

## The Indonesian Government's Efforts to Create Inclusive Education for People with Disabilities Through Assistive Technology

Cindy Meriana<sup>1</sup>, Helga Yohana Simatupang<sup>2</sup>, Aulia Srifauzi<sup>3</sup>

Universitas Potensi Utama<sup>1,3</sup>, Universitas Pembangunan Nasional “Veteran” Jawa Timur<sup>2</sup>

Email: [cinymerieana@gmail.com](mailto:cinymerieana@gmail.com)<sup>1</sup>, [helgayohana.fisip@upnjatim.ac.id](mailto:helgayohana.fisip@upnjatim.ac.id)<sup>2</sup>

### ABSTRACT

Inclusive education is an alternative solution for students with disabilities to gain full access to a quality learning environment. A common problem for people with disabilities to obtain quality education is communication difficulties and physical constraints, it is a challenge for the state to facilitate the same learning environment for all students. In the Regulation of the Indonesian Minister of National Education No. 70 of 2009, there are regulations dealing with inclusive education for students who have disabilities and have potential intelligence and or special talents. One of the implementations of these government regulations is demonstrated by the development of assisted technology specifically designed to address the challenges faced by those with disabilities. The research uses a qualitative approach by analyzing data from various sources including scientific journals, news, and official website related to the use of assistive technology for people with disabilities in Indonesia. Analysis indicates that the presence of government-supported assistive technology is uneven in Indonesia due to a number of obstacles to its implementation such as limited technology supply, lack of government support, and limited human resources in the use of such assisted technology. Comprehensive cooperation is needed involving several parties involved in the provision and use of assistive technology such as government, schools and the public to overcome the various obstacles so that Indonesia can create quality inclusive education and support sustainable development.

**Keywords :** *Inclusive Education, Assisted Technology, Indonesia’s Government Regulations, People with disability, Sustainable Development Goals*

### INTRODUCTION

According to the Directorate of Elementary Schools (2021) inclusive education is a system of education that gives all students with disabilities who may also be intelligent or have special talents the chance to learn alongside other students in a classroom (Direktorat Sekolah Dasar, 2021). Law No. 8 of 2016 respecting Persons with Disabilities and Regulation of the Minister of National Education No. 70 of 2009 concerning Inclusive Education are two of the legislation that require Indonesia to work toward inclusive education. These two rules stress how crucial it is to give every student an equitable education, free from prejudice based on their physical or mental capabilities. Nevertheless, there are still a lot of obstacles to overcome before inclusive education can truly be implemented in Indonesia. These include a lack of facilities, poor teaching

practices, and a lack of technology that can meet the needs of students with disabilities.

The implementation of technology in education is becoming more and more important, particularly for those with disabilities who frequently encounter obstacles while attempting to use traditional educational resources. Assistive technology plays a significant role in closing this gap by improving accessibility throughout education. This technology consists of a range of devices and programs made to facilitate communication, mobility, and interaction between people with disabilities and the educational setting. Although it has been demonstrated in a number of nations that the use of assistive technology increases the involvement of those with disabilities in formal education, this technology is still extremely rarely used in Indonesia (Salsabila & Agustian, 2021).

The use of assistive technology in inclusive education has been encouraged by a number of initiatives the Indonesian government has implemented. The goal of the digital literacy policy and other initiatives like Indonesia Pintar is to provide more access to technology for all students, including those with special needs. These initiatives still require improvement, particularly with regard to providing technology to schools located in distant locations and providing teachers with sufficient training. Students with disabilities may not make the best use of the assistive technology offered if there is inadequate infrastructure and training support. (Rochyadi, Sunardi, and Rossita, 2023). The adoption of inclusive education in Indonesia is hampered by social and cultural obstacles in addition to technical ones. In terms of both the physical infrastructure and the instructors' awareness of the needs of students with disabilities, many schools are still not completely equipped to accept students with impairments. In actuality, inclusive education calls for a shift in community and educator perspectives in addition to technology adaptations. To achieve fully inclusive education, a comprehensive strategy including all stakeholders is required.

Therefore, the purpose of this article is to examine the steps taken by the Indonesian government to promote inclusive education for individuals with disabilities by utilizing assistive technology. In order to promote more inclusive and equitable education, this study will address the policies that have been put into place, the difficulties encountered during their implementation, and any potential changes that could be made.

## **METHODS**

This study used library research as its methodology, which is defined as conducting research by gathering information from books, journals, and earlier studies on the topic of interest. In order to find references to books and earlier research publications that are relevant to the research topic, the internet is used as part of the data

gathering technique.

## **RESULT AND DISCUSSION**

### **Indonesian Government Policy in Supporting Inclusive Education**

The Indonesian government has put in place a number of laws to encourage inclusive education, particularly for those who are disabled. The primary legislative framework that upholds individuals with disabilities' rights to equitable education is Law Number 8 of 2016 for Persons with Disabilities. Furthermore, every school must be able to accommodate pupils with special needs and offer educational programs that are appropriate for their circumstances, according to Permendiknas Number 70 of 2009. Additionally, the government has started initiatives like Indonesia Pintar, which facilitates formal education access for both people with disabilities and children from low-income households (Farah Arriani, 2022).

