EFFECTIVENESS OF SPECIAL EDUCATION PROGRAMMES IN PRIMARY SCHOOLS: AN ANALYSIS OF THE LITERATURE

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Abstract
The effectiveness of special education programmes in primary schools, with a focus on the impact on the academic and social-emotional development of students with special needs. This study used a literature review method. The results showed that special education programs using inclusive approaches and personalised teaching contributed significantly to improved academic performance and student engagement. Effective collaboration between teachers, special education staff, parents and other professionals was also identified as an important factor in the success of the programmes. Nonetheless, the study highlighted implementation challenges, such as limited resources and the need for continuous professional development for educators. The conclusion of this analysis emphasises the need for increased investment and support in special education to overcome these challenges and ensure the achievement of optimal learning outcomes for all students.
Keywords: Effectiveness, Programme, Special Education, Primary School.

Introduction

In the current era, inclusive education has become a major focus in the education system in various countries, including Indonesia. Inclusive education is an approach in the education system that aims to ensure that all children, regardless of their abilities, backgrounds or special needs, have equal access to and full participation in all aspects of school life (Sitopu et al., 2024) ; (Guna et al., 2024) ; (Fawait et al., 2024) . It involves providing the support and adaptations necessary for every student to learn and develop to their full potential in an environment that respects diversity and promotes the values of social inclusion. Inclusive education emphasises the importance of removing physical, curricular and social barriers that may hinder student participation, and encourages cooperation between teachers, students and communities to create a more welcoming and supportive learning environment (Iksal et al., 2024) ; (Syakhrani & Aslan, 2024) ; (Judijanto et al., 2024) .

Inclusive education is important because it plays a role in creating a more just and equal society, where every individual is valued and given equal opportunities to learn and develop. By creating an inclusive learning environment, students with

different abilities and backgrounds can learn together, which in turn helps reduce stigma and discrimination against people with disabilities or those with special needs (Sangsurin et al., 2020) . This promotes the development of empathy, tolerance and appreciation of differences among students. In addition, inclusive education also ensures that the skills and potential of each student can be identified and optimally developed, increasing their chances of future success and contributing positively to society (Mulima et al., 2024) .

The increasing awareness of the importance of education for every individual, regardless of ability and need, has led to the development of special education programmes in primary schools. These programmes are designed to meet the educational needs of students with different types of disabilities, including learning disabilities, developmental delays and autism spectrum disorders. Although many initiatives have been implemented, the implementation of special education programmes is often faced with various challenges (Azizah, 2022) . Some research indicates that students with special needs still experience difficulties in reaching their full potential, whether in academic, social or emotional aspects. This raises questions about how effective current special education programmes are (Gedfie et al., 2021) .

On the other hand, the diversity of implementation of special education programmes in primary schools, such as inclusive and segregative models, demands in-depth analysis to understand the effectiveness of each method. There are also significant differences in the implementation of these programmes in developed and developing countries, indicating the need for adaptation and continuous development based on local contexts (Patrick & Umeodum ., 2024)

Therefore, this study aims to examine the effectiveness of special education programmes in primary schools through a literature analysis. By analysing the existing literature, it is hoped that a clearer picture of the effectiveness of the programme and the factors that support and hinder its success can be obtained. The results of this study are expected to contribute to the development of special education, so that it can provide more optimal educational services for students with special needs.

Research Methods

The study in this research uses the literature method. The literature research method is an approach that involves collecting, analysing, and synthesising information from various text sources to gain an in-depth understanding of a particular topic. Through critical review of books, scientific articles, reports, and other documents, researchers can identify existing trends, gaps, and perspectives in a particular field of study (Firman ;, 2018) (Suyitno, 2021) . This method allows researchers to contextualise new research within existing theoretical frameworks and assess the relevance and validity of previous findings. In addition, literature research can serve as a foundation

for hypothesis development, new theories, or even practical recommendations, while ensuring engagement with reliable and accurate sources (Jelahut ., 2022)

Results and Discussion
Effectiveness of Special Education Programmes Based on the Literature

Special Education programmes play a crucial role in meeting the educational needs of children with developmental disabilities, physical limitations or other learning challenges. According to the literature, the effectiveness of these programmes can be measured through various aspects, such as the impact on students' academic, social and emotional skills. Research shows that with individualised learning strategies focused on specific needs, students in these programmes can experience significant improvements in basic skills such as reading, writing and mathematics, which in turn increases their confidence in academic settings (Mahmud et al., 2023) .

