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FRAMING INCLUSIVITY: A PHOTOVOICE EXPLORATION OF DISABILITY ACCOMMODATIONS IN SANATA DHARMA UNIVERSITY

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Abstract

The voices of students with disabilities in inclusive higher education have not been widely revealed. This study aims to capture the learning experience in inclusive higher education using the photovoice method involving students with disabilities. The subject of this research includes 3 deaf students who received assistance from the Center for the Study of Individuals with Special Needs, 1 autistic student, and 3 companions of students with disabilities. The activities carried out were emphasized so that the subjects could convey their aspirations. Subjects were asked to photograph, record, and reflect on their experiences of good practices in inclusive learning, concerns experienced, and suggestions for improvement. The problems experienced were problems regarding accessibility, availability of infrastructure, understanding of deaf and autistic culture, and career problems. Furthermore, a critical dialogue was carried out to reach policymakers at the university and efforts to provide better inclusive education services.

Keywords: accommodation, disability, inclusivity, photovoice

Introduction

The photovoice method was introduced by Wang and Burris in the 1990s in their efforts to conduct research to reveal the voices of marginalized groups. Participants in this study were involved in providing research data through specific photography techniques. Participants were asked to identify the problems that occurred to them, document them in the form of photos, and express the photos as part of the community's voice (Wang & Burris, 1997). In this case, photovoice becomes a medium to tell or narrate daily events that are the voice of the community and have not had the opportunity to be expressed.

Currently, the use of photovoice has been widely used in various research settings, various needs, and various ages from children (Butschi & Hedderich, 2021), college students (Wass et al., 2020), to the elderly (Ronzi et al., 2016). Even for individuals with intellectual disabilities (Chinn & Balota, 2023; Overmars-Marx et al., 2018; Overmars-Marx et al., 2018), individuals with severe learning disabilities (Cluley, 2017), and individuals with hearing disabilities (Mabruroh et



al., 2022). In addition, photovoice can also be used as a data collection method for people with physical disabilities by modifying the camera (Dassah et al., 2017). The flexibility of research design with the photovoice method makes it very adaptable according to the specific needs of participants and the community context in which the research is conducted (Sutton-Brown, 2014).

The use of photovoice has three main purposes, namely: (1) To enable a group of people/communities to record and reflect on the strengths and concerns of their community, (2) to encourage critical dialogue and knowledge about important community issues based on portraits obtained through large and small group discussions, (3) to reach policy makers. In line with these purposes, photovoice can be used as a tool for participatory research. Photovoice is very flexible and can be adapted to specific participatory purposes, different groups and communities, and different public health problems (Wang & Burris, 1997).

Research using the photovoice method is suitable for delivering the voices of marginalized groups, including people with disabilities. This study tries to explore the problems faced by students with disabilities in inclusive higher education. In practice, although inclusive education has made significant progress, it is still problematic even in developed countries. Inclusive education in higher education in England, based on an article written by Shaw, has made significant progress in the last 50 years, but systemic barriers still exist. This article emphasizes the need for changes in policy and social attitudes to provide real inclusive education for students with disabilities in higher education. It is necessary so that students with disabilities can get quality academic learning and avoid the risk of withdrawing from university. That way, higher education institutions not only follow government recommendations to open up opportunities for them to study at university, but also accommodate them well in the learning process. This article recommends conducting further research to realize inclusive education that is in accordance with the life experiences of people with disabilities (Shaw, 2024).

Sanata Dharma University has a history of assisting and graduating students with disabilities. However, there has never been any research that specifically explores the learning experiences of students with disabilities or the students who assist them. Research on this matter is very much needed to provide input to stakeholders in order to continuously improve the quality of services. Good practices need to be improved and things that still need to be improved have to be pursued.

