

Inclusive Practices in Mathematics and English Language and their Effects on the Academic Achievement of Students with Disabilities: A Systematic Literature Review

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ABSTRACT This systematic literature review investigates the impact of inclusive educational practices in mathematics and English Language on the academic achievement of secondary school students with disabilities. The objectives of this study are to identify practices that promote academic achievement in the specified subjects, as well as their effects on academic success in those subjects for individuals with disabilities. Utilizing PRISMA standards, the study analyzed 23 peer-reviewed articles selected from an initial pool of 110, sourced from databases including Google Scholar, ERIC, and Dimensions. The findings revealed that inclusive practices in mathematics encompass differentiated instruction, technology integration (like GeoGebra), flexible assessments, collaborative learning, and manipulative use. In the English Language, they include co-teaching, assistive technologies, and individualized education plans. These practices also scaffold mathematics learning by enhancing understanding of vocabulary and communication skills for solving problems. Successful implementation relies on professional development, community involvement, and ongoing assessment. The study concludes that such inclusive methods improve problem-solving in mathematics and boost engagement, self-esteem, advocacy skills, and peer interaction, all of which promote collaborative learning. Ultimately, the study advocates for equitable learning environments in both mathematics and English Language to improve achievements for students with disabilities.

KEYWORDS *Mathematics, English Language, inclusive, achievement, and disabilities*

Introduction

In recent decades, inclusive education has gained prominence as a strategy to promote fairness and diversity in schools. It is defined as a teaching approach ensuring that all students, regardless of their abilities or learning needs, have equal access to education. Sahani and Patel (2023) characterize it as creating effective classrooms for all learners, including those with disabilities. Singh and Prajapati (2021) note that inclusive education accommodates diverse learning needs in regular classrooms. According to the United Nations Children's Fund (United Nations Children's Fund [UNICEF], 2017), it ensures

access to appropriate instruction and facilities for all learners. Inclusive practices integrate learners with various needs into mainstream education, aligning with global commitments like the United Nations (UN) Sustainable Development Goal 4, which advocates for inclusive and equitable quality education for all. The UN Convention on the Rights of Persons with Disabilities supports the right to inclusive education for learners with disabilities.

Inclusive education is a vital approach for closing educational gaps and ensuring equity for learners with disabilities. Rooted in social justice, it seeks to provide all students with access to meaningful learning in mainstream classes. This shift from segregation to inclusion

has been advanced by international conventions such as the Convention on the Rights of Persons with Disabilities (CRPD), which emphasizes the participation of individuals with disabilities in all areas of society, including education (United Nations [UN], 2006).

Research on inclusive practices highlights techniques to enhance learning for students with disabilities. According to Sambhav and Yu (2022), strategies for mathematics include clear modeling, immediate feedback, problem-solving techniques, manipulatives, and technology. An example is the George Polya problem-solving model, which guides students through understanding problems, developing strategies, executing plans, and reflecting on solutions, which can be aided by tools like GeoGebra. In English, differentiated instruction and co-teaching are emphasized, allowing varying reading levels for students while engaging with the same material. Challenges to implementing these inclusive methods include a lack of teacher training, resources, and negative attitudes.

Mathematics and the English Language are fundamental academic disciplines that have a substantial impact on students' overall educational progress and prospects. National Council of Teachers in Mathematics (NCTM, 2013) recommends that early childhood educators actively introduce mathematical ideas, procedures, and language through a range of suitable experiences and research-based teaching methodologies. Teachers should help students identify links between ideas in mathematics and other subjects, allowing them to expand their mathematical knowledge throughout the day and curriculum. They must encourage learners to speak, expressing their reasoning as they connect with significant mathematics in profound and persistent ways. A variety of hurdles, including cognitive, physical, and systemic problems, can make it difficult for students with disabilities to achieve proficiency in these disciplines. As a result, educators, policymakers, and academics must understand the consequences of inclusive practices on students' academic progress in these subjects.

