

Inclusive Learning For Visually Impaired Children At A Modern Elementary School

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Abstract. This study explores the implementation of inclusive education for visually impaired children in modern elementary schools. The primary objective is to understand the strategies and challenges in providing an adaptive learning environment for visually impaired students. A literature review method was employed, gathering data from various relevant sources. Key findings show significant progress in inclusive education, with teachers demonstrating high levels of commitment to delivering quality education despite facing challenges such as limited resources and support. Innovative teaching methods, including the use of music and customized learning modules, have been employed to enhance the learning experience. Additionally, classroom adaptations such as flexible seating arrangements and personalized teaching models are integral to meeting the individual needs of visually impaired students. The study concludes that continuous teacher training and regular evaluations are essential to improving the effectiveness of inclusive education. The findings highlight the importance of creating a supportive learning environment that fosters the optimal development of visually impaired children, ensuring they have equal opportunities for learning and growth

Keywords: visually, impaired, inclusive, learning, education.

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INTRODUCTION

Education is important role in influencing human development in all aspects of personality and life (Kozlova et al., 2024). Education can also maximize the potential of individuals in physical, intellectual, emotional, social, and spiritual aspects, according to the developmental stage and character of each individual (Hanif et al., 2024). Education is the process of humanizing or elevating them to the level of humanity. Children with special needs also have the same right to receive an education (Kurniawan, 2015). In the world of education, not only normal children have the right to participate in learning, but also children with special needs (ABK) (Alves et al., 2020). Therefore, the government has created inclusive education or inclusive schools specifically for children with special needs, with learning tailored to their needs. The right of children to receive an education is the foundation of the inclusive school system in Indonesia (Pratiwi, 2015).

Being born as a child with special needs is a blessing from Allah SWT, even though it is not the child's desire. Children with special needs have physical, psychological, and capability differences (Demchenko et al., 2021; Maryanti et al., 2021). However, they can still perform well both in school and outside of school despite having limitations. Children with special needs also have the potential to achieve success (Mulyawati et al., 2022; Tohara et al., 2021). Inclusive education is an educational system that requires children with special needs to study at the nearest school with their peers (Efendi et al., 2022; Shaeffer, 2019). Inclusive education is a

school where all students are in the same class, offering a viable and challenging educational program, but tailored to the abilities and needs of each student, and providing assistance and support from teachers to help students achieve success (Andriani et al., 2024; Roldán et al., 2021).

Inclusive education encompasses all aspects of education that enable children with special needs to obtain their basic rights as citizens (Putra, 2022). Inclusive education has been adapted to the needs of children with special needs (CSN), especially visually impaired children who have impairments in their sense of sight (Astuti, 2019). Visual impairment is often referred to as "blindness." "Tuna" means damaged, injured, lacking, or without, while "netra" means vision (eyes) (Rahimi & Bahri, 2019). Therefore, blindness means experiencing damage or lack in vision, or not having vision, which leads to blindness or reduced vision. Children who experience visual impairments such as total or partial blindness, even when provided with special aids, still require special educational services. So, a blind person is definitely visually impaired, but a visually impaired person is not necessarily completely blind. It is said to be blind if the child cannot receive any light stimulus from the outside (visual acuity=0). And it is said to be low vision if the child can still receive light stimuli from outside, but the visual acuity is more than 6/21, or can read the headlines of a newspaper. According to Khan & Khusro (2021), the visually impaired include those who are blind and also those who can still see but with significant limitations for daily life, especially in learning. So, children with limited vision conditions, such as "partially sighted," "low vision," or nearsightedness, are included in the blind group. Freeman (2024) states that blind individuals have central visual acuity of 20/200 or less in the better eye with corrective lenses, or central visual acuity of more than 20/200 if there is a constriction of the visual field to the widest diameter of the visual field of no more than 20 degrees in the better eye.

