



Literature Study: Implementation of an Adaptive Curriculum for Students with Special Needs in Inclusive Schools

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Abstract: This study reviews how adaptive curricula are implemented for students with special needs in inclusive schools and identifies dominant strategies, challenges, and enabling factors. Using a systematic literature review approach, the study screened 100 publications from Google Scholar, selected 40 for abstract and title relevance, and analyzed 20 articles published between 2020 and 2025. The synthesis shows that inclusive schools generally still rely on the national curriculum, while adaptation is carried out through accommodation and modification strategies such as escalation, duplication, substitution, and omission. Effective implementation depends on teacher competence, school leadership, parental involvement, and available resources. However, limited training, inadequate infrastructure, and weak cross-stakeholder coordination remain persistent barriers. The findings suggest that an adaptive curriculum is not merely a technical adjustment but a central mechanism for ensuring equitable participation and meaningful learning outcomes for students with special needs in inclusive settings. This review offers practical implications for teachers, school leaders, and policymakers in strengthening inclusive education.

Abstrak: Penelitian ini menelaah implementasi kurikulum adaptif bagi siswa berkebutuhan khusus di sekolah inklusi serta mengidentifikasi strategi dominan, tantangan, dan faktor pendukungnya. Dengan pendekatan systematic literature review, penelitian menyaring 100 publikasi dari Google Scholar, memilih 40 artikel berdasarkan relevansi judul dan abstrak, lalu menganalisis 20 artikel yang terbit pada tahun 2020–2025. Hasil sintesis menunjukkan bahwa sekolah inklusi pada umumnya masih menggunakan kurikulum nasional, sedangkan adaptasi dilakukan melalui strategi akomodasi dan modifikasi, seperti eskalasi, duplikasi, substitusi, dan omisi. Keberhasilan implementasi sangat bergantung pada kompetensi guru, kepemimpinan sekolah, keterlibatan orang tua, serta ketersediaan sumber daya. Namun, keterbatasan pelatihan, infrastruktur yang belum memadai, dan koordinasi antarpemangku kepentingan yang lemah masih menjadi hambatan utama. Temuan ini menegaskan bahwa kurikulum adaptif bukan sekadar penyesuaian teknis, melainkan mekanisme penting untuk memastikan partisipasi yang adil dan hasil belajar yang bermakna bagi siswa berkebutuhan khusus di sekolah inklusi. Kajian ini juga menegaskan perlunya penguatan pelatihan guru dan integrasi teknologi untuk mendukung layanan pembelajaran yang lebih responsif.

A. Introduction

Inclusive education is grounded in the principle that every child, regardless of physical, intellectual, social, or emotional condition, has the right to learn alongside peers in an environment that values diversity, participation, and equity. This principle has become a major global educational agenda since the Salamanca Statement emphasized that children with special educational needs should be educated within mainstream schools rather than segregated institutions (UNESCO, 1994). Inclusive schools are therefore expected not only to provide academic instruction but also to create social environments that embrace diversity and foster equal participation for all learners (Ainscow et al., 2019). Furthermore, inclusive education is closely related to the Sustainable Development Goals (SDGs), particularly Goal 4, which highlights the importance of ensuring inclusive and equitable quality education for all students (United Nations, 2015).

In Indonesia, the implementation of inclusive education has been formally supported through the National Education System Law No. 20 of 2003, which guarantees equal educational rights for every citizen without discrimination (Arum et al., 2020). This commitment is strengthened by Permendikbud No. 70 of 2009 concerning inclusive education and Permendikbudristek No. 48 of 2023 regarding reasonable accommodation for students with disabilities (Mutaqien & Ratnasari, 2023). Despite these regulations, the practical implementation of inclusion in schools still faces substantial challenges. Many schools have adopted the label of “inclusive schools,” yet students with special needs are frequently unable to participate meaningfully in classroom learning because educational practices continue to prioritize standardization over individual learner diversity (Hanifah et al., 2022).