Students with impairments' academic achievements in disciplines such as mathematics and the English language have sparked increased interest in educational studies. These courses are essential for cognitive growth, communication abilities, and professional preparedness. Despite the growing use of inclusive policies, gaps in academic achievement continue, emphasizing the need for a better understanding of the variables that influence these results. Al-zoubi and Younes (2015) present some factors that contribute to students' low academic achievement, such as using traditional methods instead of modern teaching methods

in the classroom, as well as poor relationships between teachers and students, which create a teaching environment devoid of respect, resulting in students' lack of acceptance of the learning process as a whole.

Disability encompasses conditions that limit a person's ability to perform tasks or engage with their environment similarly to others. In mathematics and English education, it refers to impairments that hinder a learner's ability to access and demonstrate knowledge in standard ways, requiring adjustments or alternative methods. This study conducts a systematic literature review to explore inclusive practices that enhance academic performance in these subjects for learners with disabilities.

Statement of the Problem

Despite progress in inclusive educational practices, students with disabilities still face barriers in achieving success in subjects like mathematics and English Language. Disparities in performance reveal systemic issues and inconsistent implementation of strategies across schools. Challenges such as inadequate teacher training, limited resources, and insufficient specialized support contribute to these issues. There's an urgent need to evaluate the long-term effects of inclusivity and to identify effective practices. This study aims to review existing literature to enhance educational methods and promote achievement for all learners, particularly those with disabilities.

Research Objectives

This study was guided by the following research objectives:

1. To investigate the practices that promote learners with disabilities' academic achievement in mathematics and the English Language.
2. To investigate how inclusive practices affect learners with disabilities' academic performance in mathematics and the English Language.

Research Questions

This article investigated the following research questions:

1. What are the practices that promote learners with disabilities' academic achievement in mathematics and the English Language?
2. How can inclusive practices affect learners with disabilities' academic performance in mathematics and the English Language?

Literature Review

Inclusive education aims to provide equal learning opportunities for students with impairments, which is fundamental to inclusive classroom practices that address diverse needs. This research review analyzes the effects of inclusive practices on the academic achievement in mathematics and English of students with disabilities identifying effective strategies and research gaps.

Inclusive Practices in Mathematics and English Language

Mathematics shares features with language, such as symbolic representation and structured communication, which are important for learning. Based on this, mathematics can be described as a type of language. Yadav (2017) defines mathematics as the study of assumptions, their properties, and applications. Mathematics is a field of study that frequently poses special obstacles for learners with disabilities, necessitating both conceptual comprehension and operational fluency. Several studies have looked into inclusive methods in mathematics classes and how they affect students with disabilities' academic ability.

English is an academic field that educates about the English language, its history, and the culture of English-speaking nations. Students learn to listen, speak, read, and write while also honing their communication, presentation, analytical, and problem-solving abilities. In the United States, English Language is a core component of K–12 education, with grade-specific standards addressing reading, writing, speaking, listening, and language (Common Core State Standards Initiative, 2010). As one of the instrumental subjects in school, English not only allows students to formulate and develop their communicative competencies in English, but it also helps to form and develop general competencies for living and working more effectively, learning other subjects well, and lifelong learning.

Globally, inclusive education is seen as a human rights requirement. The CRPD advocates for the inclusion of students with disabilities in mainstream educational settings (UN, 2006). Furthermore, Gordon (2013) asserts that inclusive education for all students is a moral human right. The study of Riga et al. (2016) further shows that Education for All (EFA) is widely recognized by international human rights law, and it is based on the generally held belief that education plays a crucial role in individual well-being as well as national development. According to Waddington and Toepke

(2014), inclusive education is both a requirement under international law and a way of meeting the extra-legal obligation to make education accessible to children with disabilities. Inclusive education is more than just an educational system; it is also a strategy and mindset that meets the learning requirements of all students and provides the most educational possibilities imaginable. Inclusive education prevents exclusion and encourages all students to participate in school settings and beyond. Research demonstrates that inclusive practices, such as differentiated instruction and co-teaching, increase the academic achievement of students with impairments in mathematics and English Language. For example, Sambhav and Yu (2022) found that inclusive practices such as the use of technology, peer teaching, differentiated instruction, immediate feedback, and the use of manipulatives can improve arithmetic and English language outcomes. However, issues such as limited resources and cultural attitudes regarding disability continue to hamper full adoption.