A similar point was made by Hidayat & Suwandi (2013), who stated that a person is categorized as legally blind if their central visual acuity is 20/200 feet or less, even with corrective lenses, or if their central visual acuity is more than 20/200 feet but they have a visual field defect that forms an angle of no more than 20 degrees in their better eye. Generally, blind people are those who have central visual acuity of 20/200 feet or less than 6 meters, even with corrective lenses, or have a very narrow visual field with an angle of no more than 20 degrees. On the other hand, people with normal vision can see clearly up to a distance of 60 meters or 200 feet. Based on that explanation, the purpose of this research is to elaborate on inclusive education for visually impaired children in modern elementary schools.

METHODOLOGY

The approach used in this writing is qualitative descriptive based on literature review and observation. The method used in this article is the library research method. Literature study is the process of data collection by understanding various research literature through the stages of literature study (Hidayat & Suwandi, 2013; Mahanum, 2021). The stages of literature study in the data collection process consist of 4 (four) stages: first, preparing the necessary equipment; second, collecting relevant sources; third, time management; and fourth, recording the research materials that have been conducted. Library sources from various references that are critically analyzed will generate new ideas (Sari & Asmendri, 2020).

Primary data includes data obtained from observations. Secondary data includes: (1) books relevant to the writing topic, (2) scientific works, (3) articles from the internet, and (4) previous theses that support the chosen topic. The data collection method involves primary data in the form of observational data. As for secondary data, which consists of relevant theories, it is obtained through the literature review method. The data obtained were analyzed descriptively qualitatively. Data analysis in this study is conducted through four steps, namely, data collection, data reduction, data presentation, and drawing conclusions and verification.

The preparation of this article has gone through systematic steps, resulting in a comprehensive and structured study. The steps taken in writing this article are: (1) identifying and formulating the problem, (2) searching for and selecting relevant literature sources, (3) analyzing data to address the problem, (4) formulating alternative solutions, (5) drawing conclusions and making recommendations, and (6) composing the article.

RESULTS AND DISCUSSION

According to Dayton (2007) dysfunctional development, such as sensory-motor development, cognitive development, verbal ability, self-skills, self-concept, social interaction ability, and unstable creativity are usually associated with the characteristics of special needs students. Inclusive education is a type of education where children with special needs (CSN) learn together with normal children (Kefallinou et al., 2020). The implementation of inclusive education for visually impaired students in modern elementary schools requires extra support. Teachers who teach at modern elementary schools have a passion for providing the best education for their students. They must encourage students to keep studying using methods that are easy to understand.

The implementation of the curriculum in modern elementary schools generally uses an independent curriculum that refers to learning achievements adjusted to the standards of special needs schools. The learning process in inclusive classes differs from regular classes, especially

in lesson planning. Teachers must have teaching modules before they start teaching, and the teaching modules in inclusive classes are adjusted to the needs of children with special needs (Barsihanor & Rosyida, 2019). Learning outcomes are designed to encourage students to remain enthusiastic about learning and to monitor their progress during the learning process. Although modern elementary schools adhere to learning outcomes, teachers at modern elementary schools do not set targets for students to complete and understand the lessons because students in Yaketunis have learning limitations. The inclusive learning process in modern elementary schools has been adjusted to the students' abilities. Inclusive teachers must understand whether the students are capable of receiving the lessons or not. If students are not yet able to receive inclusive education, teachers must adjust to the students' needs. Subjects favored by visually impaired students at the modern PAI elementary school include music. With music, students can create songs based on difficult-to-understand material, making it easier for them to absorb and comprehend the content.

In modern elementary schools, there are adequate facilities to support inclusive learning, but they continue to strive to improve student quality (Safitri et al., 2022). The teacher uses their own learning model methods in the classroom, such as adjusting to the students' conditions and arranging seating in circles and groups (Puspitaningtyas, 2020). In inclusive institutions, learning is conducted in three stages: preliminary activities, core activities, and closing activities (Prastiwi & Abduh, 2023). The problems in each modern elementary school institution vary. For inclusive education, students with special needs should ideally be accompanied by special education teachers. However, the number of students with special needs often exceeds the number of available teachers. Nevertheless, teachers at modern elementary schools continue to maximize inclusive learning by putting in extra effort to teach and always being ready to face students at the institution.

