Accessible information and inclusive education for students with disabilities in Universitas Airlangga, Indonesia

Myrtati Dyah Artaria[1] , **Mein-Woei Suen**[2] ,
Sayf Muhammad Alaydrus[1]

[1]*Department of Anthropology, Faculty of Social and Political Sciences, Universitas Airlangga, Indonesia*
[2]*Department of Psychology, College of Medical and Health Science, Asia University, Taiwan*

Abstract

Background of the study: Education is a basic human right for all, including persons with disabilities. The right to information for students with disabilities is guaranteed by the national law of the Republic of Indonesia. However, students with disabilities still face discrimination and marginalization on campus that might impede their academic achievement and subjective well-being.

Purpose: This study aims to explore information experiences of students with disabilities in Universitas Airlangga, which includes information on university policies, research opportunities, student organizations, and career opportunities.

Method: This study employed a mixed-methods approach by conducting in-depth interviews with students with disabilities (n = 5), surveys with non-disabled students (n = 106), and focus group discussions with faculty representatives (n = 10).

Findings: This study found that inaccessible information continues to be a problem for students with disabilities. However, some of their non-disabled peers, professors, and staff members have been relatively helpful in navigating their respective campus lives. The commitment to inclusive education is shown by the university and faculties within, but effective and sustainable action is required to tackle these issues.

Conclusion: The authors recommend that the university utilize already-existing organizations to conduct workshops and promote inclusive learning on campus.

Keywords: disability, higher education, inclusive learning, quality education, special needs

Page127

Introduction

Inclusive education is an educational approach and model that aims to provide equal access and opportunities for every student, regardless of their differences, dis/abilities, race, gender, sexuality, socioeconomic background, and other individual uniqueness (Alaydrus & Budianto, 2024; Lee & Torres Celis, 2024; Majoko, 2018). This approach rejects the idea of segregation, meaning that every student has the right to be educated in a regular classroom environment alongside their peers, despite the challenges they may face. However, inclusive education does not benefit only students with disabilities, as those without disabilities are also trained to appreciate diversity (Astawa, 2021; Paechter et al., 2021).

There are several reasons to rationalize the significance of inclusive education toward the students' and society's success. By promoting social inclusion in their classroom environment, inclusive education helps break down stereotypes and biases against those who are "different" from the public majority. This condition nurtures a more inclusive and compassionate society, where students with disabilities are appreciated as valued members of the school community. Seeing the students as more than their disabilities allows them to grow their self-esteem and confidence as they experience positive interactions in their day-to-day lives. This empowering environment also promotes positive mental health for the students since they are not as prone to solitude and discrimination, which can lead to reduced stress and anxiety (Bickenbach, 2019; Fougeyrollas et al., 2019; Milner et al., 2019). Besides, research has shown that students with disabilities who are educated in inclusive settings often achieve higher academic outcomes compared to those in segregated settings due to open access to a challenging curriculum and peer support. Therefore, it is safe to say that an inclusive academic environment has a profound impact on the overall well-being of all students, especially those with disabilities (Fedulova et al., 2019; Kausik & Hussain, 2023; Shpigelman et al., 2022).

The Indonesian higher education system has made efforts to promote and implement inclusive education through various legal frameworks. The government has ratified the United Nations Convention on the Rights of Persons with Disabilities (CRPD), and the Law of the Republic of Indonesia No. 8 of 2016 on Persons with Disabilities is in full effect. The national law ensures the survival, well-being, and basic human rights of every Indonesian citizen with disabilities, including the right to access education, health care, and other public facilities. In addition, the National Higher Education System Law emphasizes inclusive education and accommodations for students with disabilities. This legislation is further explained in the Minister of Research and Higher Education's Rule No. 46 of 2014 and No. 44 of 2015, which guarantees accessible infrastructures and provides financial aid for students with disabilities (Andayani, 2018; Andayani & Afandi, 2016; Hamidi, 2016; Karellou, 2019; Mulyadi, 2017).

The CRPD and Law No. 8 of 2016, by extension, recognized the right to information as a fundamental right for people with disabilities. The right to information is essential in promoting transparency, accountability, and participation in society. Through an intersectional lens, the right to information correlates with other aspects of human rights, such as rights to education, employment, and health. By accessing relevant information, people with disabilities can explore educational opportunities, advocate for their rights, and access healthcare services (Aisyah et al., 2024; Awais & Ameen, 2015; Bickenbach, 2019).

Even though several affirmative actions have been implemented by numerous higher education institutions, students with disabilities still face information accessibility issues, which are highly relevant to their academic and social lives. Additionally, current research trends mainly focus on physical infrastructures and macro-level policies, with relatively minimum studies on non-physical infrastructure and their lived experience regarding these policies. Furthermore, not many studies have been conducted regarding how lessons learned from a university's information accessibility issues can be implemented in other universities,

both in Indonesia and in other countries. Henceforth, this study aims to explore the information experiences of students with disabilities at Universitas Airlangga. This exploration was conducted to assess the implementation of one of several aspects of inclusive education at Universitas Airlangga. Several subthemes that were discussed in this study were awareness and access to information on university policies, research opportunities, student organizations, and career opportunities. Based on the assessment, this paper will then offer recommendations to further increase opportunities, comfort, and accessibility for students with disabilities in the higher education environment.

Literature Review
Understanding disability

According to the Law of the Republic of Indonesia No. 8/2016 on Persons with Disabilities, the term "disability" refers to a person with physical, intellectual, mental, and/or sensory impairment or limitation within a relatively long period of time. This condition causes them to interact with their environment. From a social lens, this limitation hinders them from fully participating in society, often causing them to be marginalized (Aisyah et al., 2024).

Disability can be understood through different models, namely the medical and social models. The medical model perceives disability as an impairment, deficiency, or abnormality that needs to be treated or cured. This model perceives disabled individuals as flawed, requiring medical intervention to normalize their bodies or minds to fit societal standards. This model has been widely critiqued due to its potential stigmatization and discrimination against persons with disabilities. The medical model tends to focus on individual bodily limitations instead of the context in which these limitations exist (Zaks, 2023).