Nations such as the United States and Australia have built robust legislative frameworks, such as the Individuals with Disabilities Education Act (IDEA) and the Disability Standards for Education 2005 (*Individuals with Disabilities Education Act, 2004; Disability Standards for Education* [Cth]). Studies suggest that learners with impairments do significantly better in school when inclusive policies are well-funded and teachers get professional development. For example, Lei et al. (2020) found that kinesthetic and linguistic scaffolds can assist students in excelling in mathematics and the English Language. Nonetheless, policy implementation differs across schools and districts, emphasizing the need for more uniform and equitable approaches.

In endeavoring to understand ways for students to improve their mathematics and English skills, other significant findings from the US focus on technology and teaching style. Ok et al. (2020) evaluated the impact of computer-assisted education on mathematics performance in students with learning disabilities and discovered that computer-assisted instruction can help students flourish in mathematics. King-Sears et al. (2021) found that co-teaching can increase academic progress for learners with disabilities.

Xin et al. (2020) indicate that inclusive strategies, including assistive technology and peer tutoring, can enhance learning outcomes in math and English. However, in developing regions like Sub-Saharan Africa and Southeast Asia, promoting inclusive education faces structural challenges such as limited funding, insufficient teacher training, and poor infrastructure. While

initiatives like the "Education for All" campaign (Education for All, n.d.) have made progress in providing education, regardless of economic standing or personal background, disparities in access to necessary resources for students with disabilities remain between rural and urban areas, and continue to pose significant issues.

In Ghana, Gidisu et al. (2026) examined the impact of assistive technologies on inclusive education for visually impaired students at colleges. The study highlights the connection between access to these technologies and equitable educational practices but acknowledges significant limitations, notably its small sample size of 20 students from only three institutions, affecting the generalizability of the findings. To address these limitations, the researchers conducted a systematic literature review of 23 relevant publications on assistive technology and inclusion, covering various educational landscapes. The findings aim to inform strategies for improving educational outcomes in mathematics and English Language for students with disabilities.

Effects of Inclusive Practices in Mathematics and English Learning

Inclusive education aims to ensure equitable learning opportunities for all students, regardless of their aptitudes or backgrounds (Ainscow, 2020). The methods employed in teaching English and mathematics have garnered significant attention due to their impact on student success, engagement, and social development. This literature overview explores research on inclusive practices from diverse perspectives, highlighting both their benefits and challenges.

Policies like the Sustainable Development Goal (SDG 4; UN, 2015) and the CRPD (UN, 2006) have strengthened the recognition of inclusive education as a basic right on a global scale (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2020). The advantages and drawbacks of inclusive teaching methods in mathematics and English classes have been studied in a number of nations.

According to research, inclusive pedagogical approaches like differentiated instruction and Universal Design for Learning (UDL) improve students' mathematical comprehension and problem-solving skills (Florian & Black-Hawkins, 2011). In Australia, Finkelstein et al. (2021) discovered that collaboration and teamwork support improved learning outcomes for students with disabilities in mathematics classrooms.

Similarly, inclusive techniques in English education, such as collaborative learning and multimodal instruction, have been found to improve reading abilities

across a wide range of students. According to research from the United States, inclusive classrooms boost language learning for learners with Special Educational Needs (SEN) and English as a Second Language (ESL) learners. Additionally, a study from Cameroon and Canada found that assistive technologies and peer-assisted learning have been shown to improve reading and writing skills (Yonge, 2022).

Adaptive curricula and assistive technology have been shown to improve the performance of students with disabilities in inclusive mathematics classrooms in the United States (McLeskey et al., 2017). Similarly, phonics-based interventions in inclusive English instruction are beneficial for dyslexic students (Fletcher et al., 2021). In the United Kingdom, inclusive education is strongly promoted through frameworks like the Special Educational Needs and Disability Code of Practice. Molbaek (2018) found that inclusive teaching strategies, such as metacognitive training and collaborative learning, benefited both mainstream and SEN students in mathematics and English classes.

The emphasis on fairness and inclusion in the Canadian education system has a positive impact on students' learning of English and mathematics. According to research by Choi et al. (2017), learners with a range of learning difficulties showed improvements in their literacy and mathematics thinking when they received tailored instruction in inclusive classrooms.