One of the most significant challenges in inclusive education lies in curriculum implementation. In many inclusive schools, the national curriculum is applied uniformly without adequate adjustment to accommodate students’ diverse learning characteristics, abilities, and developmental needs. Teachers are often expected to achieve standardized curriculum targets while simultaneously addressing the needs of students with disabilities, creating tension between curriculum demands and inclusive practices (Susilowati et al., 2022). Consequently, many students with special needs experience difficulties in accessing learning effectively, resulting in passive classroom participation and limited academic achievement. Previous studies have shown that rigid curriculum structures often hinder meaningful inclusion because they fail to recognize learner variability and differentiated learning needs (Florian & Black-Hawkins, 2011).

This problem is exacerbated by limited teacher competence, inadequate educational resources, and weak institutional support systems. Many teachers in inclusive schools have not received sufficient professional training related to adaptive instruction, differentiated learning, or curriculum modification strategies. As a result, teachers tend to use uniform instructional approaches that may disadvantage students with disabilities (Tanjung et al., 2022). In addition, inclusive schools frequently lack assistive technologies, accessible learning materials, specialized services, and collaborative support systems involving

psychologists, therapists, and special education professionals (Yunus et al., 2021). International studies similarly indicate that inadequate teacher preparation and limited school resources remain major barriers to successful inclusive education implementation worldwide (Sharma et al., 2016).

In response to these challenges, adaptive curriculum has emerged as an important approach for supporting meaningful inclusion in schools. Adaptive curriculum refers to a flexible and individualized curriculum design that adjusts learning content, instructional methods, learning media, and assessment according to students' unique characteristics and abilities (Amalia & Hutami, 2017). Rather than requiring students to conform to rigid curriculum structures, adaptive curriculum encourages educational systems to accommodate learner diversity. This approach aligns with the concept of educational equity, which emphasizes that fairness in education is achieved not by treating all students equally, but by providing support according to their specific learning needs (Supena, 2021).

The implementation of adaptive curriculum is also closely associated with the Universal Design for Learning (UDL) framework, which promotes flexibility in representation, engagement, and expression to ensure that all learners can access learning opportunities effectively (Roski et al., 2021). Through adaptive curriculum practices, teachers may modify learning objectives, simplify instructional materials, provide alternative assessments, use visual or tactile learning media, and integrate assistive technologies to support students with disabilities. Research has demonstrated that adaptive and differentiated instructional approaches can improve student engagement, participation, self-confidence, and academic achievement in inclusive classrooms (Tomlinson, 2017). Furthermore, collaboration among teachers, parents, school leaders, and special education professionals is considered essential for ensuring successful curriculum adaptation and inclusive learning environments (Yasmita et al., 2022).

Although adaptive curriculum has increasingly gained attention in educational discourse, significant research gaps remain, particularly within the Indonesian context. Previous studies have predominantly focused on inclusive education policy, teacher readiness, or general implementation challenges rather than systematically examining adaptive curriculum practices in inclusive schools (Purbasari et al., 2022). Existing research also tends to emphasize isolated classroom experiences or single-case studies without providing broader synthesis regarding implementation models, adaptation strategies, and supporting factors. Consequently, there is still limited understanding of how adaptive curriculum is implemented across different educational settings and what forms of adaptation are most effective for supporting students with special needs.

This study offers several important novelties and contributions to the field of inclusive education. First, it places adaptive curriculum as the central focus of analysis rather than treating curriculum adaptation as a secondary issue within inclusive education discussions. Second, this study synthesizes findings related to curriculum modification techniques, including escalation, duplication, modification, substitution, and omission strategies used in inclusive schools. Third, the study bridges the gap between inclusive

education policy and classroom practice by examining how adaptive curriculum is operationalized in real educational contexts. Finally, this study contributes localized evidence regarding adaptive curriculum implementation in Indonesia, where research on this topic remains relatively limited compared to international contexts (Widyastuti & Wilujeng, 2023). Therefore, this study aims to systematically review the implementation of adaptive curriculum for students with special needs in inclusive schools during 2020–2025, identify dominant adaptation strategies, and analyze the challenges and supporting factors influencing implementation. The findings are expected to contribute theoretically to inclusive education discourse and practically to the development of teacher competence, curriculum policy, and equitable educational practices.