Meanwhile, the social model of disability rejected the relevance of the biological phenomena of impairments. Instead, it views disability as something purely political. The social model emphasizes that the impairment itself does not disable individuals, but rather the social structures and attitudes that create barriers to participation in society. This model allows a more comprehensive approach to address systemic inequities and barriers faced by disabled individuals (Bickenbach, 2019; Rondinelli & Ranavaya, 2014; Traci et al., 2025).

The social determinants of disability can be defined as factors that influence the experience and impact of disability within society. Due to its relativity, this concept may vary in many cultures. However, some universal determinants of disability include economic stability, inclusive education, healthcare access, social support, and accessible physical environments. By addressing these determinants, societal barriers faced by disabled individuals can hopefully be understood and reduced (Froehlich-Grobe et al., 2021).

As touched upon by the two models, disability can be acquired at any point in life due to various factors, such as congenital deformities, chronic conditions, accidents, and senescence. The onset of disabilities can lead to limitations in daily activities shortly thereafter, underscoring the dynamic nature of disability acquisition across the lifespan (Bogart et al., 2019). Many youths acquire a disability, and for those enrolled in the conventional school system, this condition might cause unique challenges to their daily lives. University students with disabilities often experience lower retention and graduation rates due to inadequate support services and a lack of accommodations, among other barriers (Safer et al., 2020). A report stated that in Indonesia, only 2.8% of students with disabilities were able to complete an undergraduate degree (Prastiwi & Huwae, 2025). Despite efforts to implement inclusive education frameworks, participation rates remain low, particularly in low- and middle-income countries (Bani Odeh & Lach, 2023).

Right to accessible information for students with disabilities

The right to information, by definition, is a fundamental human right that ensures individuals "seek, receive, and impart information held by public bodies". It is closely tied to the principles of transparency, accountability, and the promotion of democratic governance. The right to information is enshrined in Article 19 of the Universal Declaration of Human Rights (UDHR), which recognizes freedom of expression as encompassing the ability to access information through any media regardless of frontiers (Article 19, 2016; UNESCO, 2025a). Many countries also adopted laws to operationalize this right, such as India's Right to Information Act (RTI) and Canada's Access to Information Act (AIA), which empowers citizens to request information from public authorities and mandates timely responses (Canadian Nuclear Safety Commission, 2024; Relly & Pakanati, 2021).

The right to information plays a crucial role in achieving the 2030 United Nations' Sustainable Development Goals (SDGs), particularly SDG 16.10.2, which emphasizes public access to information as a cornerstone of inclusive and accountable institutions. Emphasized by a guideline set by the United Nations Educational, Scientific, and Cultural Organization (UNESCO), it is important to leverage digital technologies to enhance access while addressing issues of digital divides, access inequality, and lack of infrastructure. These efforts aim to ensure that marginalized groups, including people with disabilities, can fully exercise their right to information (UNESCO, 2025b, 2025a).

Within the context of people with disabilities, the CRPD mandates inclusive education and equitable access to information for all (Karellou, 2019; UNESCO, 2025b). However, implementation gaps persist. As an example, a report showed that many higher education institutions in the United States failed to comply with accessibility laws like the Americans with Disabilities Act (ADA), particularly in regard to digital environments (Mullin et al., 2021). A review by Fernández-Batanero et al. (2022) confirmed this finding, reaffirming that students with disabilities frequently encounter infrastructural and pedagogical barriers, such as inaccessible course materials and untrained faculty.

Research articles and digital resources often lack basic accessibility features, creating significant barriers. As unveiled by Wentz et al. (2021), most academic journals do not enforce accessibility policies, such as alt-text for images or screen-reader compatibility. This exclusion limits students' ability to engage with scholarly work, perpetuating inequities in academic participation. Similarly, inaccessible digital platforms in universities, such as learning management systems and class media, further marginalize students with visual or cognitive disabilities (Mullin et al., 2021).

Assistive technologies (ATs) and Universal Design for Learning (UDL) principles are transformative when properly implemented. The 2023 UNESCO Global Education Monitoring (GEM) Report emphasized that ATs improve graduation rates, self-esteem, and academic performance for students with disabilities. Tools like text-to-speech software, Braille displays, and captioning services enable personalized learning and interaction (Liritantri et al., 2021). However, their effectiveness hinges on adequate training for both students and educators, which remains inconsistent across institutions (Fernández-Batanero et al., 2022; UNESCO, 2023).

Structural obstacles, such as underfunding and attitudinal biases, continue to hinder progress. Stakeholders, such as publishers and educators, often deflect responsibility for accessibility, resulting in fragmented accountability (Wentz et al., 2021). Acknowledging this issue, researchers advocate for systemic reforms, including mandatory accessibility standards for digital content, faculty training programs, and stronger enforcement of existing laws (Fernández-Batanero et al., 2022; Mullin et al., 2021). Thus, inclusive technology must be prioritized in low-resource settings, where access gaps are most pronounced (UNESCO, 2023).

Disability studies in Indonesian higher education

People with disabilities in Indonesia still face significant barriers in accessing education, especially higher education. According to the Ministry of National Development Planning, only about 5% of the 10.8 million persons with disabilities have completed a postsecondary degree. A recent survey showed that only 90 out of 4,523 universities (about 1.99%) officially accept students with disabilities. Furthermore, only five (about 0.2%) of universities are equipped with special needs units. This data showed how inaccessible higher education is for students with disabilities in Indonesia (Dzulfikar, 2019).

Responding to this, some higher education institutions took significant actions to become disability-friendly universities. Universitas Airlangga, for example, established the Airlangga Inclusive Learning Center in 2016, with other campuses following suit (Kasih, 2022). Universitas Islam Negeri (UIN) Sulthan Thaha Saifuddin Jambi, for example, has implemented the "inclusive university" framework, despite receiving challenges such as the lack of accessible physical infrastructure and relatively minimal knowledge on special needs (Pratama et al., 2024). A similar set of challenges was found in other universities, such as UIN Sunan Kalijaga and Atma Jaya Catholic University in Yogyakarta (Juwantara, 2020).