Through equity-promoting policies, Latin American nations have advanced inclusive education. In Brazil, bilingual education policies address several distinct linguistic contexts, including education for Indigenous and deaf students, although these contexts continue to require more comprehensive policy guidance (de Oliveira & Höfling, 2021).

In Asia, inclusive education is included in national education strategies, especially in nations like India and Japan. According to research conducted in India by Anis and Khan (2023), inclusive English courses that included multimodal resources, such as technology, visual aids, and creative activities, greatly improved learners' retention and understanding.

In South Africa, Walton and Engelbrecht (2022) found that inclusive strategies, like flexible grouping and individualized instruction, increased student engagement in mathematics, but they also pointed out that large class sizes impede effective implementation. Ewa (2020) explains that challenges on inclusive education in Sub-Saharan Africa are due to social order at the local level, and discusses the efforts to increase enrollment, attendance,

engagement, and completion. Although focused on primary-aged students, findings showed that educators in the region appear to be struggling with the concept of inclusion, which is having an impact on the provision of education, emphasizing the need for inclusionary practices to not only be available and practiced, but embraced by the society and educators themselves. In Ghana, inclusive education is becoming more and more important, but infrastructure constraints and teacher readiness continue to be issues (Djietror et al., 2011).

Theoretical Framework

The study integrates three core theories to interpret these findings. These include

- i. A rights-based framework for inclusive education establishes equitable access to education as a fundamental right and requires that students with disabilities not be excluded from general education on the basis of disability (UN, 2006).
- ii. Universal Design for Learning (UDL) provides a framework for designing flexible learning environments through multiple means of engagement, representation, and action and expression (CAST, 2024).
- iii. Vygotsky's Social Constructivist Theory emphasizes the role of scaffolding and social interaction (Zone of Proximal Development) in overcoming learning gaps (Vygotsky, 1978).

Justification for a Dual-Subject Focus

Adopting a dual-subject focus on mathematics and English Language enhances this review's contribution to the Journal of Mathematics Education at Teachers College by emphasizing the interdisciplinary links between these fields. The approach highlights how language skills support mathematical understanding, identifying the challenges faced by students, especially those with disabilities. It also provides a broader lens for examining inclusive practices, revealing both subject-specific adaptations and common pedagogical strategies across disciplines. This dual focus is crucial for teacher education, demonstrating how integrated methods can meet diverse student needs. Additionally, it addresses a gap in existing literature by offering cross-disciplinary insights, ultimately aligning with JMETC's goals to situate mathematical learning within broader social and linguistic contexts, thus enriching educational practices and outcomes.

Methodology

This study employed a Systematic Literature Review (SLR) approach to examine inclusive practices and their effects on the academic achievement in mathematics and English Language of students with disabilities. The SLR method provided a rigorous, transparent, and reproducible process for identifying, analyzing, and synthesizing relevant research evidence (Shaheen et al., 2023).

This review focused on learners with disabilities, primarily at the secondary school level. From an initial pool of 110 studies, 23 peer-reviewed articles were purposively selected based on their relevance, methodological quality, and contribution to understanding inclusive practices and academic achievement. The selected studies represented different disability categories, educational contexts, and geographical settings.

Relevant literature was obtained through systematic searches in databases such as ERIC (Education Resources Information Center), Dimensions, and Google Scholar. Search terms combined concepts related to inclusive education, students with disabilities, academic achievement, mathematics, and English Language using Boolean operators. Inclusion criteria limited studies to peer-reviewed, English-language articles published from 2011 onward, while studies unrelated to inclusive practices or lacking accessible full texts were excluded.

The study followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 guidelines for study selection, involving identification, screening, eligibility, and inclusion stages (Page et al., 2021). Data from the selected studies were extracted using a structured coding process that captured study characteristics, participant details, subject focus, inclusive practices, and academic outcomes. Both deductive and inductive coding approaches were used to identify key themes and emerging patterns.

To ensure reliability, the methodological quality and risk of bias of the included studies were assessed using established appraisal criteria such as research design, sample adequacy, validity, transparency, and bias control. Data analysis was conducted through thematic synthesis and comparative analysis, with findings summarized in a PRISMA Evidence Table (Table 1). The analysis aimed to identify inclusive practices that enhance the achievement in mathematics and English Language of students with disabilities.