B. Method

This study employed a Systematic Literature Review (SLR) approach to examine the implementation of adaptive curricula for students with special needs in inclusive schools. The SLR method was used to systematically identify, evaluate, and synthesize findings from previous studies related to the research topic (Religiana & Utanto, 2017). Literature was collected from online academic databases, particularly Google Scholar, focusing on publications published between 2020 and 2025. The data collection process began with a keyword search using the phrase “adaptive curriculum implementation for students with special needs in inclusive schools,” which initially identified 100 relevant publications. After screening titles and abstracts, 40 articles were considered relevant, and following a more in-depth review based on predetermined inclusion criteria, 20 articles were selected for final analysis. The selected studies were systematically analyzed to identify key themes, implementation strategies, major findings, challenges, and research implications related to adaptive curriculum implementation in inclusive educational settings. The overall research flow is presented in Figure 1.

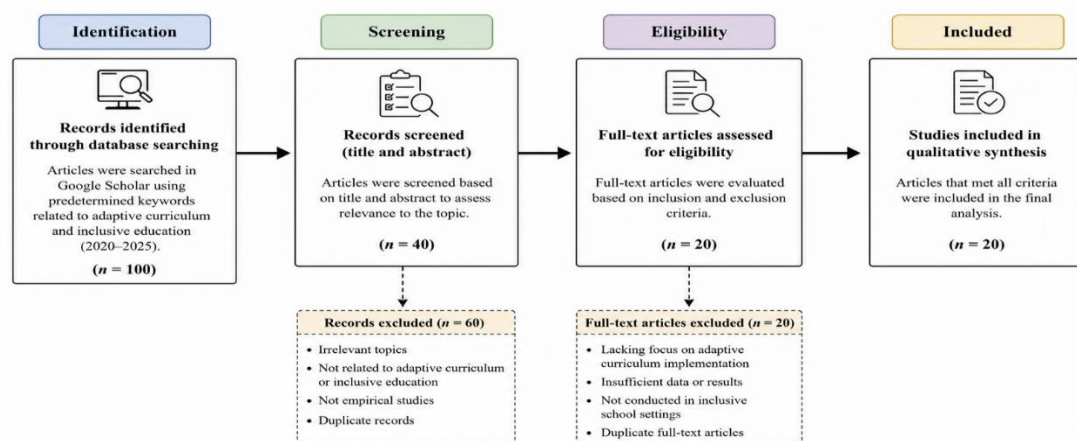


Figure 1. Research Flow

With this approach, the results of the literature review can provide a comprehensive picture of the implementation of an adaptive curriculum for students with special needs in inclusive schools and provide direction for future practice and research.

C. Result

The literature search process identified 100 publications related to adaptive curriculum implementation for students with special needs in inclusive schools. After screening the titles and abstracts, 40 articles were considered relevant. A further eligibility review based on the inclusion criteria resulted in 20 articles being selected for final synthesis and analysis.

Characteristics of the Reviewed Studies

The reviewed studies were published between 2020 and 2025 and predominantly employed qualitative descriptive and literature review approaches. Most studies focused on curriculum adaptation strategies, differentiated learning, inclusive learning management, and curriculum flexibility for students with special needs in inclusive schools. Table 1 presents the characteristics of the selected studies.

Table 1. Characteristics of Reviewed Studies

Aspect	Findings
Total reviewed articles	20 articles
Publication years	2020-2025
Dominant methods	Qualitative descriptive and literature review
Educational settings	Elementary school, junior high school, senior high school, and inclusive madrasah
Main focus	Adaptive curriculum, differentiated learning, inclusive management, curriculum modification
Main participants	Students with special needs, teachers, principals, and parents

The findings indicate increasing scholarly attention toward adaptive curriculum implementation in inclusive education, particularly regarding curriculum flexibility and differentiated instruction.

Forms of Adaptive Curriculum Implementation

The synthesis revealed that inclusive schools generally continue to use the national curriculum framework while implementing adaptation through accommodation and modification strategies. The most common adaptations involve changes in learning objectives, instructional methods, assessment systems, learning media, and time allocation according to students' individual characteristics and abilities.