In this study, the research method chosen was using photovoice. The activities carried out were emphasized on the aim of enabling community groups, in this case students with disabilities at Sanata Dharma University and also the students who accompanied them in conveying their aspirations. This group was asked to record and reflect on the experience of good practices of inclusive learning at Sanata Dharma University and also the concerns they experienced. Furthermore, critical dialogues are encouraged to occur in focused discussion groups to reach policy makers at the university to enable them providing optimal inclusive education services. This is in line with the universal apostolic preference lived by Sanata Dharma University, namely walking with the excluded, in this case students with disabilities.

The use of photovoice is expected to provide input that encourages systemic change in the higher education environment as research conducted by Strack et al.

In their research, the photovoice project succeeded in revealing the perspectives of black male students and giving them a voice in the process of advocating for policy change on campus. This study emphasizes the importance of listening to students' voices in designing programs that support their academic success and shows the potential of participatory methods in encouraging systemic change in the higher education environment (Strack et al., 2018).

Method

This study used data collection techniques through photos collected from subjects with hearing disabilities or deaf, and autism along with students accompanying them during lectures. The photos collected represented the subject's voice, so they were often referred to as photovoice. VOICE itself is an abbreviation of "Voicing Our Individual and Collective Experience" (Wang & Burris, 1997). This study aimed to find various good practices and things to be improved in the education system at Sanata Dharma University through participatory and collective dialogue from research participants. The subjects of this study consisted of 3 deaf students receiving assistance from the Center for the Study of Individuals with Special Needs (PSIBK), 1 autistic student, and 3 companions of students with disabilities. All participants had given their consent to participate in the study and were aware that their names will not be published.

Photovoice method is a participatory approach to qualitative research that combines photography with narrative. It gives voice to individuals or communities to present their experiences, views, and issues relevant to them through images they take themselves.

Wang and Burris (1997) outline the following steps for conducting photovoice research:

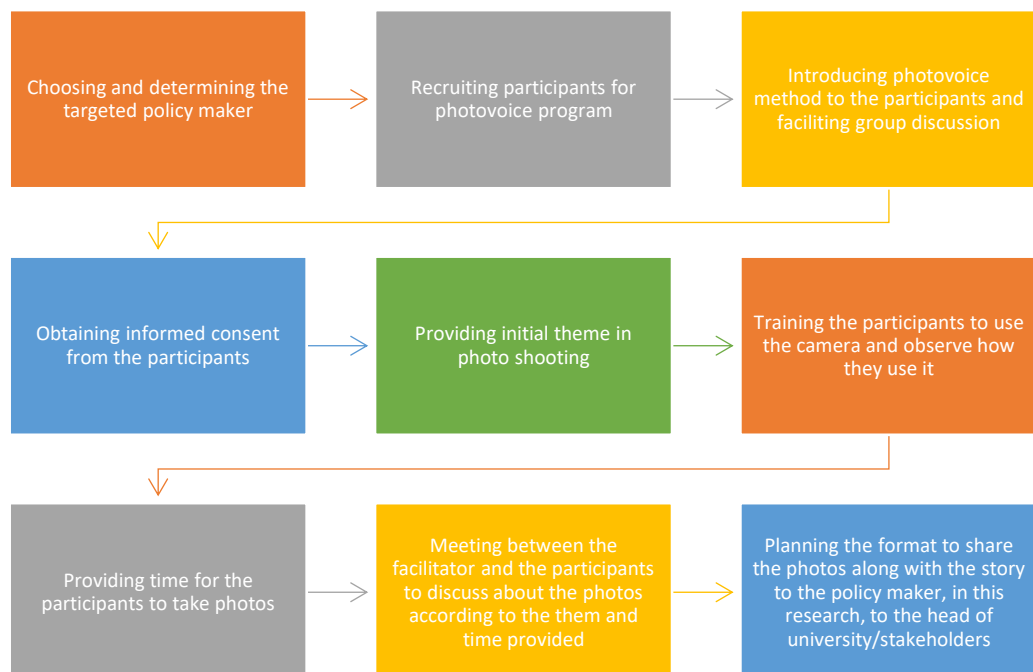


Figure 1. Photovoice research steps

Guided open-ended question to discuss the pictures taken by participants using a special technique from Wang, (1999); (Sutton-Brown, 2014) namely SHOWeD, an acronym.