The challenge faced by teachers in modern elementary schools is that, as educators, they must be patient when teaching children with special needs. They must understand and study the conditions of special needs students at school well. In modern elementary schools, there are generally several students with disabilities, especially those who have visual impairments such as blindness (Arifin & Widyastono, 2020; Coryzoeniawati, 2022). However, it's not just the blind; other challenges include students on the autism spectrum, those with low cognitive abilities, and those with disabilities.

Inclusive education in modern elementary schools offers a very diverse experience. Teaching children with special needs is a very noble task and provides many valuable experiences for teachers. This can boost teachers' morale because they are motivated by the fact that there are still many students with limitations that they can help.

However, they remain enthusiastic about continuing to learn and pursue their dreams. Students who have visual impairments or are blind certainly have potential that can be seen from another perspective. In modern elementary schools, some students are already proficient in memorizing the Quran. Their enthusiasm and perseverance in studying encourage them not to give up despite facing various challenges. Previous research has documented the implementation of inclusive education in various institutions, such as at MAN 2 Sleman, which has run smoothly by describing how the curriculum is applied. According to experts, inclusive learning is very important in all institutions, especially in inclusive schools that prioritize these learning needs. The effectiveness of inclusive learning depends on teaching methods that are acceptable and comfortable for students. For example, visually impaired students feel comfortable learning inclusively through songs or by touching objects, as their sense of hearing and touch play an important role as substitutes for vision. As a teacher in inclusive education, it is important to collaborate with institutions, students, and parents to create a safe and comfortable learning environment.

Barriers to Inclusive Education for Visually Impaired Children in Modern Elementary Schools

The main challenge faced by teachers in implementing inclusive education in modern elementary schools is:

1. Extra Support

Teachers need to provide extra support in the learning process, especially for visually impaired students or those with other special needs, so that they can understand the material better and participate in learning optimally. This support includes various aspects, such as the provision of appropriate teaching materials, the use of more inclusive teaching methods, and additional guidance outside of class hours if needed. However, the challenge is that the number of available teachers is limited compared to the number of students who require special attention, so effective strategies are needed to ensure that every student receives adequate guidance.

2. Availability of Resources

Although the facilities are adequate, there is still a challenge in improving the quality of resources, in terms of educators, learning materials and technology support, to ensure that every learner, including children with special needs, can have an optimal learning experience in an inclusive and empowering environment.

3. Deep Understanding

Teachers must have a good and in-depth understanding of the conditions, characteristics and learning needs of students with special needs, both from cognitive, emotional, social and physical aspects. With this comprehensive understanding, teachers can design learning strategies that are more inclusive, adaptive and in accordance with the individual needs of each student. In addition, a comprehensive understanding also enables teachers

to provide optimal support in increasing the confidence, independence, and academic and non-academic abilities of students with special needs, so that they can develop optimally in a conducive learning environment.

4. Curriculum Adjustment

Despite adopting the Merdeka Curriculum, which has undergone various adjustments to make it more relevant to current educational conditions, challenges in its implementation remain unavoidable. One of the main challenges is adapting the learning process to the specific needs of each student, which are very diverse in terms of their abilities, learning styles and interests. This requires educators to be more careful in designing flexible and innovative learning plans, as well as organizing learning activities that are not only interesting but also effective in improving students' understanding and skills optimally.

5. Patience and Dedication

Teaching children with special needs is not just about delivering subject matter, but also requires tremendous patience and dedication from teachers. With a caring and empathetic approach, teachers can create a comfortable and supportive learning environment that keeps children with special needs motivated to learn and develop their full potential. Patience in facing challenges and dedication in providing the right guidance will help them achieve better academic progress and social skills.