Several studies identified the use of duplication, modification, substitution, and omission models as dominant curriculum adaptation strategies. In addition, differentiated

instruction and individualized learning programs were frequently implemented to support students with special needs. Some schools also integrated visual media, concrete learning tools, and technology-assisted instruction to strengthen learning accessibility.

Table 2. Dominant Adaptive Curriculum Strategies

Adaptive Strategy	Description of Implementation
Accommodation	Adjustment of assessment, time allocation, and learning environment
Modification	Simplification of indicators, materials, and learning objectives
Differentiation	Flexible instruction based on student learning needs
Duplication	Use of regular curriculum with additional support
Substitution	Replacement of difficult content with equivalent material
Omission	Removal of learning components unsuitable for student abilities
AI-based adaptive learning	Technology-assisted individualized learning support

The findings demonstrate that adaptive curriculum implementation emphasizes flexibility and responsiveness to learner diversity rather than rigid curriculum standardization.

Curriculum Components Commonly Adapted

The reviewed literature indicates that curriculum adaptation does not only occur in learning materials but also across broader instructional components. Teachers frequently adapt teaching strategies, assessments, media, and classroom interaction models to support student participation and achievement.

Table 3. Adapted Curriculum Components in Inclusive Schools

Curriculum Component	Forms of Adaptation
Learning objectives	Simplification and adjustment based on student ability
Learning materials	Modified and contextualized content
Teaching methods	Differentiated and individualized instruction
Learning media	Visual, tactile, and concrete media
Assessment	Alternative and flexible evaluation methods
Time allocation	Additional learning and assessment time
Classroom environment	Pull-out systems and flexible seating arrangements

The results suggest that adaptive curriculum implementation is multidimensional and requires adjustments across instructional planning, implementation, and evaluation processes.

Supporting and Inhibiting Factors

The implementation of adaptive curriculum is strongly influenced by collaboration among teachers, principals, parents, and educational specialists. Teacher competence,

school leadership, parental involvement, and technology integration were identified as the most important supporting factors. At the same time, major barriers include limited teacher training, inadequate infrastructure, weak parental support, budget constraints, differences in student abilities, and limited understanding of inclusion policies.

Table 4. Supporting and Inhibiting Factors in Adaptive Curriculum Implementation

Supporting Factors	Inhibiting Factors
Teacher competence	Limited teacher training
School leadership support	Inadequate infrastructure
Parental involvement	Weak parental support
Collaboration with specialists	Limited education budget
Technology integration	Differences in student abilities
Continuous curriculum evaluation	Limited understanding of inclusion policies

The synthesis of the 20 reviewed articles shows that adaptive curriculum in inclusive schools is consistently associated with personalized learning, flexible instruction, and improved participation of students with special needs. Across the reviewed studies, the curriculum adaptation process was repeatedly linked to accommodation, modification, differentiated learning, and individualized support, while several studies also reported positive impacts on academic achievement, cooperation, participation, and social-emotional development.

Table 5. Data Analysis Matrix of Articles Used in the Literature Review

No.	Author (Year)	Method	Key Finding
1	Sidik et al (2025)	Literature review	Adaptive curriculum increases engagement and academic success through personalized learning.
2	Natasha & Prasetyaningtyas (2022)	Qualitative descriptive	Evaluation was adapted through accommodation and modification; difficult questions were removed and alternative assessments were used.
3	Khoiruman et al (2023)	Qualitative descriptive	Curriculum adaptation in inclusive schools should adjust materials, methods, facilities, and other learning resources.
4	Khoir (2025)	Case study	Main barriers include limited resources, weak teacher training, low parental support, and inadequate infrastructure.
5	Jannah & Marwiyah (2020)	Qualitative descriptive	Adaptive curriculum models include duplication, modification, substitution, and omission.
6	Trisia & Meilana (2025)	Literature review	Differentiated curriculum offers a flexible, adaptive, student-centered solution in inclusive elementary schools.
7	Syachbana (2023)	Literature review	Adaptive curriculum aims to ensure equitable access, but implementation faces low teacher participation and limited support.
8	Aryanti & Fathoni (2025)	Qualitative descriptive	Accommodative learning improved academic, social, and emotional outcomes for students with special needs.

