

Inspiring Future: Motivational Program for Visually Impaired Students toward Higher Education in Information Technology at Malaysian Association for the Blind (MAB)

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Abstract

Inclusive education is a crucial effort to ensure equitable access to education for all, including those with visual impairments. Although technological advances have made learning easier for visually impaired students, challenges remain that affect their motivation to pursue higher education. Limited information, low self-confidence, and stigma regarding the academic abilities of people with visually impaired are some of the frequently encountered barriers. This international community service program aims to increase the motivation, self-confidence, and insight of visually impaired students regarding higher education opportunities, particularly in the fields of information technology and computer engineering. The program was held on May 18, 2026, at the Malaysian Association for the Blind (MAB) in Kuala Lumpur, Malaysia, and involved 12 visually impaired students. The program included the delivery of motivational materials, an introduction to inclusive higher education, reinforcement of simple logic and mathematics, and interactive discussions. The program demonstrated high levels of enthusiasm among participants. Participants gained new insights into opportunities for continuing higher education, support for inclusive campuses, and the use of assistive technology in the learning process. This activity positively impacted participants' motivation and confidence to pursue higher education. Furthermore, it strengthened the role of higher education institutions in supporting inclusive education and equitable access to education for visually impaired students.

Keywords: *Higher education, inclusive education, information technology, visually impaired students*

1. INTRODUCTION

Education is a fundamental right of every individual, regardless of physical, social, cultural, or other disabilities. The concept of inclusive education represents a global commitment to creating equal educational opportunities for all, including people with disabilities (Shabir et al., 2025). Inclusive education focuses not only on open access to education but also on providing a learning environment that supports student diversity (Kapcia, 2024). One group still facing challenges in gaining access to higher education are students with visual impairments (Afonso et al., 2025). The barriers they face include not only limited access to learning media but also psychological and social aspects such as low self-confidence, limited information about higher education, and stigma regarding the academic abilities of people with disabilities. These conditions make some blind students hesitant to pursue higher education.

Advances in information technology have opened up broader opportunities for people with visual impairments in accessing education. Various assistive technologies, such as screen readers, voice-based applications, digital teaching materials, and accessible learning media, have helped blind students gain more independent learning experiences (Elshaer et al., 2025; Ghoneim et al., 2026; Gidisu et al., 2026; López Flores & González Lara, 2023; Ndume, 2025). Technology also enables visual impairments students to participate in fields of information technology and informatics that were previously considered inaccessible (Ghoneim et al., 2026; Ndume, 2025). However, information technology is still often viewed as a field synonymous with visual activities, leading some visual impairments or blind students to lack confidence in entering this field. However, with the support of assistive technology and an inclusive educational environment, blind individuals have equal opportunities to learn and develop in technology (Flores & Lara, 2023; Gidisu et al., 2026).

Universities play a crucial role in supporting inclusive education by providing disability friendly educational services (Li et al., 2023; Rashid et al., 2025). Pamulang University is one such university that supports inclusive education through its Lembaga Layanan Disabilitas (LLD), which provides support to students with special needs, including those with visual impairments. Furthermore, Pamulang University provides scholarships for visually impaired students to ensure equitable access to higher education. As an implementation of the Tri Dharma of Higher Education, the Informatics Engineering Department at Pamulang University conducted an international community service activity at the Malaysian Association for the Blind (MAB) in Kuala Lumpur, Malaysia, with the theme "Inspiring Future: Motivational Program for Visually Impaired Students toward Higher Education in Information Technology." This activity aimed to provide motivation, broaden participants' horizons regarding higher education, and build the self-confidence of students with visual impairments, encouraging them to pursue higher education, particularly in the fields of information technology and Informatics Engineering. Furthermore, this activity also served as a means of introducing inclusive higher education and the use of technology to support the learning process for blind students.

2. IMPLEMENTATION METHOD

An international community service activity was held on May 18, 2026, at the Malaysian Association for the Blind (MAB) in Kuala Lumpur, Malaysia. Twelve blind secondary school students participated. The implementation method of this community service activity included several stages as illustrated in Figure 1.



Figure 1. Stages of Community Service Implementation

During the preparation stage, a team of lecturers from the Informatics Engineering Department at Pamulang University conducted internal coordination regarding the preparation of materials, assignment of tasks, and technical implementation. Coordination was also carried out with the Malaysian Association for the Blind (MAB) regarding the activity schedule, participants, and supporting facilities. The implementation stage began with a meeting with MAB leaders and administrators to discuss potential collaborations in developing inclusive education and to introduce Pamulang University as a higher education institution that supports students with special needs through the Lembaga Layanan Disabilitas (LLD). The activity continued with motivational presentations by the Informatics Engineering Lecturers from Pamulang University, an interactive session, simple logic and math exercises, and educational games and quizzes. The evaluation stage was conducted through direct observation of participant enthusiasm, participation during discussions, and responses throughout the activity.