The problems with inclusive education implementation found in practice were categorized by Muhibbin & Hendriani (2021) in three main points: (1) limited access to campus facilities; (2) lack of understanding and awareness of the civitas on disability and special needs; and (3) non-inclusive curriculum. To tackle the said issues, researchers have called for comprehensive strategies through multidisciplinary collaborations. Some key recommendations might include: (1) mandatory training on inclusive education for educators; (2) special fund allocation to increase campus accessibility; and (3) intersectoral partnership to strengthen institutional capacity (Liritantri et al., 2021; Marlina et al., 2024).

Based on the literature review, the authors found that many studies on disability and higher education mainly focus on material or infrastructural inaccessibility. Despite its importance, this heavily materialistic approach tends to ignore other immaterial components that make up inclusive education, such as accessible information. Until now, minimum studies have explored how Indonesian students with disabilities access academic information that is essential to their learning process. There should be a change in paradigm for students with disabilities, where they should do more than just survive, but also thrive in academic settings. This research gap is important to fill in, considering that inaccessible information might hinder students with disabilities' participation in academic settings (Awais & Ameen, 2015; Fichten et al., 2020; Nganji, 2018).

Method

Research type

This study adopted a mixed-methods approach, which combines elements from both qualitative and quantitative methods in a single study. This approach allowed for a comprehensive exploration of participants' experiences and perspectives, combining numerical trends from the survey data with in-depth insights obtained from the qualitative data. The findings from both methods provided a more robust understanding of the research phenomenon and enriched the interpretation of the study results.

Research location

This study was conducted at Universitas Airlangga, Surabaya City, Indonesia. Since the faculty buildings were located on all three campuses, this study was done in Campuses A, B, and C of Universitas Airlangga. The data collection process was conducted offline. Universitas Airlangga was selected due to its established commitment to inclusive education, existing

programs supporting students with disabilities (particularly through the installation of Airlangga Inclusive Learning Center), and its representative role as a major public university in Indonesia, making it a relevant and insightful case for examining accessible information and inclusive education practices. By choosing this university as the main focus, this study hopes to unveil the reality of information accessibility in one of the best universities in Indonesia and potentially become a model for other universities to develop better inclusive education practices. Then, findings from this reputable university are expected to have a wide impact, both nationally and internationally, for the betterment of the lives of students with disabilities.

Population and sample

To acquire multiple perspectives on the issue, the authors involved nearly every actor in a higher education climate as the sample, such as students with disabilities, policymakers (the Deanship), non-disabled students, and professors. Two distinct questionnaires were filled out by non-disabled students (n = 106) and students with disabilities (n = 5), though for the data obtained from students with disabilities, the authors will focus on the qualitative data. The general demographic data was also obtained, such as age, sex, and year of admission (see Tables 1 and 2).

Table 1. Characteristics of the non-disabled student respondents (n = 106)

No	Characteristics	Responses	Frequency	Percentage
1	Sex	Male	25	23.6%
		Female	81	76.4%
2	Age groups (in years old)	16-18	5	4.7%
		19-21	30	28.3%
		>22	71	67.0%
3	Year of admission	2013	7	6.6%
		2014	31	29.2%
		2015	34	32.1%
		2016	15	14.2%
		2017	19	17.9%

(Source: Primary data)

Table 2. List of informants (n = 5)

No	Initials	Age (in years)	Study program	Type of disability
1	DN	18	Economics	Visual impairment
2	AA	20	Anthropology	Visual impairment
3	DH	32	Public Policy	Visual impairment
4	SD	19	Information and Library Sciences	Physical impairment
5	TA	20	Indonesian Language and Literature	Visual impairment

(Source: Primary data)

Meanwhile, the in-depth interviews and FGD sessions were conducted by ten different faculty members at Universitas Airlangga. The faculty that are represented in this study are the Faculty of Medicine, Faculty of Social and Political Sciences, Faculty of Fisheries and Marine Science, Faculty of Nursing, Faculty of Economy and Business, Faculty of Humanities, Faculty of Public Health, Faculty of Science and Technology, Faculty of Vocational Studies, and Postgraduate School. The authors interviewed the Vice Deans, Vice Directors, and Unit Leaders of such faculties.

Data collection

The quantitative data was collected through questionnaires. Meanwhile, in-depth interviews and focus group discussions (FGD) were conducted to procure the qualitative data. All information was obtained from people who worked or studied at Universitas Airlangga, Surabaya, Indonesia—all are consensual participants. The questionnaire was coded using numbers, where "Do not know" scored 0, "Strongly disagree" scored 1, "Disagree" scored 2, "Agree" scored 3, and "Strongly agree" scored 4. For the qualitative data, the semi-structured interview guidelines were designed to gain in-depth insights into the experiences of students with disabilities in accessing information and the faculty Deanship's experience in ensuring access to these pieces of information.

Data analysis

The questionnaire was analyzed quantitatively through descriptive statistics using the IBM SPSS Statistics v.26, and the data were presented in frequency distribution tables. Meanwhile, the interview and FGD transcripts were analyzed qualitatively using thematic analysis, which involved these steps: (1) familiarization with the data; (2) initial open coding to identify significant statements; (3) categorization of the codes into first-order concepts; (4) categorization of the first-order concepts into broader second-order themes; and (5) synthesization of the second-order themes into four aggregate dimensions. Since this study adopted the mixed-methods design, both transcripts and questionnaire results are considered in these steps in order to gain holistic themes to discuss in this study. These themes were, then, presented in the form of interpretive narration based on their contextual nuances. After that, the findings of this study were compared and discussed using the secondary data—findings of previous research results. Prior works of literature, such as journal articles, books, book chapters, and reports, were procured from reputable sources, such as Scopus, Web of Science, and Google Scholar.

Result and Discussion

The findings of this study are presented in four key themes: (1) university policy awareness and academic support; (2) access to research opportunities; (3) access to student organizations and self-development activities; and (4) access to career opportunities. These themes were identified through a systematic coding process, which included categorizing raw data into first-order concepts, grouping them into second-order themes, and synthesizing them into overarching dimensions. Table 3 illustrates this data structure and provides transparency regarding how each theme was derived from the analysis. Each theme is, then, further elaborated and cross-checked with data procured from other sources to provide insight into the lived experiences of students with disabilities at Universitas Airlangga regarding accessibility and inclusion in various academic and extracurricular domains.