No.	Author (Year)	Method	Key Finding
9	Suryana et al (2024)	Qualitative descriptive	Schools aligned and modified curriculum, developed individual learning programs, and adjusted teaching evaluation.
10	Mustika et al (2025)	Case study	Curriculum was not fully responsive; obstacles included limited training, non-inclusive methods, and weak resource support.
11	Maulidin (2024)	Quasi-experiment	AI-based adaptive learning improved academic performance, engagement, and social interaction.
12	Fatmasari et al (2024)	Literature review	Inclusive education requires differentiation, collaboration, and attention to 21st-century demands.
13	Widoningrum et al (2025)	Qualitative descriptive	Flexible curriculum design needs individual assessment, adaptive strategies, tailored media, and ongoing mentoring.
14	Yaasmin (2024)	Literature review	Effective inclusive curriculum management depends on planning, organizing, implementation, evaluation, and collaboration.
15	Pasha et al (2023)	Qualitative descriptive	Curriculum adaptation improved student cooperation and participation through accommodations and modifications.
16	Salamah et al (2025)	Qualitative descriptive	Teachers adapted curriculum and strategies using concrete and visual media, but faced time and training constraints.
17	Fajra et al (2020)	Qualitative descriptive	Inclusive curriculum model was relevant and applicable, with core competencies reduced according to student ability.
18	Cahyaningtias et al (2025)	Qualitative descriptive	Inclusive science learning worked well, but lesson planning and policy understanding were still weak.
19	Ginting et al (2025)	Qualitative descriptive	There was a gap between policy and reality in admission, curriculum, assessment, teacher availability, and facilities.
20	Kurniawan (2025)	Case study	Inclusive curriculum strengthened tolerance, reduced stereotypes, and fostered harmonious social interaction.

The synthesis of the reviewed articles demonstrates that adaptive curriculum implementation in inclusive schools predominantly emphasizes flexibility, individualized instruction, and differentiated learning approaches. Most studies reported that curriculum adaptation was conducted through accommodation and modification strategies, including adjustments to learning objectives, teaching methods, assessment systems, and learning media according to students' individual abilities and needs.

In addition, the findings consistently highlight teacher competence, school leadership, parental involvement, and collaboration among stakeholders as important supporting factors for successful implementation. However, several studies also identified persistent barriers, such as limited teacher training, inadequate infrastructure, budget constraints, and weak understanding of inclusive education policies. Overall, the reviewed

literature indicates that adaptive curriculum plays a central role in promoting equitable participation and meaningful learning experiences for students with special needs in inclusive schools.

D. Discussion

The findings of this literature study indicate that adaptive curriculum implementation in inclusive schools is not merely a technical adjustment, but a structural response to the diverse learning needs of students with special needs. The results show that most inclusive schools still use the national curriculum framework while applying accommodation, modification, differentiation, duplication, substitution, and omission strategies to support student participation. This finding answers the first research objective concerning how adaptive curriculum is implemented in inclusive schools. The dominance of these strategies demonstrates that schools attempt to maintain curriculum standards while simultaneously creating flexibility for learners with different abilities and characteristics. This result supports the concept of inclusive pedagogy proposed by [Florian & Black-Hawkins \(2011\)](#), which emphasizes that inclusive learning should anticipate learner diversity rather than treat it as an exception. Similarly, [Tomlinson \(2017\)](#) argued that differentiated instruction is essential for ensuring equitable learning opportunities in diverse classrooms. Therefore, the reviewed studies collectively indicate that adaptive curriculum functions as the operational foundation of inclusive learning practices.

