evaluations through observation of reading performance, error pattern checklists, and analysis of daily progress notes. Assessment is not conducted through formal tests but uses a performance-based approach better suited to student profiles. Information from this formative assessment is then used to refine learning steps in the next meeting, making the learning cycle more responsive and sustainable. Overall, aligning the curriculum based on assessment results enables the creation of a more realistic, measurable, and student-centered learning design. This adaptation also shows that the Merdeka Curriculum can be implemented inclusively if teachers have accurate data on student needs and receive clear guidance on translating that data into learning practices.

Implementation of Curriculum Alignment in Early Reading Instruction

Curriculum alignment was implemented across several early reading instruction sessions to determine the extent to which the designed curriculum met students' learning needs. The implementation was carried out in regular classes with the assistance of classroom teachers, so that the conditions observed truly reflected the actual learning situation. During the implementation process, the researcher observed student engagement, the quality of teacher-student interactions, and the effectiveness of the strategies used to help students overcome the reading obstacles identified in the assessment stage. In the early stages of learning, teachers implemented phonological warm-up activities, such as simple sound games, to activate students' phonemic awareness. This activity has been proven to help students begin learning activities better prepared, though on some occasions, students still need repetition of instructions and additional examples. Learning then continues with exercises in recognizing letter sounds using multisensory media such as raised letter cards and syllable boards. Using this media provides a more concrete learning experience and helps students associate letters with their sounds more consistently.

Next, in the core activity, the teacher applied explicit learning strategies through the I Do – We Do – You Do approach. The teacher first provided a model of reading syllables slowly and clearly (I Do), then invited the students to read together (We Do), and in the next stage asked the students to try reading independently with minimal support (You Do). In practice, students showed greater responses when the activity was done collaboratively, although they remained hesitant when asked to read alone. The teacher then provided immediate feedback, especially when students made mistakes in reversing letters or omitting certain sounds. This positive, correction-based approach helped students stay

motivated and not feel pressured during the reading activity. The learning steps were then reinforced with structured reading exercises, namely reading syllables and repeated words that had consistent vowel-consonant patterns. These exercises were given at short intervals to maintain student focus. During implementation, it was observed that students were better able to maintain their attention when tasks were broken into small chunks, with breaks between activities. Teachers also modified the way they delivered instructions by using simpler sentences and accompanying them with visual demonstrations, which proved to be easier for students to understand. Students' social and emotional interactions were also an important aspect of implementation. At the beginning of the learning process, students appeared anxious when asked to read. However, after several meetings, they began to show more positive engagement, such as daring to try reading even though they still made mistakes. The teacher's consistent reinforcement was an important factor in reducing this anxiety. Overall, the implementation demonstrates that assessment-based curriculum alignment not only affects academic outcomes but also supports students' emotional regulation during learning. This implementation demonstrates that curriculum adaptation can be carried out in regular classes without disrupting the main learning flow, provided teachers have clear guidelines and strategies tailored to students' needs. These findings provide an important basis for assessing the effectiveness of the adapted curriculum and serve as a foundation for the evaluation stage in the next section.

Results of Curriculum Alignment Implementation Evaluation

The results of the evaluation of curriculum alignment implementation show positive developments in students' reading abilities, although the improvement has been gradual. The most noticeable change occurred in the accuracy and consistency of recognizing letter sounds, as students began to pronounce the sounds of several letters without randomly guessing, as they did in the initial assessment. Although letter reversals still occur, their frequency has begun to decline, and students can correct them when given visual cues or repeated examples. This indicates that explicit learning strategies with targeted repetition have a significant effect on the stabilization of decoding skills. In syllable reading exercises, students showed an increase in fluency in combining simple phonemes, especially in patterns that had been repeatedly practiced. Students appear more confident when reading syllables with consistent structures (e.g., ba-bi-bu or pa-pi-pu), though they still struggle with unfamiliar patterns. The evaluation notes that students' ability to maintain attention for longer periods of time has also improved. Whereas at the beginning of the program, students would easily lose focus after a few minutes, they are now able to follow a series of activities with fewer distractions. This change appears to be related to modifications in the learning steps that break activities down into small, clear segments.