Results and Discussions

The analysis of literature highlights significant benefits of inclusive practices in mathematics and English Language on the academic progress of students with disabilities. The findings were structured under specific subheadings, including the Study Selection process following PRISMA guidelines. A total of 110 records were initially identified, with 20 duplicates removed, leaving 90 for screening. This process resulted in the exclusion of 50 irrelevant records, ultimately leading to the inclusion of 40 studies that met the criteria for the systematic review. Figure 1 presents the PRISMA flow diagram of the study selection process. It consists of four (4) steps in the order from steps 1 to 4.

Characteristics of Included Studies (PRISMA Evidence Table)

Table 1 presents the characteristics of the included studies. It highlights the author's year, country, study design, study focus, inclusive practices, key findings, and limitations.

Table 1
PRISMA Evidence Table

Author, Year	Country/ Context	Study Design	Focus	Inclusive Practice(s)	Key Outcomes on Achievement	Limitations / Risk of Bias
Yadav (2017)	General	Conceptual	Mathematics	Theoretical framing	Defines mathematics as a structured language	No empirical data
Ministry of Education and Teaching (2018)	General	Descriptive	Mathematics & English	Curriculum perspective	Highlights the importance of English competencies	No inclusion focus
Gordon (2013)	Global	Conceptual	General	Rights-based inclusion	Positions inclusion as a human right	No empirical evidence
Riga et al. (2016)	Global	Policy review	General	EFA framework	Education supports development outcomes	Broad, not subject-specific
Waddington & Toepke (2014)	Global	Legal analysis	General	Differentiated instruction	Inclusion as a legal obligation	No classroom data
Sambhav and Yu (2022)	Global	Empirical (mixed/ quantitative)	Mathematics & English	Technology, peer teaching, and manipulatives	Improved Math & English outcomes	Resource constraints
Lei et al. (2020)	USA/ Australia	Empirical	Mathematics & English	Kinesthetic & linguistic scaffolds	Improved performance in both subjects	Policy variability
Ok et al. (2020)	Not specified	Experimental	Mathematics	Computer-assisted instruction	Improved math performance	Only Math-focused
King-Sears et al. (2021)	Not specified	Empirical	Mathematics & English	Co-teaching	Increased academic progress	Limited subject comparison
Xin et al. (2020)	China	Empirical	Mathematics & English	Assistive technology, peer tutoring	Improved learning outcomes	Rural–urban disparities

Figure 1
PRISMA Flow Diagram for an SLR

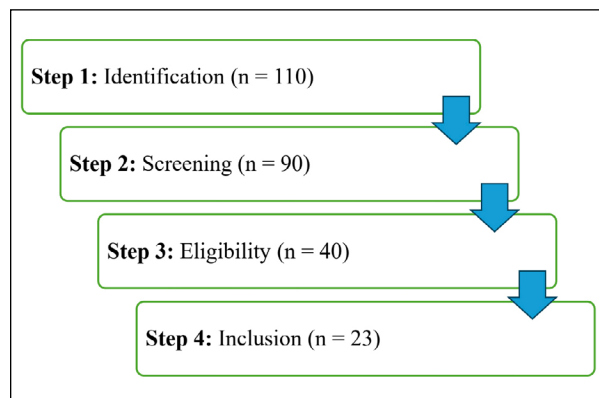


Table 1 outlines PRISMA evidence on inclusive practices that enhance academic performance in mathematics and English Language for students with disabilities. Key strategies identified include differentiated instruction, co-teaching, assistive technology, peer teaching, immediate feedback, and manipulatives.