The guided open-ended questions, adjusted to the context of the research objectives, were as follow:

1. What do you **See** in this photo related to the learning activities accommodating students with disabilities?
2. What is actually **H**appening in this photo related to the learning activities accommodating students with disabilities?
3. How does this photo relate to **O**ur life or learning activities our accompanying students with disabilities?
4. **W**hy this situation, worry, concern, or power **E**xist in this photo? (**We**) Describe your unconveyed voice!
5. What can we **D**o about the thing the in photo? Mention suggestions you can provide to address your concerns related to accommodation for students with disabilities in inclusive higher education.

Data processing

The following data processing steps were done based on the steps from Wang and Burris (1997):

- a. *Selecting*: selecting the most accurate photo that can represent the community necessity.
- b. *Contextualizing*: telling the meaning or significance of the photo.
- c. *Codifying*: identifying issue, theme or related theory.

In the selecting stage, participants were asked to choose from the many photos they took that best represented their experiences, feelings, challenges, or needs during their education at an inclusive higher education institution. The purpose of this selection activity was to narrow down the many images or objects that respondents might have photographed to those that best represented their voices. Participants were also encouraged to engage in reflective practice by asking themselves why the photo was important to convey and what voice it was intended to convey. During the process, the facilitator could assist participants if they had difficulty selecting an object by guiding their reflective thinking.

The next stage was contextualization. This stage involved participants sharing the meaning behind the photo and the voice behind it. Photos could be narrated either orally or in writing. The facilitator could ask exploratory questions based on the guidelines from SHOWeD. Research participants were expected to provide more detailed context regarding their experiences learning and interacting at an inclusive higher education institution and their expectations regarding suggested improvements.

The codifying stage is an overall analysis process to identify emerging issues, patterns, themes, or theories based on the totality of the collected photos. These photos and their narratives were connected and coded or categorized to identify recurring themes or shared voices. Participants could be brought together to discuss what they wanted to convey to the stakeholders and policymakers so their voices would be heard.

Findings and Discussion

The results of this study are in the form of photographs collected from participants during the period June-October 2024. 6 participants submitted their photos while 1 participant chose not to take photos but also provided information about the issues they wanted to voice during the sharing session. A total of 18 photos were collected which were then identified, recorded, and reflected by students with disabilities and assistants of students with disabilities from their learning experiences in inclusive classes. Subsequently, the researcher selected critical dialogues emerged from the photograph learning experiences in the inclusive campus, along with their hopes and desire for changes or improvements. The following are data collected from the photos by the participants along with narratives related to the results of the photos.

The use of easy-to-understand language in Learning Management System (LMS) and learning process

Deaf Subject 1 said that the Learning Management System (LMS) has greatly helped him in learning. However, he noted one thing that the information in the LMS should be made more informative for the deaf students. The challenges faced by deaf students, especially in terms of accessibility, are language literacy. Often deaf people have limited language or knowledge of terms, so it is necessary to compile an LMS that takes into account the abilities of deaf students. In compiling an LMS, lecturers can provide alternative text for image explanations, text that can be synchronized with multimedia, videos with subtitles and explanations of complex academic terms, and include graphics and visual displays supporting the text. It is also necessary to translate English terms that may be confusing for deaf students, who speak Indonesian as their mother tongue, into Bahasa Indonesia (McKeown & McKeown, 2019).