Table 3. Data structure illustrating the development of themes from the data analysis

First-order concept	Second-order themes	Aggregate (main themes)
Most non-disabled students answered "Did not know" in the questionnaire's "Policy awareness" section.	Lack of awareness of disability-inclusive policies	University policy awareness and academic support
"Not every department or faculty staff member is well aware of what students with disabilities need."	Lack of targeted academic support for students with disabilities	University policy awareness and academic support

Most non-disabled students answered "Agree" or "Strongly agree" on the questionnaire's "Research opportunities" section.	Inclusion in research opportunities	Access to research opportunities
"If they are competent, they will be accepted."	Inclusion in research opportunities	Access to research opportunities
Most non-disabled students answered "Did not know" in the questionnaire's "Student organizations" section.	Lack of awareness of inclusion from student organizations	Access to student organizations and self-development activities
"I do not receive any information on career opportunities."	Lack of inclusive career support	Access to career opportunities

(Source: Primary data)

University policy awareness and academic support

Universitas Airlangga has enacted several policies concerning the rights of students with disabilities. Some of these policies include increased accessible information, peer support groups, disability-friendly restrooms, and many more (Hikmah et al., 2021). The university also created several seminars, workshops, and focus group discussions. As a commitment to further ensure inclusive education, the Airlangga Inclusive Learning Center was founded in 2016 (Kasih, 2022). Despite this commitment, information dissemination disparities were still noticeable, as this study later proved.

As displayed in Table 4, non-disabled students are generally unaware of university policies on students with disabilities, neither in paper nor in practice, and neither from their friends nor the university. This result is in parallel with the experiences of students with disabilities. All informants reported that they were not aware of university policies on students with disabilities. The only accessible source of information regarding university policies is their friend, with three out of five of them agreeing to this notion. This finding is quite concerning since acknowledging their own rights that are regulated by university policies or other forms of regulations holds high importance to their daily academic life. Without prior information about their basic rights and responsibilities, students with disabilities might run into certain difficulties and not know how to solve them. Moreover, they might not know how to exercise their lawful rights in accessing certain student services to potentially increase their academic achievement and improve their well-being (Andayani, 2018; Rizky, 2015)

Table 4. University policy awareness of non-disabled students

No	Statement	Score				
		0	1	2	3	4
1	I am aware of the campus's service for students with disabilities	50.9%	14.2%	15.1%	14.2%	5.7%
2	I am aware of the policy of service for students with disabilities from the campus's social media	58.5%	18.9%	14.2%	6.6%	1.9%
3	I am aware of the policy of service for students with disabilities from the campus's website	63.2%	16%	13.2%	4.7%	2.8%
4	I am aware of the policy of service for students with disabilities from my friend	41.5%	19.8%	11.3%	21.7%	5.7%

5	I am aware of the policy of service for students with disabilities from the campus's rectorate staff	67.9%	18.9%	6.6%	3.8%	2.8%
6	I am aware of the policy of service for students with disabilities from the campus's faculty staff	61.3%	17.9%	10.4%	3.8%	6.6%
7	I am aware of the policy of service for students with disabilities from the campus's department staff	61.3%	15.1%	9.4%	9.4%	4.7%

(Source: Primary data)

In terms of academic support provided by the professors and university staff, the informants mentioned that they are provided with accessible course materials and special learning assistance for certain courses. All five informants mentioned that they experienced adequate services in relation to their respective learning experiences. The accessible materials include paper handouts, journals, and course modules. The professors also provided assistance during exams, which one of our informants vividly recalled.

"For me, one of the most interesting learning experiences in the Faculty of Economics and Business is the quizzes and mid-term exams. During the mid-term exams, I was positioned in a special room, and inside, I was left alone with a special exam sheet as well. Once, I worked on my quiz in front of the class, in front of the professor's table, because I could not read the questions that the professor wrote on the whiteboard. These impressive experiences rekindled my eagerness to learn, which had gone out for some time. Thankfully, alhamdulillah [thanks be to God], in this semester, I achieved a 4.0 GPA." (Interview with DN)

Regarding Braille books and writing-to-Braille transcription services, two informants did not have access to such services, two informants experienced the services, and one was not aware that there were such services in their department or faculty. Four of five informants also stated that there are non-disabled students who offered to be their reading assistant, peer supporter (buddy), or note-taker—three of them agreed to this statement, while one of them strongly agreed. Therefore, in conclusion, our informants mainly receive learning assistance from their friends and professors. However, regarding course accessibility and reading materials, they still expected more from the university, particularly the Universitas Airlangga Library, the Airlangga Inclusive Learning Center, and the Universitas Airlangga Center of Language and Multiculture, to assist them in providing Braille books, writing-to-Braille transcription, and the usage of sign language in class. This statement was made clear by one of our informants.

"Not every department or faculty staff member is well aware of what students with disabilities need. For instance, sign language for the audially impaired and soft files for the visually impaired. There are no specific road signs for the visually impaired, even though there are our [non-disabled] friends who helped us." (Interview with TA)

Access to research opportunities

As Table 5 showed, non-disabled students were generally not aware of the social interaction and relationship between professors and students with disabilities, which is marked by an overwhelming number of respondents who voted "do not know" on all statements (35.8-46.2%). Yet, some agreed that the professors in their department and faculty are generally

respectful of students with disabilities (17-22.6%). Even though most respondents agreed that the professors were quite inclusive in their classrooms, they were not as inclusive in terms of research opportunities. About 23.6% of the respondents agreed that the professors in their department did not offer students with disabilities to participate as their co-researchers.