3. RESULTS AND DISCUSSION

Prior to the core community service activity, a team of lecturers from the Informatics Engineering Department at Pamulang University held a discussion with the leadership and administrators of the Malaysian Association of the Blind (MAB). The meeting discussed collaboration opportunities in developing inclusive education and introduced Pamulang University as an inclusive campus that accepts students with visual impairments. Furthermore, the community service team also provided information about Pamulang University's full scholarship program for all students with special needs, including those with visual impairments. The session explained that Pamulang University has a Lembaga Layanan Disabilitas (LLD) that assists students with special needs in both academic and non-academic areas. Furthermore, visual impairments students receive learning assistance and adjustments to academic evaluations without compromising their learning competency. This discussion was a crucial part of the activity because it demonstrated the university's commitment to supporting equitable access to education for people with disabilities.



Figure 2. Discussion and Coordination Between the Pamulang University Community Service Team And The Administrators Of The Malaysian Association For The Blind (MAB).

During the core community service activity, motivational material was delivered by Dr. Eng. Ahmad Musyafa, M.Kom., and Lisdia Fitriana Masitoh, M.Pd., using a humanistic and communicative approach. The material focused on the importance of higher education, developing self-motivation, and opportunities for blind students to develop in the fields of information technology and informatics. Participants were given an understanding that limited vision is not a barrier to achieving higher education or pursuing a professional career. Furthermore, participants were provided with various real-life examples of blind students who have successfully completed their studies in information technology. The material was delivered interactively, ensuring active and enthusiastic participation throughout the event. The speakers also shared various inspiring stories about blind individuals who have succeeded in education.



Figure 3. Delivery Of Higher Education Motivation Material By The Community Service Team Of The Informatics Engineering Study Program, Pamulang University

In addition to providing motivation, the Community Service activity also strengthened participants' mathematical literacy and simple logic skills. The presenter explained that logical and mathematical thinking skills are essential foundations in the field of information technology. Participants were invited to participate in simple math exercises

such as number patterns, percentage calculations, and basic logic exercises. The activities were conducted in a communicative and participatory manner, allowing participants to be directly involved in the learning process. These simple exercises aimed to build participants' confidence that mathematics and logic can be learned by visual impairments students. Furthermore, this activity helped participants understand the importance of logical thinking skills in everyday life and in the technology field.

Participants were actively involved in answering questions and attempting to solve problems posed by the presenter. This demonstrates that an interactive learning approach can increase participant engagement throughout the activity. In this activity, participants were also introduced to the concept of inclusive higher education and the use of assistive technology in learning. The presenter explained that technological advances have made it easier for people with visual impairments to access education and information.

Participants received an explanation of how screen readers, digital teaching materials, and various learning adaptations are used for visually impaired students in higher education, particularly at Pamulang University. They were also introduced to the learning support provided through the Lembaga Layanan Disabilitas (LLD). This information about inclusive campuses and educational support provided participants with new insights into how higher education can be more accessible to people with disabilities.

The interactive and question-and-answer session was one of the most active parts of the Community Service activity. Participants were given the opportunity to share their experiences, learning challenges, and perspectives on higher education. Several participants expressed concerns about their ability to participate in the learning process at university. However, through the discussion session, participants gained an understanding that technological advances and campus mentoring systems can assist blind students or visually impaired students in their learning process. In addition to the discussion, the activity also included an educational quiz aimed at increasing participant participation. This activity created a more enjoyable atmosphere and helped participants feel more confident.



Figure 4. Interaction, Discussion, and Question and Answer Session Between Participants and The Community Service Team.

Based on observations during the activity, participants demonstrated high levels of enthusiasm and participation. They actively participated in discussions, answered questions, and engaged in simple logic and math exercises. This

activity positively impacted participants' motivation and confidence to continue their education at university. Participants gained new insights into higher education opportunities, inclusive campus support, and career opportunities in information technology.



Figure 5. Group Photo of Participants, MAB Administrators, and the Community Service Team After The Activity

4. CONCLUSION

An international Community Service activity with the theme "Inspiring Future: Motivational Program for Visually Impaired Students toward Higher Education in Information Technology" was successfully implemented at the Malaysian Association for the Blind (MAB) in Kuala Lumpur, Malaysia. This activity had a positive impact on increasing the motivation, self-confidence, and insight of visually impaired students regarding higher education and information technology. Through the delivery of motivational materials, reinforcement of simple logic and mathematics, an introduction to inclusive higher education, and educational interactions, participants gained an understanding that visual impairment is not a barrier to achieving higher education and developing a career in technology. This activity also demonstrated the important role of higher education institutions in supporting inclusive education by providing disability friendly educational services and academic support to students with special needs. Going forward, similar activities are expected to be carried out continuously with a wider range of participants so that more visually impaired students can gain the motivation and opportunity to continue their education at university.

5. REFERENCES

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