Figure 2. Learning management system

S: *The picture shows the LMS used by the lecturers to provide learning materials, assignments submission, and feedback to the students*

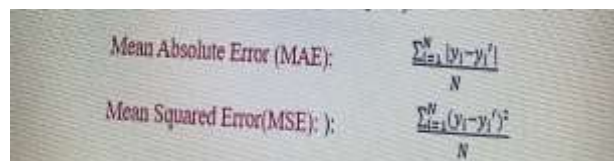
H: *If it is filled completely and clearly, it will be very helpful for deaf students for learning, but if it is incomplete, it will be confusing for deaf students*

O: *Through LMS, I can learn well because there are various sources provided by the lecturer. The problem occurs when the lecturer does not fill the LMS completely and informatively*

We: *Sometimes I worry that I don't understand the material given by the lecturer*

D: *My voice is that I hope that lecturers fill the LMS completely, including various sources that complement the material delivered orally. Reading materials and videos will be very helpful for understanding*

The problem regarding accessibility in terms of language was also conveyed by the companion of deaf Subject 2. Not only in the LMS but also during the lecturing process.


$$\begin{array}{ll} \text{Mean Absolute Error (MAE):} & \frac{\sum_{i=1}^N |y_i - \hat{y}_i|}{N} \\ \text{Mean Squared Error (MSE):} & \frac{\sum_{i=1}^N (y_i - \hat{y}_i)^2}{N} \end{array}$$

Picture 3. A slide show of a lecturer

Data from the deaf student companion:

This photo shows a PowerPoint (PPT) material taken from a laptop display. It explains about the Mean Absolute Error (MAE) and Mean Squared Error (MSE), which are used to measure the level of error in a recommendation system. This material is a part of the Recommendation System lecture that is being attended by a deaf student that I accompany.

This photo shows material being delivered in English. In lectures, lecturers often use English to explain concepts, which makes it difficult for accompanying students like us to take notes, and for deaf students to understand the material directly. This creates challenges in the learning process.

I took this photo to highlight the difficulties experienced by deaf student I accompany and me as the companion in taking courses that use English. These difficulties arise because the technical material is delivered in a language that not all students are fluent in, so understanding is slower.

Through this photo, I want to show that the use of English in delivering lecture materials, especially complex materials like this, can be a barrier for students with limited accessibility, such as deaf students. Although English is an international language, there is a need to provide materials in a language that is easier to understand, or perhaps using two languages (bilingual) to help understanding.

This photo provides an opportunity to reflect on the importance of a more inclusive learning approach. Delivering materials in two languages (English and Bahasa Indonesia) or providing written transcripts of lecturers' explanations can greatly help students, including deaf friends, to understand the material more easily. In addition, lecturers can also consider using visualizations or other media that can help students digest difficult concepts. This will improve the quality of learning, making it more inclusive and effective for all learners.

Provision of facilities and infrastructure that empower students with disabilities

Two Deaf students voiced the importance of providing campus facilities and infrastructure that can be accessed independently by students with disabilities, namely the existence of computers in the library that can provide information on how to borrow books, where the books are located, and how to access them. This written information makes it very easy for deaf students to access books independently. In addition, the existence of various written instructions such as lecturers' rooms, laboratory rooms, and so on, makes it easy for deaf students to find rooms independently. However, there is still a thing that needs to be added, namely the need for written information boards displayed in the library, because deaf students cannot hear information from librarians if the information is delivered through the loudspeaker device.



Figure 4. Loudspeaker device installed in the library

S: *This loudspeaker device is installed in the library and when the library is about to close, the information will be announced by the librarian that the library will be closed soon*

H: *When the announcement is made, deaf students cannot hear the information being conveyed*

O: *Having PSIBK does not mean that all facilities have met the requirements for students with disabilities, including deaf students. That is one of the facilities that is not friendly to me as a deaf student. I cannot hear what is being conveyed through this loudspeaker device*

W: *When the librarian feels that the announcement has been made, he will turn off the lamp and lock the door. It will be dangerous if deaf students cannot hear the announcement and being locked inside the library*

D: *Provide information on an electronic board that can be read by deaf students so that the information can be received well*



Figure 5. Computer for book lending services in library

S: In this photo is a computer used to perform self-service book lending in the library

H: Using the help of this computer can make it easier to search for books without having to ask the librarian