From a social-emotional perspective, teachers reported a decrease in performance anxiety, especially when students were asked to try reading new words. Students began to show initiative, even though they were aware that the possibility of making mistakes remained. Positive teacher responses, simple praise, and the removal of task pressure were shown to support students' emotional regulation. The evaluation also showed that the interaction between teachers and students became more supportive, which increased students' intrinsic motivation to learn to read. The overall evaluation results showed that the curriculum alignment was successful in creating more focused learning aligned with students' needs. Although the improvement in reading skills has not yet reached the same level as their peers, the progress made has been consistent and shows a clear direction for improvement. This evaluation confirms that assessment-based curriculum adaptation is not only effective in improving technical reading skills but also affects non-academic aspects such as students' self-confidence, engagement, and emotional regulation. These findings provide a basis for the realistic integration of curriculum alignment into regular classroom settings if teachers have structured and flexible guidelines. In addition, the evaluation results show that the program's success depends not only on the adapted material but also on the quality of interaction, the consistency of the strategy, and continuous monitoring of progress.

Discussion

The findings in this study confirm that students' reading difficulties are not only related to phonological abilities but also result from interactions among linguistic, cognitive, motor, and emotional factors. These obstacles are evident in weak phonological awareness, poor working memory, and anxiety that arises when students are asked to read. These results are in line with the findings of a study by Annisa et al. (2024), which states that children with dyslexia often have difficulty distinguishing sounds, remembering phonological information, and maintaining focus during reading tasks (Annisa & Zudeta, 2024). The article also emphasizes that without an accurate initial assessment, teachers tend not to understand the root of the problem, leading to less targeted interventions. Your research reinforces these findings by showing how comprehensive assessments produce a more concrete map of learning needs. This approach shows how assessment serves not only as an identification tool but also as the main basis for designing appropriate learning interventions. These findings are reinforced by research conducted by Surtini and Herawati (2024), which criticizes schools for often experiencing difficulties in implementing differentiation because teachers do not yet have a deep understanding of individual needs assessment. The article emphasizes that without accurate assessment, teachers tend to apply uniform learning methods, thereby failing to accommodate the needs of students with special needs (Surtini & Herawati, 2024). This research empirically addresses these criticisms by providing concrete steps for conducting assessments, analyzing them, and compiling them into a curriculum aligned with student learning profiles. Effective curriculum adaptation must be based on an analysis of individual needs, not just a general simplification of material, and requires an assessment-based curriculum alignment to meet the individual learning needs of students (Mara & Lucia, 2012); (Dafit & Ain, 2024). This aligns with this research process, which used phonological, working memory, and pre-reading ability assessments as the basis for curriculum modification. Thus, the adaptations made are not generic but specific and targeted according to student profiles. Curriculum flexibility can only be implemented if teachers have sufficient interpretive capacity and professional competence to translate curriculum documents into contextual learning adaptations (Elisondo, 2025); (Adiatma et al., 2023). This statement emphasizes that the curriculum will be dynamic if teachers can integrate students' individual needs into the planning and implementation of learning. Social support in the learning environment can help increase students with special needs' participation and confidence in the learning process (Matsuda & Miyauchi, 2023).

Research has shown that students' learning needs cannot be met by a single teaching method; they must be tailored to the results of phonological, working memory, fine motor, and emotional assessments. The curriculum alignment carried out in this study departs from how assessment data is translated into more realistic learning objectives, simplified material, and structured, explicit teaching strategies tailored to students' abilities. This approach aligns with the principles of the Merdeka Curriculum, which emphasize differentiated learning. However, its implementation in practice still faces challenges, especially for children with special needs. Research by Hayani et al. (2024) confirms that the Merdeka Curriculum provides ample room for teacher adaptation. However, in practice, teachers often lack clear technical guidelines for adjusting learning objectives and teaching strategies (Hayani & Nurhaliza, 2024). Furthermore, the findings of this study are reinforced by research by Sukroni et al (2025), which shows that a multisensory approach and phonics learning can help dyslexic students improve their decoding skills (Sukroni, 2025). Research has shown that students' learning needs cannot be met by a single teaching method; they must be tailored to the results of phonological, working memory, fine motor, and emotional assessments. The curriculum alignment carried out in this study departs from how assessment data is translated into more realistic learning objectives, simplified material, and structured, explicit teaching strategies tailored to students' abilities. The results of this study indicate an improvement in the reading ability of students with dyslexia. This finding aligns with previous research suggesting that a multi-sensory learning approach can gradually improve students' reading ability (Talita et al., 2024). This approach aligns with the principles of the Merdeka Curriculum,