One of the key factors in the effectiveness of special education programmes is teacher quality and training. The literature confirms the importance of special educators trained in adaptive learning techniques and inclusive approaches to teaching students with special needs. Teachers who have adequate qualifications and experience are more likely to be able to adapt teaching methods to maximise their students' learning potential. Teacher professionalism and skills also have a major influence on the ability to manage heterogeneous classes and deliver inclusive learning (Florabelle, 2023) .

The integration of technology in special education programmes is also mentioned in the literature as an element that enhances teaching effectiveness. Learning aids such as interactive educational software and the use of adaptive devices can be customised to cover students' individual learning needs, provide more varied alternatives in the delivery of material, and increase student engagement. The adoption of appropriate technology can facilitate better communication and understanding between students and teachers, as well as between students and their peers (Boutskou ., 2023)

Besides academics, the literature also highlights the importance of a holistic approach that includes emotional and social support in special education programmes. Comprehensive interventions focus not only on academic achievement but also on developing life skills, emotional adjustment and healthy social interactions. Psychological support and behavioural coaching are integrated into these programs to help students deal with the emotional and social challenges they often experience, thus improving their overall quality of life and preparation for future independence (Raish & Carr-Chellman, 2023) .

Overall, based on the literature, the effectiveness of special education programmes largely depends on the proper implementation of various components such as adapted curriculum, competent teachers, integrated technology, and social and emotional support. Sustainability and regular evaluation of the programme are also

necessary to ensure that the educational objectives are achieved and that each student benefits the most from the programme. With the right approach, special education programmes can contribute to opening up greater opportunities for students with special needs to participate fully in society and reach their full potential.

Supporting and inhibiting factors for programme effectiveness

The effectiveness of special education programmes is strongly influenced by various supporting and inhibiting factors. A key enabler is the presence of qualified and well-trained teachers. Teachers who have qualifications in special education and experience in working with students with special needs can make a big difference in achieving optimal outcomes (Yoneda, 2020) . In addition, ongoing training for teachers also helps them to stay up-to-date with the latest methods and strategies in special education. Competent teachers are better able to provide adaptive and inclusive teaching, which is essential to accommodate the various needs of students (Griggs, 2021) .

Technology also plays an important role in supporting the effectiveness of special education programmes. The use of learning aids such as customised educational software, mobile applications and adaptive devices can assist in the delivery of material in a more effective and engaging manner. These technologies allow for a more individualised delivery of education, which can be tailored to each student's pace and way of learning. In addition to technological support, adequate school infrastructure, including classrooms that are friendly to students with physical limitations, also supports the creation of an optimal learning environment (Brink et al., 2024) .

Support from school administration and education policy is also an essential enabler. Proactive leadership and inclusive policies on the part of schools and government can create a conducive framework for the implementation of special education programmes. Adequate funding for this area of special education is important to ensure sufficient resources are available, including the provision of learning aids, physical facilities and teacher training programmes (Musa & Mbeya, 2022).

However, there are also some inhibiting factors that can reduce the effectiveness of special education programmes. One of the main barriers is the stigma and discrimination that may still occur in the school and community environment. This can affect students' self-confidence and inhibit their full participation in teaching and learning activities. Awareness and education of the whole school community about the importance of inclusion and acceptance of special needs is essential to overcome these barriers (Arango, 2024) .

In addition, limited funding is often a significant barrier. Budget reductions and insufficient funding for special education programmes can lead to an inability to provide the necessary resources, such as technological devices, facilities and training for teachers. Strong and stable financial support is necessary for the continuity and success

of these education programmes. By addressing these inhibiting factors, a special education programme can become more effective in achieving its goal of educating and developing the full potential of students with special needs (Azizah, 2022)

Thus, the effectiveness of special education programmes depends on various enabling factors such as teacher quality, technology, administrative support and inclusive policies. However, there are also many inhibiting factors to consider, such as stigma, limited funding and inflexible curricula. Collaboration between teachers, parents and experts as well as continuous evaluation are key to overcoming barriers and improving programme success. With a holistic and inclusive approach, special education programmes can have a significant impact in developing the potential of students with special needs.