O: This computer can help the deaf students to do independent learning and serve themselves. Hopefully, there can be various facilities that make it easier for students with disabilities to find information themselves

We: The concern occurs is that the librarians have not mastered sign language so communicating with them is difficult. It is easier to ask directly on the computer

D: The suggestion is to increase the facilities that enable students with disabilities to access information independently



Figure 6. Nameplate

Data from the deaf student companion:

In this photo, the nameplate serves as a directional guide that makes it easier for people, especially deaf students and their companions, to understand and find the locations of the offices in this building. The nameplate is very helpful because it provides clear information without having to ask other people.

This photo shows a nameplate in the campus hallway that indicates important positions such as the Head of the PMIPA FKIP Department, the Head of the Physics Education Study Program, and the Deputy Head of the Physics Education Study Program. This nameplate serves as a clear location guide in the building.

I chose this photo to show the importance of nameplates in helping deaf students and their companions navigate the campus environment. The presence of a nameplate like this provides better accessibility for students who need visual guidance, reducing confusion when looking for a particular place. This photo conveys that a nameplate located in a strategic place is very useful for anyone, especially deaf students. However, I would also like to suggest that information like this should not only be available in the hallway, but also in more public places such as elevators or bulletin boards, so that everyone can see it more easily.

This photo shows the importance of visual accessibility to create an inclusive campus environment. With clear signage and more accessible location directions, deaf students can more easily navigate the campus without getting lost. This indicates the need for further improvements, such as posting location information in more visible places, so that all students can benefit from it. This can increase students' independence and comfort in the learning environment.

From this photo and narrative, deaf subject 1 mentioned the importance of mastering sign language for the entire academic community on campus. However, the deaf subjects realized that it was impossible for all education staff, lecturers and other students to master sign language in the near future. Therefore, it is necessary to provide informative facilities and infrastructure to make it easier for them to access information and facilities.

In a study conducted by Alanazi (2021), it does support the communication style desired by deaf students, namely sign language. From a study conducted at a university in Saudi Arabia, it was shown that sign language is the most frequently chosen method of communication, because it is considered natural and easy to use by deaf students. This study provides insight for policy makers and educators into effective communication practices in inclusive education for deaf students (Alanazi, 2021).

Empathy between lecturers and students

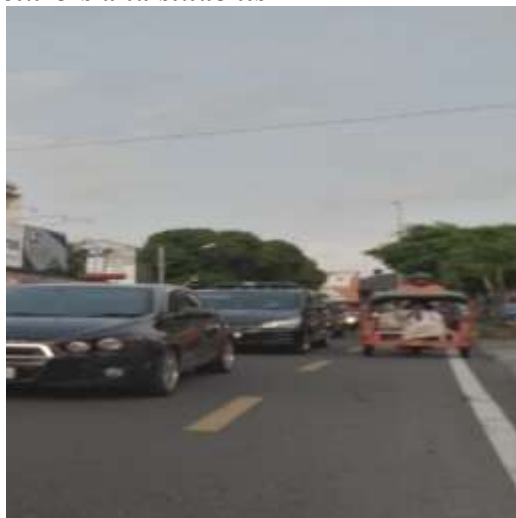


Figure 7. Transportation vehicles have different speeds

Data from the deaf student companion:

The car will drive fast, while the pedicab will drive slowly. Impatience causes accidents. This is always found in life. This is also experienced as a companion, when seeing a lecturer who speaks quickly, while the companion must help the deaf student to write important notes from the lecture. Lecturers have their own characteristics, some want everything fast and accurate. However, they do not see who is with them, and who they are teaching. There is a feeling of sadness seeing this situation.



Figure 8. The use of mask when speaking with the deaf

Data from the deaf student:

In my opinion, lecturers can gain access to teach students by providing materials through PowerPoint presentations. I am enthusiastic to understand more and learn about this topic through the materials presented in PPT on campus. However, sometimes lecturers use masks during presenting their PowerPoint, so I have difficulty understanding.