Table 1
PRISMA Evidence Table

Author, Year	Country/ Context	Study Design	Focus	Inclusive Practice(s)	Key Outcomes on Achievement	Limitations / Risk of Bias
Gidisu et al. (2026)	Ghana	Mixed-methods	Mathematics & English	Assistive technology	Enhanced equitable learning	Small sample size
Florian & Black-Hawkins (2011)	Global	Empirical	Mathematics	UDL	Improved conceptual understanding	Limited longitudinal data
Finkelstein et al. (2021)	Australia	Empirical	Mathematics	Collaboration, teamwork	Improved learning outcomes	Context-specific
Yonge (2022)	Cameroon/ Canada	Comparative	English	Assistive technology, peer learning	Improved literacy skills	Limited generalisation
McLeskey et al. (2017)	USA	Empirical	Mathematics	Adaptive curriculum, assistive technology	Improved performance	Implementation challenges
Fletcher et al. (2021)	Not specified	Experimental	English	Phonics-based instruction	Improved reading skills	Focus on one disability
Molbaek (2018)	UK	Empirical	Mathematics & English	Metacognition, collaboration	Improved outcomes in both subjects	Scalability unclear
Choi et al. (2017)	Canada	Empirical	Mathematics & English	Tailored instruction	Improved literacy & math thinking	Context-specific
de Oliveira & Höfling (2021)	Brazil	Empirical	English	Multilingual inclusion	Improved literacy & integration	Limited Math focus
Anis and Khan (2023)	India	Empirical	English	Multimodal instruction	Improved retention & understanding	Technology dependence
Walton & Engelbrecht (2022)	South Africa	Empirical	Mathematics	Flexible grouping, individualisation	Increased engagement	Large class sizes
Ewa (2020)	Sub-Saharan Africa	Review	General	Inclusion strategies	Implementation challenges	Not subject-specific
Djietror et al., 2011	Ghana	Descriptive	General	Policy implementation	Growing inclusion awareness	Infrastructure issues

Thematic Synthesis

This study examines practices that enhance academic achievement in mathematics and English for learners with disabilities. It highlights inclusive instructional practices, such as differentiated instruction, cooperative learning, assistive technology, and the use of manipulatives, which positively influence student performance across both subjects. Evidence indicates that these approaches improve conceptual understanding and problem-solving in mathematics while also strengthening reading, vocabulary, and writing skills in English. Importantly, the literacy and communication skills developed through inclusive English Language instruction provide a critical foundation for mathematics learning. Improved reading comprehension and vocabulary enable learners to better interpret mathematical

terminology, understand word problems, follow complex instructions, and communicate their mathematical reasoning effectively. Similarly, writing and discussion activities in English support the development of logical thinking and explanation skills that are essential for mathematical problem-solving.

The findings suggest that gains in English Language learning can facilitate access to mathematical concepts and contribute to improved mathematics achievement, particularly for learners with disabilities who may experience challenges with language-intensive mathematical tasks. These results align with the work of Sambhav and Yu (2022), Xin et al. (2020), and Ok et al. (2020), who advocate differentiated instruction and co-teaching models to address diverse learning needs. Additionally, Universal Design for Learning (UDL) is recommended to ensure

accessibility and provide multiple means of engagement, representation, and expression. The effective use of technology and structured peer collaboration further supports student engagement by enhancing both literacy and mathematical understanding. Ongoing professional development for teachers and active parental involvement remain essential for reinforcing these inclusive practices. Regular assessment and instructional adjustments based on learner feedback are also necessary to maximize the transfer of literacy gains into improved mathematical learning outcomes and overall academic success.

Effects of Inclusive Practices in Mathematics and English

Inclusive practices in mathematics and English, such as individualized instruction and Universal Design for Learning (UDL), can significantly enhance academic performance for learners with disabilities. These approaches promote tailored learning, increased engagement, and equitable opportunities, improving skills in arithmetic, problem-solving, reading, and writing. Importantly, the benefits observed in English Language learning extend beyond literacy outcomes and serve as critical scaffolds for mathematics achievement. Through inclusive English instruction, learners develop reading comprehension, vocabulary, communication, and critical-thinking skills that are essential for interpreting mathematical terminology, understanding word problems, following instructions, and articulating mathematical reasoning. Consequently, improvements in literacy can facilitate greater access to mathematical concepts and enhance learners' ability to engage in problem-solving activities. The findings therefore suggest that successful inclusive practices in English Language education can indirectly strengthen mathematics learning by providing the linguistic and cognitive foundations required for mathematical understanding. These results underscore the positive implications of inclusive strategies on both academic achievement and social development, aligning with earlier research by Anis and Khan (2023) and related studies.