Comparison of Special Education Programmes in Different Countries

Special education programmes in different countries have a variety of approaches that are tailored to each country's social, cultural and policy context. For example, in the United States, special education programmes are highly structured and supported by federal laws such as the Individuals with Disabilities Education Act (IDEA). IDEA guarantees that every child with special needs has the right to a free, appropriate public education. The Individualised Education Program (IEP) is a key component of the IDEA, which involves a tailored education plan for each student based on an assessment of their individual needs (Obioma, 2023).

In Finland, the inclusive education system is very well implemented. Finland believes that every child deserves an equal education, regardless of their abilities. The focus on inclusion means that students with special needs are taught alongside regular students in the same classroom, with additional support as needed, such as teacher assistants and assistive technology. Teachers in Finland are specially trained to deal with the needs of diverse students, and a continuous evaluation system is used to monitor their progress (Johnston & Ksoll ., 2022)

In Japan, special education programmes are more segregation-oriented, with children with special needs often placed in special schools or special classes within mainstream schools. Currently, Japan is transitioning towards a more inclusive model, but cultural and infrastructural challenges remain. Nonetheless, special schools in Japan focus heavily on life skills and work preparation to ensure that students can function independently in society after graduation (Worrell et al., 2021).

Australia has a unique approach where a combination of inclusion and segregation is applied depending on the individual needs of students. Some students with special needs are placed in mainstream schools with additional support, while others attend special schools. National policy frameworks, such as the National Disability Strategy, provide guidance and support in the development of special

education programs that ensure equitable access to education for all students (Ahmed, 2024).

In Indonesia, special education programmes are still developing. The Indonesian government has developed various policies to support inclusive education, such as the Minister of National Education's regulation on inclusive education and efforts to improve teachers' capacity through training. Nonetheless, challenges such as lack of resources, social stigma and inadequate infrastructure still impact the effectiveness of special education implementation. However, with ongoing support from various parties, inclusive education in Indonesia is showing a positive trend (Lee et al., 2022).

In Canada, special education programmes vary greatly as each province and territory has the power to make their own policies regarding education. In general, Canada adopts an inclusive approach, which means that students with special needs are usually placed in mainstream schools with various forms of additional support, such as team-teaching of teachers, educational assistants, as well as the use of assistive technology. There is also a large focus on collaboration between schools, families and communities to ensure that the needs of each student are well met (Dlamini, 2024).

In the UK, legislation such as the Children and Families Act 2014 governs special education and provides guidance on the support students with special needs and disabilities (SEND) should receive. Every eligible student gets an Education, Health and Care Plan (EHCP), which is an official document detailing their educational, health and welfare needs and the support required. Most schools in the UK adopt an inclusive approach, although there are also specialised schools that cater for the needs of specific students (Olid-Luque et al., 2024).

As such, special education programmes in different countries show wide variations in approach and implementation, influenced by government policies, community culture and available resources. Countries such as the United States and Finland have demonstrated success through inclusion models and strong support structures. While other countries, such as Japan and Indonesia, continue to optimise their systems despite challenges. Nonetheless, the same overarching goal remains to provide quality and equitable education for all students, including those with special needs. Each country can learn from other countries' best practices to strengthen and enrich their special education systems, with a firm focus on inclusion, individualised support and multi-stakeholder collaboration.

Conclusion

The effectiveness of special education programmes in primary schools shows that these programmes generally have a positive impact on the academic and social-emotional development of students with special needs. The studies reviewed highlight that inclusive approaches that integrate students into regular classes, while providing appropriate additional support, tend to improve student engagement and academic

performance. Personalised teaching and the use of assistive technology have also been shown to improve learning outcomes for students with special needs.

In addition, collaboration between teachers, special education staff, parents and other professionals proved crucial to the success of these programmes. Effective communication and coordination ensure that students' individual needs are properly identified and met. Continuous training and professional development for teachers was also mentioned as an important factor that enhances their capacity to deliver inclusive and effective education.

Despite the positive results, the study also highlighted the challenges faced in implementing special education programmes. These include limited resources, high workloads for teachers and lack of adequate professional development. The study therefore recommends increased investment in special education, provision of adequate resources and training programmes for teachers and support staff to ensure that all students receive a quality and equitable education.

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