My hope for the future is that friends with disabilities will still get the same rights as other friends, can go to college and be accepted in the campus environment well. After graduating from college, they can work and get a decent job, so they can be independent and not depend on others.

The challenges of accepting deaf students in higher education are indeed not easy. One of the things that lecturers, education staff, and regular students need to do to be able to communicate well with deaf students is to understand that their way of communicating is indeed different. A deaf person has language limitations so that they cannot be equated with hearing people. What often happens in higher education is the lack of trained sign language interpreters at the university level, the difference between sign language and written language, and the limitations of assistive devices such as captions. In addition, there are also cognitive barriers,

namely the challenge of understanding academic terminology and material delivered verbally or in written language to deaf students. Next are social barriers, namely isolation and lack of understanding from the academic community about deaf culture (Batista & García, 2023). This is often still experienced so that there are still lecturers who wear masks when explaining or still speak quickly so that deaf students and their companions have difficulty receiving information. In the future, there needs to be training for the entire academic community to improve understanding and empathy from the academic community and be able to adopt better inclusion strategies to support deaf students (Batista & García, 2023).

Concerns about the future of disabled students

The unexpected thing that the subject would convey was about future career concerns. Out of 3 deaf students, one of them conveyed about anxiety in terms of future career.



Figure 9. Imagination of something far away and hard to reach

Data from deaf Subject 3:

Usually during class, I look up at the sky for a while hehehehe....

To be honest, I have no hope. I'm confused.

I don't know why, yeah. Because I often think about hopes for the future or plans for tomorrow or the day after. I try to finish my studies for my mother if she's still around. I also have a lot of plans, but I still think long term.

That's why I often look at the sky.

Research conducted by Donnellan and Mathews (2021) shows that deaf and hard of hearing adolescents have concerns related to independence, especially those with additional disabilities. These concerns are related to daily living skills. For example, if you have to travel independently and are afraid because you are not yet proficient in technology. Sometimes it is the family who is often too protective, limiting the opportunity for deaf children to learn these skills. Like the story that once happened, the campus gave deaf students the opportunity to take part in real work lectures (KKN) in a community. However, the parents of deaf students protested because they were afraid that their children would have an accident on the road due to their hearing limitations. Concerns also occur in terms of social skills (such as maintaining relationships), concerns about planning, decision-making, and responsibility. Many deaf adolescents experience social isolation due to limitations in establishing or maintaining relationships, both in the local community and

between deaf friends. This can affect their career planning in the future. Therefore, it is necessary for universities to prepare deaf students to gain work skills for their future careers (Donnellan & Mathews, 2021).

Experiences in inclusive classrooms and expectations for future policies



Figure 10. People playing the orchestra

The photo of the orchestra players illustrates that all musicians have an important role based on the instrument they play. This is closely related to the existence of our role in presenting an inclusive space for the Disabled at Sanata Dharma University. Led by a conductor in an orchestra and musicians who play with their musical instruments, if one of the voices does not sound or experiences a dissonant note, it will affect a song that is played. However, if all the musicians work together compactly, are not selfish (I am the one who plays the music the most correctly) or a dissonant note will directly be given direction to improve, then one or even thousands of songs can be enjoyed beautifully. This also describes the condition of our campus, where we all cannot stand alone in presenting an inclusive space and we all have our respective roles like the musicians above who complement each other. An incident was experienced by a disabled student in my class who experienced discrimination. The incident was not direct but through covert actions (secretly not liking his presence at the beginning of the lecture because it was considered troublesome) and some of the departments in our faculty laughed at us when we went home (when we bought food at the stall in front of the campus). From this incident, the early year of college showed how the dissonant tone (inclusive space for my friend) was very low. However, towards the end of COVID-19 period and the beginning of normal lectures, the condition is getting better, especially in the COVID-19 period with the presence of deaf students, their voices are increasingly heard by hearing students. Year after year, I really hope that the inclusive space for the Disabled is not only for PSIBK volunteers/student staff, but we all implement and present the inclusive space in a more friendly way, just as we complement each other like the melody played by the orchestra players, thus the inclusive space is present and beautiful for all of us to feel.