which emphasize differentiated learning. However, its implementation in practice still faces challenges, especially for children with special needs. Research by Hayani et al. (2024) confirms that the Merdeka Curriculum provides ample room for teacher adaptation. However, in practice, teachers often lack clear technical guidelines for adjusting learning objectives and teaching strategies (Hayani & Nurhaliza, 2024). Furthermore, the findings of this study are supported by Sukroni et al. (2025), who found that a multisensory approach and phonics instruction can help dyslexic students improve their decoding skills. Student engagement and understanding increase when differentiation is carried out in a planned manner. This aligns with the findings of this study, which emphasize the need for curriculum alignment based on comprehensive assessment. The relevance of this study is also reinforced by research (Alnahdi et al., 2024) and (Ependi et al., 2023), which found that the mismatch between the curriculum and individual needs resulted in low academic and functional skill development in students. Teachers and families in the study reported that without curriculum adjustments, learning became ineffective and often failed to account for differences in student abilities. These findings support the results of this study, namely that without comprehensive initial assessments and curriculum adjustments based on needs profiles, obstacles such as phonological weaknesses, low working memory, and reading anxiety cannot be appropriately addressed. Thus, this study reinforces the importance of adaptive curricula as the main foundation of inclusive education.

From a classroom management perspective, the findings of this study indicate that the quality of teacher-student interaction greatly influences the success of reading instruction for students with learning difficulties, the clarity of instruction, and the creation of an emotionally safe learning environment. In the implementation process, providing positive feedback, breaking tasks down into small steps, and using the I Do – We Do – You Do approach have been proven to help reduce student anxiety while increasing their readiness to try reading again. This strategy allows students to feel more structured and focused, thereby minimizing cognitive load and emotional pressure. Previous research has shown that the application of the CIRC method in differentiated learning is effective in improving the reading skills of students with learning difficulties (L. I. Novianti & others, 2025) (R. Novianti et al., 2025). The quality of classroom management, including clarity of instruction, emotional regulation, and supportive relationships between teachers and students, are key factor in increasing the learning motivation of students with special needs (Kahfi, 2022); (Roldan et al., 2021). This statement shows that a responsive, empathetic classroom environment directly contributes to increased student participation and confidence. Thus, this study not only contributes to the field of curriculum alignment but also enriches our understanding of how inclusive classroom management practices can support the academic and emotional development of students with reading difficulties. The failure of inclusive schools often occurs not because of a lack of commitment, but because of the absence of a clear operational framework for implementing the principle of inclusion in daily teaching and learning activities, as well as teachers' limited understanding of diagnostic assessment and differentiated learning (Vrasmas, 2014); (Harfiani & Dessty, 2023). Implementing a systematic reading program has been shown to improve students' reading skills among those with specific learning difficulties (Safarina & Susetyo, 2024).

Overall, integrating research findings with national and international literature shows that assessment-based curriculum alignment is an important practice that aligns with the principles of the Merdeka Curriculum and is consistent with the global inclusive education framework. This study offers an operational approach that teachers can apply to bridge the gap between curriculum documents and students' individual needs, especially those with reading difficulties such as dyslexia. The results of this study confirm that assessment-based curriculum alignment is a crucial component that has been overlooked in both field practice and previous research. Unlike previous studies that focused more on learning strategies, learning motivation, or the general implementation of the Merdeka Curriculum, this study provides a clear operational model for integrating assessment, differentiation, and explicit learning to improve the effectiveness of reading instruction in regular classrooms. Thus, this study not

only strengthens the existing literature but also fills an empirical gap that has not been fully addressed.

4. CONCLUSION

This study concludes that students' reading difficulties in inclusive classrooms result from interactions among phonological, cognitive, motor, and emotional factors, and that their treatment requires a comprehensive assessment to inform curriculum alignment. The results of the study show that translating assessment data into realistic learning objectives, adapted materials, and explicit and gradual learning strategies can support student engagement and readiness in reading learning. These findings confirm that the effectiveness of the Merdeka Curriculum in inclusive education depends heavily on teachers' ability to use individual needs assessments as a basis for differentiated learning. Therefore, it is recommended that inclusive elementary school teachers systematically conduct initial diagnostic assessments and use them as a basis for learning planning. In contrast, schools and policymakers need to provide operational guidelines and training support to help teachers implement assessment-based curriculum alignment, so that reading instruction becomes more responsive to students' specific needs.

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