Comparative Analysis

The findings from this study indicate that inclusive practices in mathematics and English Language encompass differentiated instruction, co-teaching models, assistive technologies, peer support, individualized education plans, and multimodal instruction. However, inclusive practices in mathematics further emphasize technology integration (such as GeoGebra and computer-assisted

instruction), flexible assessment methods, collaborative learning, and the use of manipulatives and visual aids. Importantly, these English Language strategies enhance mathematics learning by helping students understand mathematical vocabulary, interpret word problems, and communicate their reasoning and solutions effectively.

Additionally, the success of these inclusive practices is bolstered by professional development, parental and community involvement, and consistent monitoring and assessment. These strategies lead to improved problem-solving in mathematics as well as advancements in reading, writing, and vocabulary knowledge, thereby fostering student engagement in mathematical tasks. Other positive outcomes associated with these practices include increased engagement, heightened self-esteem, enhanced self-advocacy skills, and better peer interactions, all of which promote participation in collaborative mathematical learning experiences. Inclusive practices significantly enhance mathematics achievement for students with disabilities, with English Language supports acting as essential tools that facilitate access to mathematical concepts, reasoning, and communication. The study advocates for educators to foster more equitable learning environments for students in mathematics and the English Language.

Inclusive Practices Model for Mathematics and English Language

Figure 2 outlines the Inclusive Practices Model for mathematics and English Language, comprising components such as Rights-Based Foundation, Inclusive Pedagogy, Instructional Strategies, Support Mechanisms, Contextual Enablers, and Improved Achievements.

The Inclusive Practices Model for mathematics and English Language advocates for a rights-based approach to education, ensuring fair access and participation for all learners, particularly those with disabilities. It promotes learner-centered techniques such as differentiated instruction, UDL, and scaffolding, tailored with subject-specific methods like manipulatives and digital tools for mathematics, phonics, and collaborative learning for English. Inclusion is further supported through assistive technology, peer assistance, and an adapted curriculum. The model's success relies on enabling factors like teacher training and resources, while challenges such as limited resources and large class sizes may hinder its full implementation. When effectively applied, it enhances academic success, engagement, and equality.

Limitations/Gaps

This study faced several limitations, including a scarcity of randomized controlled trials, the absence of longitudinal impact studies, low representation of Africans, insufficient resources, few studies integrating both mathematics and English, and weak reporting on bias risk and methodological rigor.

Conclusions

The comprehensive study of inclusive practices and their effects on the academic success in mathematics and English Language of students with disabilities emphasizes the crucial relevance of building equal educational settings. The data show that:

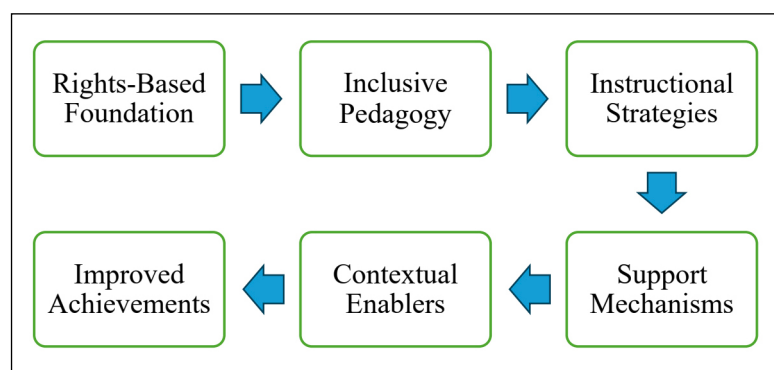
- i. Differentiated instruction, universal design for learning, and the use of assistive technology have all been found to increase engagement, individualized learning, and improved learning outcome.
- ii. When inclusive policies are properly implemented, students with impairments do much better academically and socially.

Recommendations

Based on a systematic literature review, recommendations for improving inclusive practices for students with disabilities in mathematics and English Language include:

- i. Ensure heads of high schools provide adequate resources, such as assistive technologies and suitable learning materials.
- ii. Promote comprehensive teacher training programs focused on inclusive education and subject-specific strategies.
- iii. Further studies should investigate the impact of inclusive practices in diverse educational settings.
- iv. Explore the role of assistive technology, such as screen readers and speech-to-text software, in students' academic performance.

Figure 2
Inclusive Practices Model



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