Figure 11. Flowing river

Illustration in figure 11 is a continuation of illustration in figure 10. An inclusive space when we have received, heard, seen or felt, we all must proclaim to continue what has been received well for Sanata Dharma University to be more inclusive in any aspect. Responding to the conditions that cornered my classmate in the first year of my studies, gradually after entering normal lectures (after the pandemic), the conditions have changed greatly even until now. Starting from my friends who are also often involved in eating together, helped to cross the street and when walking are also invited together slowly, also the presence of deaf students who are invited to become administrators of study program organizations, study program lecturers who actively involve deaf students to become novel writers, presenting notetakers to JBI and the Sanata Dharma Hymn are also sung in sign language, the desire of hearing friends and lecturers to learn sign language, and many more. The progress and process are indeed long but produce results that slowly give rise to an inclusive space and become our shared homework to continue to be intensified. The illustration of the waterfall shows that the flowing water has a purpose and never stops downstream, even if it stops, the spring will continue to flow from upstream. Likewise with our personality in Universitas Sanata Dharma as a person who is not one, but with togetherness like the waterfall we can continue to present an inclusive space in Universitas Sanata Dharma.



Figure 12. Rainbow

Finally, in the illustration 12 is a rainbow as a form of the beauty of togetherness that has no boundaries (segregation) of who is non-disabled and who is disabled. In response to the conditions on the Sanata Dharma campus, the rainbow that is each of us at Sanata Dharma is increasingly visible, but all of that must be maintained. Don't let unpleasant incidents happen again. We can do this together with an attitude of openness, complementarity, and providing access/space without choosing or being selective. Hopefully the

Sanata Dharma environment will become more inclusive every day, not only about Disabilities but also involving all fields.

The illustrations from a disabled students' companion shows the problems faced in inclusive classes, the development of the case, and the desired expectations. It is undeniable that moving towards an inclusive school without discrimination is not easy. This has also been a mandate of the UN Convention on the Rights of Persons with Disabilities since 2006. In Indonesia, there are still few people with disabilities who complete their education at university level. Existing policies do not fully support inclusion in higher education. This is different from what happens at universities in Singapore and the United States where they have strong policies to increase the participation of people with disabilities in higher education. Hopefully Indonesia can strengthen policies and programs to increase access to higher education for people with disabilities, learning from best practices implemented in Singapore and the US. There is a need to increase awareness and training for academic staff regarding the needs of people with disabilities to create a more inclusive learning environment (Amnesty et al., 2023).

Autistic students need a regular routine in an inclusive classroom

In the research process, the autistic respondent was not willing to collect photos and give meaning to the photos. However, the respondent was willing to attend the activities held by PSIBK. The respondent participated in the sharing activity and said that he needed an understanding of his disability from friends in the class and the student activity committee. For example: the experience of being a new student participating in campus initiation activities, caused him to have to participate in activities in different places and move around (unfamiliar) in a short time. This was not easy for him who was not used to rapid changes in routine. In addition, because his sensory was too sensitive to hear loud sounds from the sound system, he could not follow all the activities properly because there needed to be a distance. Therefore, he hopes that the committee will understand the specific needs of individuals with certain disabilities, and refrain from immediately scolding or raising their voices when the new students they are assisting encounter difficulties. These behaviours may not stem from disobedience, but rather from unique conditions that should not be equated with those of other students.

