

PERCEPTIONS OF STUDENTS WITH DISABILITIES ON ACCESSIBILITY OF LEARNING MATERIALS: A CASE STUDY AT UNIVERSITAS BRAWIJAYA

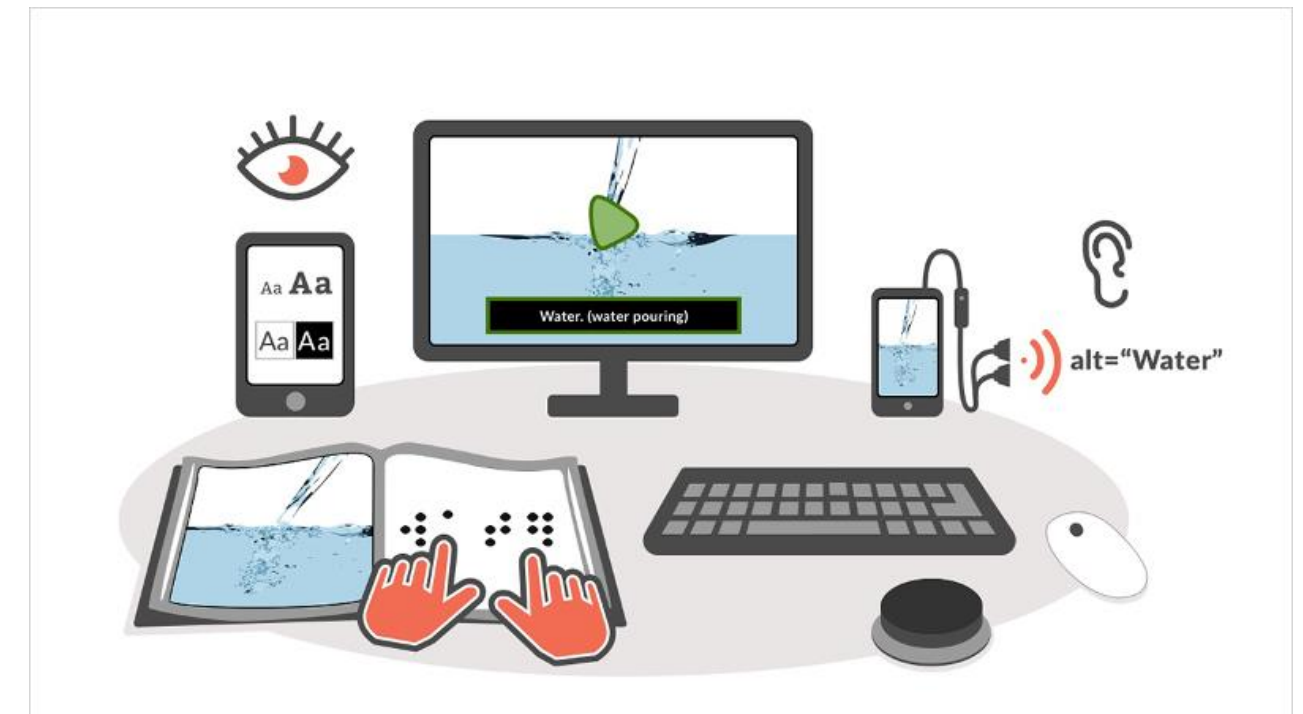
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Universitas Brawijaya

Subdirectorate of Disability Services

Background



- Teachers need to make sure accessibility of learning materials for all students.
- Providing instructional materials in alternative formats ensures that students with disabilities can engage with content effectively and have an equal opportunity for academic success (Nganji, 2018).
- Students with disabilities experience barriers to understanding learning materials because digital sources such as PDF (Nganji, 2018) and LMS (Ristovska et al., 2021) often fail to meet accessibility standards.

Research Question

1. How do students with disabilities perceive the accessibility of learning materials in Universitas Brawijaya?

Methodology

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Research Design	Participants	Instruments	Data Analysis
Single instrumental case study	9 students with various disabilities (vision and hearing impairment, mental, intellectual, and physical disabilities) and 2 lecturers in the field of science and technology and social and humanities	Interview guidelines for students and lecturers developed based on the principles of Universal Design for Learning (UDL)	The data were analyzed thematically.