Table 5. Social interaction and relationships between professors and students with disabilities

No	Statement	Score				
		0	1	2	3	4
1	Professors in the department give equal opportunities for students with disabilities to voice their opinions in class	35.8%	6.6%	16%	19.8%	21.7%
2	Professors in the department respond to students with disabilities' opinions in class	35.8%	7.5%	17.%	17%	22.6%
3	Professors in the department offered to help if students with disabilities experience hardships in understanding their course	37.7%	5.7%	17.9%	21.7%	17%
4	Professors in the department offered to help students with disabilities if required	36.8%	4.7%	16%	22.6%	19.8%
5	Professors in the faculty offered to help students with disabilities if required	37.7%	6.6%	17%	25.5%	13.2%
6	Professors in the department offered students with disabilities to participate in their research	44.3%	9.4%	23.6%	12.3%	10.4%
7	Professors in the faculty offered students with disabilities to participate in their research	46.2%	8.5%	24.5%	10.4%	10.4%

(Source: Primary data)

This finding was further verified by the interviews. Four out of five informants did not even know that there are research opportunities that students with disabilities can participate in. The other informant strongly expressed their disappointment in the matter, stating that research opportunities and student-professor collaboration should be made more accessible, especially if one aspires to be an academician. This issue was addressed by the Vice Dean of the Faculty of Economics and Business, who stated that.

"Oh, of course, in other words, we are going to accept them [students with disabilities seeking research opportunities]. Because it [research] relates only to their intellectual capabilities. If they are competent, they will be accepted… No other prerequisites [other than competence], right?" (Interview with the Vice Dean of the Faculty of Economics and Business).

This acknowledgment, especially by those who are in power, like the Vice Dean, held high importance for students with disabilities. By actively acknowledging and addressing the needs of students with disabilities, the university indirectly exemplified social and academic inclusion for the entire learning community. This not only fosters a sense of belonging for

students with disabilities but also helps shift attitudes and perceptions toward disability within the broader educational setting. By experiencing a supportive and accessible learning environment, they gain skills in self-advocacy, communication, and problem-solving that will serve them well in various aspects of their lives, including future education, employment, and social interactions (Björnsdóttir, 2017; Granot, 2016; Kausik & Hussain, 2023).

Access to student organizations and self-development activities

As displayed in Table 6, most non-disabled students were unaware of how students with disabilities navigate themselves in student organizations and self-development activities. Those who were aware generally agreed that there were still disparities for students with disabilities. The respondents viewed student organizations, whether at the department-, faculty-, or university-level, as inadequate to provide accessible information for students with disabilities. The information might include scholarship socializations, digital content, workshops, seminar opportunities, and calls for papers. This information disparity is highly unfortunate since student organizations and self-development activities might improve their well-being, overall college experience, and personal growth (Bialka et al., 2017).

Table 6. Student organizations and self-development activities for students with disabilities

No	Statement	Score				
		0	1	2	3	4
1	Department-level organizations provide accessible information to students with disabilities	38.7%	13.2%	20.8%	16%	11.3%
2	Faculty-level organizations provide accessible information to students with disabilities	42.5%	11.3%	19.8%	16%	10.4%
3	University-level organizations provide accessible information to students with disabilities	39.6%	14.2%	19.8%	17.9%	8.5%
4	External organizations provide accessible information to students with disabilities	56.6%	7.5%	18.9%	9.4%	7.5%

(Source: Primary data)

The students with disabilities shared different perspectives on the matter. All five informants viewed the department- and faculty-level organizations as most helpful in providing accessible information to them, in comparison to university-level and external organizations. This matter's result should be taken into evaluation, especially by external and university student bodies, on how to increase access for students with disabilities.

The media or platform to promote such relevant information is also important. The authors find that most students with disabilities who participated in this research were exposed to their needed information through several ways, such as social media and peer-to-peer communication. Conventional posters and faculty wall magazines, on the other hand, were not an effective method to convey messages and opportunities to students with disabilities.

The media plays a pivotal role in providing accessible information to students with disabilities. One of the key aspects of this importance is the power of choice and flexibility it offers. By presenting information in various formats, such as text, audio, and video, media allows students with disabilities to access content in ways that best suit their individual needs and preferences. Moreover, the media can enhance engagement and understanding. Visual aids,

multimedia presentations, and interactive content can make complex concepts more accessible and comprehensible to students with disabilities, including those with visual or auditory impairments (Fichten et al., 2020; Gernsbacher, 2015; Hollier, 2016).

An example of accessible media for students with disabilities is captioning. Captioning refers to the addition of written text that is timely regulated so that persons who have trouble hearing it can understand the message without having to hear it. Moreover, prior studies have found that students who watched captioned videos have higher comprehension. Simply put, captioning might help not only students with disabilities but also non-disabled students (Gernsbacher, 2015; Youngblood et al., 2018).

Access to career opportunities

Unfortunately, this study found that not even half of our informants receive accessible information about career opportunities. Only three out of five students with disabilities who participated in this study often received adequate information about career opportunities from their respective faculty. At the department- and university-level, however, most either do not know or do not receive them at all. Universitas Airlangga also has a special body that aims to promote career opportunities and stimulate entrepreneurial skills, named the Directorate of Career Development, Entrepreneurship Incubation, and Alumni. This special body, however, was considered lacking in providing access for students or alumni with disabilities, with only two informants feeling benefited by the Directorate's information. The Board of Alumni was also deemed inadequate to provide accessible information to students with disabilities.

This finding is quite concerning since previous studies found a persistent employment gap for people with disabilities. According to the United States Bureau of Labor Statistics (2024), the unemployment rate for people with disabilities was reported at 7.2%, which is 3.7% higher than for those without disabilities. Furthermore, people with disabilities are less likely to obtain employment, and if they do, they tend to be employed in lower-skilled and entry-level occupations. After obtaining employment, people with disability are also more likely to be selected out of work (Milner et al., 2019). This disparity highlights the ongoing challenges faced by people with disabilities in achieving equitable employment outcomes.

The role of higher education institutions is crucial in addressing these issues. By guaranteeing access to information on career opportunities and employment outcomes, students with disabilities can seek appropriate accommodations and support services. Knowledge of available resources, such as vocational training programs and job placement services, might significantly enhance their employability (Lindsay et al., 2021). Accessible information on scholarship opportunities, inclusive educational programs, and mentorship initiatives might help in bridging the disparities between students with disabilities and quality education and vocational training (Bureau of Labor Statistics, 2024). Realizing the essential roles of information technology and digitalization, access to information about skill development resources might help enable students with disabilities to acquire relevant skills that might enhance their employability. Conducting digital literacy workshops, for example, might help students with disabilities to improve their career readiness (Alper & Goggin, 2017).