Another important finding is that curriculum adaptation occurs across multiple instructional components, including learning objectives, teaching materials, instructional methods, learning media, assessment systems, time allocation, and classroom management. This finding answers the second research objective regarding what curriculum components are commonly adapted in inclusive schools. The reviewed studies suggest that adaptive curriculum implementation is multidimensional because teachers are required to adjust not only the content being taught but also the way learning is delivered and evaluated. Such findings are closely aligned with the Universal Design for Learning (UDL) framework, which promotes flexibility in representation, engagement, and expression to ensure accessibility for all learners ([Roski et al., 2021](#)). In addition, [Mutaqien & Ratnasari \(2023\)](#) emphasized that inclusive curriculum implementation becomes more effective when instructional planning, learning activities, and assessments are designed according to students' individual needs. This indicates that adaptive curriculum is most successful when schools implement systemic instructional adjustments rather than isolated curriculum modifications.

The literature synthesis also reveals why adaptive curriculum is considered important in inclusive education. Several reviewed studies reported improvements in student engagement, participation, academic achievement, collaboration, and socio-emotional development after adaptive learning strategies were implemented. These findings suggest that adaptive curriculum not only helps students access learning but also supports meaningful participation and positive learning experiences. [Sidik et al \(2025\)](#)

found that personalized curriculum adaptation significantly improved the engagement and academic success of students with special needs. Similarly, Aryanti & Fathoni (2025) reported that accommodative learning approaches positively influenced students' academic performance as well as their social and emotional development. These findings reinforce the argument that inclusive education should not be measured solely by physical access to classrooms, but also by the quality of participation and learning outcomes experienced by students with special needs.

The reviewed studies further indicate that the success of adaptive curriculum implementation depends heavily on teacher competence, school leadership, parental involvement, collaboration with specialists, and technology integration. This finding answers the research objective concerning the supporting factors influencing adaptive curriculum implementation. Teacher competence emerged as one of the most dominant factors because teachers play a central role in identifying student needs, selecting appropriate instructional strategies, and conducting flexible assessments. Susilowati et al (2022) explained that inclusive education management requires collaboration among school leaders, teachers, and stakeholders to ensure effective implementation. Likewise, Purbasari et al (2022) emphasized that teacher readiness and institutional support are crucial for strengthening inclusive education practices. The results of this study therefore indicate that adaptive curriculum implementation cannot rely solely on individual teacher initiative, but requires systemic institutional support and collaborative educational management.

Despite its benefits, the reviewed studies consistently identified several barriers that limit the effectiveness of adaptive curriculum implementation. The most common obstacles include limited teacher training, inadequate infrastructure, weak parental support, limited educational budgets, and insufficient understanding of inclusion policies. These findings explain why many inclusive schools continue to face difficulties in implementing meaningful inclusion practices. Although inclusive education policies have been widely introduced, implementation often remains inconsistent at the classroom level. Hanifah et al (2022) similarly reported that students with special needs frequently experience learning difficulties because schools are not fully prepared to provide responsive learning environments. Internationally, Sharma et al (2016) also identified limited teacher preparation and inadequate school resources as major barriers to successful inclusive education implementation. Thus, the findings of this study suggest that the primary challenge of adaptive curriculum implementation lies not in policy availability, but in the uneven capacity of schools to operationalize inclusive principles in practice.

Another significant finding emerging from the reviewed literature is the increasing integration of differentiated learning, individualized learning programs, and technology-assisted instruction, including artificial intelligence (AI)-based adaptive learning. This trend indicates that adaptive curriculum implementation is evolving toward more personalized and technology-supported learning systems. Such developments are important because inclusive education in the 21st century requires not only accessibility, but also responsiveness to digital transformation and diverse learner profiles. Fatmasari et al (2024)

argued that inclusive education must respond to technological advancement and 21st-century skill demands through differentiated and collaborative learning approaches. Furthermore, Maulidin (2024) demonstrated that AI-based adaptive learning improved academic performance, engagement, and social interaction among students with special needs. These findings suggest that the future direction of adaptive curriculum development will increasingly involve the integration of flexible curriculum design, digital learning technologies, and individualized support systems.