Findings

Main Theme	Students with Disabilities Majoring in Social and Humanities	Students with Disabilities Majoring in Science and Technology	Lecturers
Accessibility of learning materials	<ul style="list-style-type: none">• Need subtitles and interactive media for learning materials• Have difficulty with visual materials such as text for dyslexic and visually impaired students	<ul style="list-style-type: none">• The biggest challenge is the accessibility of the practicum and the use of laboratory equipment.• Need more assistance on materials that require direct interaction	<ul style="list-style-type: none">• Aware of the importance of accessibility for students with disabilities but feel less skilled in adapting learning materials for students with mental disabilities
Use of assistive technology	<ul style="list-style-type: none">• Helped by technology such as screen readers and Grammarly but constrained by accuracy on technical materials	<ul style="list-style-type: none">• Assistive technology is useful, but difficult to apply in a practical context.• Limitations on visual materials that require adaptation	<ul style="list-style-type: none">• Recognize the benefits of accessibility technology but feel the need for further training in its use

Findings

Main Theme	Students with Disabilities Majoring in Social and Humanities	Students with Disabilities Majoring in Science and Technology	Lecturers
Lecturer support and campus environment	<ul style="list-style-type: none">• Feel helped by flexible and responsive lecturers, but not all lecturers have the same understanding	<ul style="list-style-type: none">• Face difficulties during practicum and need more guidance from lecturers, especially related to practicum tools and materials	<ul style="list-style-type: none">• Committed to supporting students with disabilities, but limited training and resources limit their capacity in inclusive teaching
Institutional policies and support	<ul style="list-style-type: none">• Expect more accessible learning materials, such as those with subtitles and audio materials	<ul style="list-style-type: none">• Need policies that allow for broader adaptation in the lab and practice, especially quantitative tools	<ul style="list-style-type: none">• Expect more comprehensive policies, regular training, and rewards for lecturers who provide inclusive learning

Accessibility of Learning Materials

- There is consistency in the need for more inclusive teaching materials, but the challenges vary across groups.
- Science and technology students need accessibility to labs and practicums while social-humanities students need more interactive learning materials.
- Lecturers need training and resources to optimize inclusive learning materials.

Use of Assistive Technology

- Assistive technology plays a vital role in supporting students with disabilities, but its implementation needs to be enhanced with technical training for lecturers.
- While students have begun to use technology independently, they still need support from lecturers so that this technology can be optimally integrated into the classroom.

Lecturer Support and Campus Environment

- Support from lecturers is very significant in encouraging the success of students with disabilities.
- However, both science and technology and social and humanities students highlighted the inequality in the level of understanding and implementation of accessibility among lecturers.
- Universities need to provide special assistants in the laboratory and conduct further training so that lecturers can provide more optimal support.

Institutional Support and Policies

- Institutional policies need to be improved to be more comprehensive and responsive to the needs of disabilities, both in theory and practical classes.
- Improved lecturer training, provision of more inclusive technology, and special assistance for students with disabilities in the laboratory are important points expected by all three groups.

Discussion

- Accessibility of teaching materials can increase student participation and involvement in the learning process (Smith, 2018).
- Technologies such as screen readers, text correction applications, and other assistive devices have been shown to help students with disabilities access information more effectively (Burgstahler, 2020).
- However, it is still essential for institutions to provide additional training so that students and lecturers can use assistive technology optimally.

Discussion

- Lecturers who receive special training related to inclusive teaching are better able to adapt their teaching methods.
- An inclusive campus environment is also an important factor because it can provide a sense of security and support students' psychology (Hehir et al., 2016).
- Educational institutions need to design accessibility policies that cover both physical (e.g., accessible facilities) and digital (e.g., learning materials in various formats) aspects.

Conclusions

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- ❖ The three groups of informants provided a comprehensive picture of the challenges and needs in creating a more inclusive learning environment.
- ❖ Students with disabilities in both study groups need better accessibility, especially in learning materials and practicums while lecturers showed commitment but were constrained by a lack of adequate support and training.
- ❖ To achieve optimal inclusivity, educational institutions need to develop responsive policies, provide training for lecturers, and provide adequate facilities and companions to support the learning process of students with disabilities.

Thank you.

Do you have any questions?