Study limitations and implications

This study is limited by its focus on a single institution, which may affect the generalizability of the findings to other universities in Indonesia or globally. Aside from the minimum amounts, almost all (four of five) informants are visually impaired, indicating that there might be a bias in the data presented. Thus, the results and recommendations derived from this study might not apply to every type of disability. Future studies should be conducted in different universities or regions with larger and more diverse sample groups so that more

targeted and accurate recommendations can be synthesized to improve inclusive education practices and policies in Indonesian higher education institutions.

This study theoretically contributes to the growing body of literature on inclusive education by highlighting the role of institutions in shaping the accessibility of information, as well as underscoring the relevance of social model frameworks in understanding disability and inclusion, particularly in higher education settings globally and nationally. This study affirmed the social model of disability, where institutional challenges, instead of individual physical impairment, hinder students with disabilities from achieving their true potential. This finding showed how the social institution theory and organizational change model require further investigation to fully comprehend how universities can efficiently implement inclusive education frameworks.

This study managed to identify access to information challenges for students with disabilities and offered practical recommendations to Universitas Airlangga and other universities to increase their efforts to accommodate students with disabilities. Practically, this study's findings highlight the importance of multi-institutional support, staff training, and accessible infrastructure in promoting inclusive education by developing targeted intervention strategies that enhance access to information and learning resources for students with disabilities.

Even though this study is focused on Universitas Airlangga, the implications of this study's findings are still highly relevant to other universities. Many higher education institutions, especially in middle- and low-income countries, might face similar challenges to ensure information accessibility for students with disabilities. The recommendations made in this study could be referenced by these institutions to adopt a more inclusive educational framework. Further analysis can also develop these suggestions to make more holistic guidelines for inclusive education.

Conclusion

Based on the findings of this study, Universitas Airlangga certainly has the potential to become an inclusive university. However, there are still several essential challenges to the implementation of it. Ensuring more accessible information for students with disabilities requires the university to put more budget into disability-friendly student services. Some services that could be added might include noised road signs, sign language interpreters, and text-to-Braille transcription in every classroom, in both faculty and rectorate buildings. Furthermore, the skills of those who have the power and platform to share reliable information should be increased in terms of communicating with students with disabilities. Therefore, the authors recommend that the university add, at least, compulsory Indonesian Sign Language workshops or courses for every civitas who wants to participate. The authors acknowledge that these recommendations are far from easy, and hence, the authors appreciate every "baby step" effort that the university has taken in slowly transforming the campus into a more inclusive university. The authors also recommend that the university utilize already-existing bodies, such as the Airlangga Inclusive Learning Center, to create workshops, increase community volunteers, and promote inclusive learning on campus.

As a final remark, this study reaffirms the message that true inclusion in higher education is more than just guaranteeing physical access. Higher education institutions should carry the UDHR principles in guaranteeing that each student, regardless of their (dis)abilities, should have equal opportunities to achieve their true potential. By increasing access to information, universities have made significant progress toward a future where students with disabilities are fully integrated into society, empowered, and supported to achieve their academic and professional purposes.

Acknowledgments

Authors' Contributions

All authors have contributed to the final manuscript. The contribution of all authors: conceptualization, methodology, formal analysis, writing original draft preparation, writing review, and editing. All authors have read and agreed to the published version of the manuscript.

Conflict of Interest

All authors have no conflict of interest related to this study.

Funding

References

Aisyah, P. D., Lestari, M. M., & Diana, L. (2024). Penerapan Pasal 27 Convention on the Rights of Persons with Disabilities 2006 dalam Undang-Undang Nomor 8 Tahun 2016 tentang Penyandang Disabilitas. *Aktivisme: Jurnal Ilmu Pendidikan, Politik Dan Sosial Indonesia*, *1*(3), 167–175. https://doi.org/10.62383/aktivisme.v1i3.340

Alaydrus, S. M., & Budianto, A. K. (2024). Marginalized identity in Indonesian higher education: navigating nonbinary students' experience on campus. *Simulacra*, *7*(1), 35–50. https://doi.org/10.21107/sml.v7i1.22930

Alper, M., & Goggin, G. (2017). Digital technology and rights in the lives of children with disabilities. *New Media & Society*, *19*(5), 726–740. https://doi.org/10.1177/1461444816686323

Andayani. (2018). Studi kebijakan kampus inklusif: implementasi Permendikbud RI No 46/2014. *Welfare: Jurnal Ilmu Kesejahteraan Sosial*, *7*(2), 186–207. https://ejournal.uin-suka.ac.id/dakwah/welfare/article/view/2018.072-05/1099

Andayani, & Afandi, M. (2016). Pemberdayaan dan pendampingan komunitas penyandang disabilitas dalam mengakses pendidikan tinggi. *Aplikasia: Jurnal Aplikasi Ilmu-Ilmu Agama*, *16*(2), 153–166. https://doi.org/10.14421/aplikasia.v16i2.1178

Article 19. (2016). *The public's right to know: principles on right to information legislation*. Article 19. https://www.article19.org/data/files/RTI_Principles_Updated_EN.pdf

Astawa, I. N. T. (2021). Pendidikan inklusi dalam memajukan pendidikan nasional. *Guna Widya: Jurnal Pendidikan Hindu*, *8*(1), 65–76. http://ejournal.ihdn.ac.id/index.php/GW

Awais, S., & Ameen, K. (2015). Information accessibility for students with disabilities: an exploratory study of Pakistan. *Malaysian Journal of Library and Information Science*, *20*(2), 103–115. https://sare.um.edu.my/index.php/MJLIS/article/download/1768/2533

Bani Odeh, K., & Lach, L. M. (2023). Barriers to, and facilitators of, education for children with disabilities worldwide: a descriptive review. *Frontiers in Public Health*, *11*(1–20). https://doi.org/10.3389/fpubh.2023.1294849

Bialka, C. S., Morro, D., Brown, K., & Hannah, G. (2017). Breaking barriers and building bridges: understanding how a student organization attends to the social integration of college students with disabilities. *Journal of Postsecondary Education and*