6. Limited Human Resources

Another challenge faced in implementing inclusive education is the limited number of human resources, especially special education teachers who have the competence and experience in assisting students with special needs. For example, visually impaired students require more intensive assistance in the teaching and learning process, both in terms of using Braille-based learning media, assistive technology and in developing social skills. However, the availability of educators who have special expertise in handling these needs is still limited, which can have an impact on the effectiveness of learning and the academic and non-academic development of students with special needs.

Evaluation of Inclusive Learning Implementation for Visually Impaired Children in Modern Elementary Schools

To improve the evaluation of inclusive learning in modern elementary schools, there are several aspects that need to be considered and addressed, including:

1. Use of Diverse Learning Methods

The use of diverse learning methods is essential in creating an effective and enjoyable learning experience for students, especially for those with special needs, such as visually impaired students. Teachers need to continue to encourage the application of various methods that are not only varied but also easy to understand, such as the use of songs to strengthen memory and the use of concrete objects as tactile learning

media. With this approach, students can more easily understand the concepts taught, increase their absorption of the material, and feel more motivated in the learning process. In addition, the application of methods that suit students' needs also contributes to creating an inclusive learning environment that supports their optimal development.

2. Thorough Learning Planning

Thorough lesson planning is very important for teachers, especially in dealing with inclusive classes consisting of students with various learning needs. Before teaching, teachers must prepare learning modules carefully so that the learning process can run optimally. The modules that are prepared must be tailored to the special needs of children with special needs (ABK), both in terms of delivery methods, materials, and learning media used. With modules that are specifically designed according to the characteristics and needs of students, it is expected that every learner, including children with disabilities, can more easily understand the material being taught and achieve learning objectives effectively and optimally.

3. Support and Classroom Management

It is important for teachers to have adequate support in inclusive classrooms, especially since the number of students with special needs often exceeds the number of teachers available. This support can be in the form of additional educators, special assistants or ongoing training that helps teachers manage the classroom effectively. In addition, seating arrangements in a circular or group format can help create an inclusive environment, allowing for more active interactions between students and encouraging cooperation and understanding between them. With the right classroom management strategies, teachers can create a comfortable learning atmosphere, support students' social and academic development, and ensure that each individual gets the attention and support they need.

4. Continuous Evaluation

Teachers need to conduct regular evaluations of students' learning achievements by continuing to monitor their progress systematically and in depth. This evaluation can be done through various methods, such as direct observation, formative assessments, discussions with students, and communication with parents or guardians to get a more comprehensive picture of their learning progress. By conducting continuous evaluation, teachers can identify challenges faced by students and adapt learning strategies and approaches to better suit individual needs, especially for students with special needs. This adaptive approach aims to ensure that every student receives optimal support in achieving their full potential.

5. Training and Self-Development

Continuous support in the form of training and self-development for inclusive teachers is essential to improve the quality of learning provided to students with special needs. Through structured and needs-based training programs, teachers can gain a deeper understanding of appropriate teaching strategies, effective communication methods and individualized approaches in dealing with students' diverse characteristics. In addition, continuous training also enables educators to keep their insights up to date on inclusive education policies, supporting technologies and the latest innovations in education. Thus, they can be better prepared to deal with various challenges that arise in the classroom and create a more inclusive, friendly learning environment that supports the optimal development of each learner.

CONCLUSION

The study highlights significant efforts in implementing inclusive education for visually impaired children in modern elementary schools. Teachers demonstrate strong enthusiasm and dedication, employing diverse and accessible teaching methods, such as music and tailored teaching modules, to enhance the learning experience despite challenges like limited resources and support. The planning of inclusive education involves thoughtful classroom adaptations, such as flexible seating arrangements and personalized teaching models, which help meet the individual needs of students with special needs.

Key findings emphasize the importance of continuous evaluation of learning outcomes and the ongoing development of teachers through training and self-improvement. These aspects are crucial for enhancing the effectiveness of inclusive education. The study suggests that by prioritizing these elements, inclusive education can evolve into a more supportive, comfortable, and inclusive environment for all students, including those with special needs like the visually impaired. This research underscores the importance of creating a learning environment where every student can thrive, and it highlights the potential for continuous improvement in inclusive education practices.

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