The policy is still not being applied consistently in the field, though. According to the data gathered, the majority of schools have begun implementing inclusive education practices, particularly in large urban regions. However, this strategy is frequently not carried out well in isolated places. This is caused by a number of things, such as inadequate facilities and resources, as well as a lack of awareness on the part of schools regarding the significance of inclusive education. Therefore, even if the policy currently exists, it still has to be better implemented, particularly in places that are harder to access.

### **The Role of Assistive Technology in Improving Accessibility of Education for People with Disabilities**

During it comes to improving the effectiveness of education access for those with impairments, assistive technology is essential. This technology consists of a range of tools and programs made to help individuals with disabilities use their functional abilities in the classroom. For instance, students with visual impairments can now access instructional resources that were previously inaccessible thanks to screen reader software like JAWS or NVDA. Furthermore, students with speech and language problems can communicate with instructors and peers more successfully when using augmentative and alternative communication (AAC) technologies (Suwahyo, Setyosari, & Praherdiono, 2022).

Although it is still in its early stages, assistive technology implementation has started to take place in a few inclusive schools in Jakarta and Surabaya, according to observations made there. The majority of large city schools have access to this technology, either as a result of private initiatives or government funding. However, many schools in rural or distant locations do not currently have access to this equipment. The inequitable

distribution of devices and lack of funding continue to be barriers to the deployment of assistive technology in these locations. As a result, in order to spread this technology across the nation, more funding must be allocated and regulations must be made clear.

### **Challenges of Implementing Assistive Technology in Inclusive Schools**

Although assistive technology has enormous promise to improve inclusive education, there are still a number of obstacles to overcome before it can be widely used in classrooms. Budgetary restrictions are a major issue, particularly for schools located in underprivileged communities. While certain assistive devices are made available through grants or government help, many schools lack the funding to buy them, and the quantity of devices provided is frequently insufficient for all pupils who use them (Rosita, Rochyadi, & Sunardi, 2023).

The lack of assistive technology training for instructors is another problem. Since many educators are still ignorant of the different assistive technology accessible, they are unable to make the best use of them during the teaching and learning process. Many educators at inclusive schools who participated in interviews expressed the need for additional training on the use of assistive technology in the classroom. This implies that attempts to increase the use of assistive technology across Indonesia should prioritize training for educators and school personnel.

### **Infrastructure Support and Assistive Technology Capacity Development**

An obstacle to the use of assistive technology is infrastructure support, in addition to issues with finance and training. Many schools lack reliable internet access, which is necessary to run online devices and use cloud-based apps. This is especially true for schools located in remote places. The inclusive learning process is further hampered by the absence of auxiliary facilities, such as computer labs with assistive gear and software (Mitraberdaya, 2024). Prioritizing capacity building for assistive technologies is also necessary. The majority of assistive technology in use in Indonesia today is imported, making it sometimes pricy and challenging to obtain. A number of regional advancements in assistive technology have started to surface in recent years, including more reasonably priced hearing aids and Indonesian text-reading programs. These technologies, nevertheless, are still in their infancy and will need more development and backing from both the public and private sectors in order to become broadly used.

## **CONCLUSION**

This article's conclusion states that while the Indonesian government has shown its support for inclusive education for individuals with disabilities by enacting laws and implementing initiatives like Law No. 8 of 2016 and Indonesia Pintar, there are still

major obstacles in the way of these efforts, particularly when it comes to the provision of assistive technology. Although there are still gaps in teacher preparation programs and the necessary infrastructure, assistive technology plays a significant part in improving the accessibility of education for students with disabilities. Its distribution is also unequal, particularly in rural regions. Greater efforts are required to achieve truly inclusive education in terms of finance, training, and the creation of more reasonably priced assistive technology that is suitable for the Indonesian environment.

## REFERENCES

- Direktorat Sekolah Dasar. (2021, April 07). Infografis: Pendidikan Inklusif. Retrieved from <https://ditpsd.kemdikbud.go.id/artikel/detail/infografis-pendidikan-inklusif>
- Farah Arriani, d. (2022). Panduan Pelaksanaan Pendidikan Inklusif. Jakarta: Badan Standar, Kurikulum, dan Asesmen Pendidikan Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia.
- Mitraberdaya. (2024, Juni 07). Tantangan dalam Menerapkan Teknologi Pendidikan yang Memadai untuk Mendukung Proses Pembelajaran. Retrieved from <https://mitraberdaya.id/id/news-information/tantangan-dalam-menerapkan-teknologi-pendidikan>
- Rosita, T., Rochyadi, E., & Sunardi. (2023). Teknologi Asistif Dalam Pendidikan Inklusif. *Journal of Elementary Education*.
- Salsabila, U. H., & Agustian, N. (2021). Peran Teknologi Pendidikan Dalam Pembelajaran. *Jurnal Keislaman dan Ilmu Pendidikan*, Volume 3 Nomor 1, 123-133.
- Suwahyo, B. W., Setyosari, P., & Praherdiono, H. (2022). Pemanfaatan Teknologi Asistif dalam Pendidikan Inklusif. *Jurnal Kajian Teknologi Pendidikan*, Volume 7 Nomor 1, 51-63.
- Undang-Undang No. 8 Tahun 2016 tentang Penyandang Disabilitas Permendiknas No. 70 Tahun 2009 tentang Pendidikan Inklusif