Disability, *30*(2), 157–172. https://files.eric.ed.gov/fulltext/EJ1153574.pdf

Bickenbach, J. E. (2019). The ICF and its relationship to disability studies. In N. Watson, A. Roulstone, & C. Thomas (Eds.), *Routledge Handbook of Disability Studies* (2nd ed., pp. 51–66). Routledge. https://www.taylorfrancis.com/chapters/edit/10.4324/9780429430817-5/icf-relationship-disability-studies-jerome-bickenbach

Björnsdóttir, K. (2017). Belonging to higher education: inclusive education for students with intellectual disabilities. *European Journal of Special Needs Education*, *32*(1), 125–136. https://doi.org/10.1080/08856257.2016.1254968

Bogart, K. R., Rosa, N. M., & Slepian, M. L. (2019). Born that way or became that way: stigma toward congenital versus acquired disability. *Group Processes & Intergroup Relations*, *22*(4), 594–612. https://doi.org/10.1177/1368430218757897

Bureau of Labor Statistics. (2024). *Persons with a disability: labor force characteristics — 2023*. https://www.bls.gov/news.release/pdf/disabl.pdf

Canadian Nuclear Safety Commission. (2024). *Annual report on the Access to Information Act 2023-24*. Government of Canada. https://www.cnsc-ccsn.gc.ca/eng/resources/publications/reports/access-to-information-and-privacy/annual-report-atip-2023-2024/

Dzulfikar, L. (2019). *The long road for disability-inclusive education in Indonesia's universities*. The Conversation. https://theconversation.com/the-long-road-for-disability-inclusive-education-in-indonesias-universities-128224

Fedulova, I., Ivanova, V., Atyukova, O., & Nosov, V. (2019). Inclusive education as a basis for sustainable development of society. *Journal of Social Studies Education Research*, *10*(3), 118–135. https://jsser.org/index.php/jsser/article/view/933/390

Fernández-Batanero, J. M., Montenegro-Rueda, M., & Fernández-Cerero, J. (2022). Access and participation of students with disabilities: the challenge for higher education. *International Journal of Environmental Research and Public Health*, *19*(19), 11918. https://doi.org/10.3390/ijerph191911918

Fichten, C. S., Olenik-Shemesh, D., Asuncion, J., Jorgensen, M., & Colwell, C. (2020). Higher education, information and communication technologies and students with disabilities: an overview of the current situation. In *Improving Accessible Digital Practices in Higher Education* (pp. 21–44). Springer International Publishing. https://doi.org/10.1007/978-3-030-37125-8_2

Fougeyrollas, P., Boucher, N., Edwards, G., Grenier, Y., & Noreau, L. (2019). The disability creation process model: a comprehensive explanation of disabling situations as a guide to developing policy and service programs. *Scandinavian Journal of Disability Research*, *21*(1), 25–37. https://doi.org/10.16993/sjdr.62

Froehlich-Grobe, K., Douglas, M., Ochoa, C., & Betts, A. (2021). Social determinants of health and disability. In D. J. Lollar, W. Horner-Johnson, & K. Froehlich-Grobe (Eds.), *Public Health Perspectives on Disability* (Vol. 16, pp. 53–89). Springer US. https://doi.org/10.1007/978-1-0716-0888-3_3

Gernsbacher, M. A. (2015). Video captions benefit everyone. *Policy Insights from the Behavioral and Brain Sciences*, *2*(1), 195–202. https://doi.org/10.1177/2372732215602130

Granot, D. (2016). Socioemotional and behavioural adaptation of students with disabilities: the significance of teacher–student attachment-like relationships. *Emotional and Behavioural Difficulties*, *21*(4), 416–432. https://www.tandfonline.com/doi/abs/10.1080/13632752.2016.1235324

Hamidi, J. (2016). Perlindungan hukum terhadap disabilitas dalam memenuhi hak

mendapatkan pendidikan dan pekerjaan. *Jurnal Hukum Ius Quia Iustum*, *23*(4), 652–671. https://doi.org/10.20885/iustum.vol23.iss4.art7

Hikmah, T. L., Yusuf, M., & Sianturi, R. S. (2021). Kriteria pengembangan kampus ramah disabilitas di Universitas Airlangga. *Jurnal Teknik ITS*, *9*(2), C147–C153. https://doi.org/10.12962/j23373539.v9i2.55409

Hollier, S. (2016). The growing importance of accessible social media. In K. Ellis & M. Kent (Eds.), *Disability and Social Media: Global Perspectives* (1st ed., pp. 77–88). Routledge. https://doi.org/https://doi.org/10.4324/9781315577357

Juwantara, R. A. (2020). Pemenuhan hak difabel di UIN Sunan Kalijaga dan Universitas Atma Jaya Yogyakarta. *INKLUSI*, *7*(2), 253–270. https://doi.org/10.14421/ijds.070204

Karellou, J. (2019). Enabling disability in higher education. a literature review. *Journal of Disability Studies*, *5*(2), 47–54. http://pubs.iscience.in/journal/index.php/jds/article/view/964

Kasih, A. P. (2022). *Seperti ini langkah Unair wujudkan kampus ramah disabilitas*. Kompas.Com. https://edukasi.kompas.com/read/2022/06/22/150551171/seperti-ini-langkah-unair-wujudkan-kampus-ramah-disabilitas?page=all

Kausik, N. H., & Hussain, D. (2023). The impact of inclusive education on academic motivation, academic self-efficacy, and well-being of students with learning disability. *Journal of Education*, *203*(2), 251–257. https://doi.org/10.1177/00220574211031957

Lee, P.-H., & Torres Celis, S. (2024). Crip-queer intimacy, alliance and activism: towards holistic sexuality education in Taiwan. *Sex Education*, *24*(4), 562–577. https://doi.org/10.1080/14681811.2023.2225159

Lindsay, S., Cagliostro, E., Leck, J., & Stinson, J. (2021). Career aspirations and workplace expectations among youth with physical disabilities. *Disability and Rehabilitation*, *43*(12), 1657–1668. https://doi.org/10.1080/09638288.2019.1671505