Overall, the findings of this study demonstrate that adaptive curriculum implementation in inclusive schools is characterized by flexibility, differentiation, and responsiveness to learner diversity. The reviewed literature consistently shows that adaptive curriculum contributes positively to academic participation, learning accessibility, and socio-emotional development among students with special needs. At the same time, the findings also reveal that effective implementation depends on strong teacher competence, collaborative school management, supportive educational policies, and adequate learning resources. Therefore, this study reinforces the view that adaptive curriculum should be understood not as an additional educational adjustment, but as a fundamental principle for achieving equitable and meaningful inclusive education.

E. Implication

The findings of this study imply that adaptive curriculum implementation should be positioned as a fundamental component of inclusive education rather than merely a supplementary adjustment for students with special needs. The reviewed literature demonstrates that flexible curriculum design, differentiated instruction, individualized assessment, and technology integration contribute positively to improving student participation, accessibility, academic achievement, and socio-emotional development in inclusive classrooms. These findings indicate the need for policymakers and educational institutions to strengthen teacher competence through continuous professional training related to adaptive learning, inclusive pedagogy, and curriculum modification strategies. In addition, schools need to develop collaborative systems involving principals, parents, therapists, and special education professionals to support effective curriculum adaptation. The study also implies that future curriculum policies should provide greater flexibility for schools to implement differentiated and student-centered learning approaches aligned with the principles of inclusive education and Universal Design for Learning (UDL). Furthermore, the increasing use of technology-assisted adaptive learning suggests that digital innovation can become an important tool for strengthening equitable and responsive educational services for students with special needs in inclusive schools.

F. Limitation and Suggestion for Further Research

This study has several limitations that should be acknowledged. First, the study relied exclusively on secondary data derived from previously published journal articles,

which may not fully represent the diverse realities of adaptive curriculum implementation across inclusive schools in different regions and educational contexts. Second, the reviewed studies were limited to publications between 2020 and 2025 and were predominantly qualitative in nature, resulting in limited empirical evidence regarding the long-term effectiveness of adaptive curriculum practices on student learning outcomes. In addition, variations in research focus, participant characteristics, and educational settings among the selected articles may influence the generalizability of the findings. Therefore, the conclusions of this study should be interpreted within the scope and characteristics of the reviewed literature.

Based on these limitations, future research is recommended to conduct empirical investigations through classroom observations, experimental studies, or longitudinal research to measure the direct impact of adaptive curriculum implementation on students' academic achievement, participation, and socio-emotional development. Further studies are also encouraged to explore adaptive curriculum practices across different disability categories, educational levels, and cultural contexts to obtain a more comprehensive understanding of inclusive learning implementation. In addition, future researchers should examine the integration of digital technology, artificial intelligence, and Universal Design for Learning (UDL) principles in adaptive curriculum development, as these approaches have significant potential to strengthen personalized and equitable learning experiences in inclusive schools.

G. Conclusion

This study concludes that the implementation of adaptive curriculum in inclusive schools plays a significant role in creating equitable, flexible, and student-centered learning environments for students with special needs. The findings of the literature review reveal that inclusive schools generally continue to use the national curriculum framework while applying various adaptation strategies, including accommodation, modification, differentiation, duplication, substitution, and omission. Curriculum adaptation is implemented across multiple instructional components, such as learning objectives, teaching methods, assessment systems, learning media, classroom management, and time allocation, to ensure that learning activities align with students' individual abilities and needs. The reviewed studies consistently demonstrate that adaptive curriculum contributes positively to student participation, academic achievement, collaboration, and socio-emotional development in inclusive educational settings.

The study also highlights that successful adaptive curriculum implementation is strongly influenced by teacher competence, school leadership, parental involvement, collaboration with specialists, and the integration of technology-assisted learning. However, several challenges remain, including limited teacher training, inadequate infrastructure, weak institutional support, and limited understanding of inclusive education policies. Overall, the findings indicate that adaptive curriculum should not be viewed merely as a technical curriculum adjustment, but as a fundamental principle for achieving meaningful

and sustainable inclusive education. Therefore, strengthening professional development, institutional collaboration, and flexible curriculum policy is essential to support responsive educational services for students with special needs in inclusive schools.

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