Liritantri, W., Handoyo, A. D., Bazukarno, K. P., & Arnita, L. K. (2021). Evaluasi terhadap penerapan desain aksesibilitas untuk disabilitas fisik di Fakultas Industri Kreatif Universitas Telkom. *ARSITEKTURA*, *19*(2), 263–274. https://doi.org/10.20961/arst.v19i2.50841

Majoko, T. (2018). Participation in higher education: voices of students with disabilities. *Cogent Education*, *5*(1), 1–17. https://doi.org/10.1080/2331186X.2018.1542761

Marlina, I., Wibowo, G., Bastias, D. D., Sijapati Basnett, B., Prasetyo, D. D., & Nasiir, M. (2024). Counting the costs: understanding the extra costs of living with disability in Indonesia to advance inclusive policies within the SDG framework. *Frontiers in Rehabilitation Sciences*, *5*(1236365), 1–19. https://doi.org/10.3389/fresc.2024.1236365

Milner, A., Shields, M., King, T. L., Aitken, Z., LaMontagne, A. D., & Kavanagh, A. M. (2019). Disabling working environments and mental health: a commentary. *Disability and Health Journal*, *12*(4), 537–541. https://doi.org/10.1016/j.dhjo.2019.06.002

Muhibbin, M. A., & Hendriani, W. (2021). Tantangan dan strategi pendidikan inklusi di perguruan tinggi di Indonesia: literature review. *JPI (Jurnal Pendidikan Inklusi)*, *4*(2), 92–102. https://doi.org/10.26740/inklusi.v4n2.p92-102

Mullin, C., Gould, R., & Harris, S. P. (2021). *Digital access for students in higher education and the ADA: an ADA Knowledge Translation Center research brief*. https://adata.org/sites/adata.org/files/files/Digital Access for Students_final_2021.pdf

Mulyadi, A. W. E. (2017). Poliicy of inclusive education for education for all in Indonesia.

Policy & Governance Review, *1*(3), 201–212. https://doi.org/10.30589/pgr.v1i3.57

Nganji, J. T. (2018). Supporting the information journey of students with disabilities through accessible learning materials. *Information and Learning Science*, *119*(12), 721–732. https://doi.org/10.1108/ILS-07-2018-0062

Paechter, C., Toft, A., & Carlile, A. (2021). Non-binary young people and schools: pedagogical insights from a small-scale interview study. *Pedagogy, Culture & Society*, *29*(5), 695–713. https://doi.org/10.1080/14681366.2021.1912160

Prastiwi, H. B., & Huwae, A. (2025). Berjuang ditengah kesulitan: potret academic well-being mahasiswa difabel di perguruan tinggi inklusif. *Bulletin of Counseling and Psychotherapy*, *7*(1), 1–12. https://journal.kurasinstitute.com/index.php/bocp/article/view/1234/900

Pratama, Y. S. A., Armansyah, Y., & Fathoni, M. K. (2024). Implementasi kebijakan kampus ramah difabel di Universitas Islam Negeri Sultan Thaha Saifuddin Jambi. *Journal of Disability Studies and Research*, *3*(1), 23–32. https://e-journal.lp2m.uinjambi.ac.id/ojp/index.php/jdsr/article/view/2635/1244

Relly, J. E., & Pakanati, R. (2021). Freedom of information lessons from India: collaboration, co-production and rights-based agenda building. *Journalism*, *22*(4), 974–992. https://doi.org/10.1177/1464884918817032

Rizky, U. F. (2015). Kebijakan kampus inklusif bagi penyandang disabilitas (studi tentang advokasi kebijakan kampus inklusif di Universitas Brawijaya). *IJDS: Indonesian Journal of Disability Studies*, *2*(1), 30–37. https://ijds.ub.ac.id/index.php/ijds/article/view/27/19

Rondinelli, R. D., & Ranavaya, M. (2014). Disability assessment. In H. T. Benzon, J. P. Rathmell, C. L. Wu, D. C. Turk, C. E. Argoff, & R. W. Hurley (Eds.), *Practical Management of Pain* (5th ed., pp. 257-268.e1). Elsevier. https://doi.org/10.1016/B978-0-323-08340-9.00017-7

Safer, A., Farmer, L., & Song, B. (2020). Quantifying difficulties of university students with disabilities. *Journal of Postsecondary Education and Disability*, *33*(1), 5–21. http://files.eric.ed.gov/fulltext/EJ1273641.pdf

Shpigelman, C.-N., Mor, S., Sachs, D., & Schreuer, N. (2022). Supporting the development of students with disabilities in higher education: access, stigma, identity, and power. *Studies in Higher Education*, *47*(9), 1776–1791. https://doi.org/10.1080/03075079.2021.1960303

Traci, M. A., Meshesha, H. S., & Horner-Johnson, W. (2025). Public health dimensions of disability. In S. R. Quah (Ed.), *International Encyclopedia of Public Health* (3rd ed., pp. 887–900). Elsevier. https://doi.org/10.1016/B978-0-323-99967-0.00146-0

UNESCO. (2023). *Global education monitoring report 2023: technology in education: a tool on whose terms?* GEM Report UNESCO. https://doi.org/10.54676/UZQV8501

UNESCO. (2025a). *Access to information laws*. UNESCO. https://www.unesco.org/en/access-information-laws

UNESCO. (2025b). *Right to information*. UNESCO.

Wentz, B., Lazar, J., Jaeger, P. T., & Gorham, U. (2021). A socio-legal framework for improving the accessibility of research articles for people with disabilities. *Journal of Business and Technology Law*, *16*(2), 223–257. http://www.ncbi.nlm.nih.gov/pubmed/35721784

Youngblood, N. E., Tirumala, L. N., & Galvez, R. A. (2018). Accessible media: the need to prepare students for creating accessible content. *Journalism & Mass Communication Educator*, *73*(3), 334–345. https://doi.org/10.1177/1077695817714379

Zaks, Z. (2023). Changing the medical model of disability to the normalization model of

disability: clarifying the past to create a new future direction. *Disability & Society*, 1–28. https://doi.org/10.1080/09687599.2023.2255926