In this data collection, the autistic subject has not shown comfort in conveying his feelings to the researcher. The things conveyed are still about the experience of being a new student and conveyed to the PSIBK assistant. The subject was still reluctant to take photos in several times of conveying the procedure for taking pictures/photos. As in the study conducted by Do et al. (2021), photovoice research with autistic subjects will encounter various obstacles such as communication difficulties, the need for additional training for researchers to understand how to effectively support participants with autism, and technical obstacles, such as the use of cameras or digital tools by participants who require technological adjustments. Indeed, special adjustments are needed for the success of this study (Do et al., 2021). Photos should indeed make it much easier to communicate for autistic children because they allow for minimal verbal explanations. However, after waiting for several months, the subject was still not ready to convey what he was feeling.

Individuals with autism often have challenges in verbal and social communication. Although photovoice helps overcome verbal barriers, some participants may still have difficulty explaining the meaning of their photos in group discussions or individual interviews and may even have difficulty taking photos, so they need help from friends or family to take photos (Teti et al., 2016). Therefore, the researcher respected the autonomy of the participant with autism and did not require them to take photos.

On the next occasion, the autistic participant came to share his feelings after experiencing lectures for three semesters through writing, not photos. From the writing submitted, the subject experienced anxiety when having to change groups in the learning process in his lectures. In addition, lectures that were not in a study package, which required students to choose various elective courses, made it difficult for the subject to adapt to new friends and unfamiliar lecturers. This situation made the subject hesitant to communicate in a new environment. Hence, the subject hopes to receive support in navigating class dynamics and finding peers who can accompany him completing various assignments in class, such as student buddies.

Meeting between the facilitators and the photovoice respondents

After the photo collection was completed, the respondents and facilitators met and discussed what voices were behind the photos. Researchers and respondents held a meeting to interpret the photos and write their narratives. After that, the presentation materials representing the voices of students with disabilities were prepared. This presentation material was presented at a meeting with university stakeholders organized by the Ignatian Study Center (PSI).

Research using the photovoice method allows subjects not only to collect photos as part of what they voice but also makes them agents of change themselves who voice their aspiration. In its implementation, there are many ways to convey the voice of the community such as exhibitions or presentations. From the research conducted by Capous-Desyllas and Bromfield (2018), it can be seen that the subjects of the research using the photovoice method collected their photos, made art-based collages, and held exhibitions to show the public their aspirations. Likewise, in the study by Hidayah (Hidayah et al., 2020), a photo exhibition was also held to convey the aspirations of food farmers in the Sulawesi region. In this study, 2 deaf Subjects also had the opportunity to convey their aspirations to the leadership of the university through meeting activities organized by PSI.

Meeting with the policy maker of the university

A meeting was held with university stakeholders facilitated by the Ignatian Study Center. This meeting was used as an opportunity to convey the voices of students with disabilities and their companions and lecturers. Two deaf students gave a presentation by showing photos that had been prepared to be presented to stakeholders and the audience who attended the event with PSI. The theme taken was about marginalized people. In conveying this voice, they were assisted by a Sign Language Interpreter so that it was easier when discussions and questions and answers occurred. This photovoice research method has great benefits for research participants because it gives them the opportunity to actively contribute to the research process, develop critical thinking and reflective skills and then convey

their voices (O' Malley & Munsell, 2020). Stakeholders at the university welcomed the aspirations conveyed by the two research subjects with hearing disabilities.



Figure 13. Conveying aspirations with university stakeholders

Follow-up after the photovoice presentation

Tsang (2020) proposed a strategy to obtain more comprehensive data from photovoice research. One of them is to compare the results of the analysis between researchers and participants to create an interpretive dialogue. In this study, researchers trust more what is conveyed by the participants and try to connect it with the experience of being dynamic with students with disabilities. One thing that has not been done in this study is asking for opinions from lecturers who teach disable students in inclusive classes. This will be a research that needs to be done in the future so that the explanation can be more comprehensive, from the perspective of lecturer and disable students, and will be able to be the basis for university policy making.

The results of this photovoice study can be used as discussion material for stakeholders and lecturers in higher education. Policy making in higher education is dynamic, multilevel, and full of challenges in terms of coordination and implementation. Not only accommodating government provisions or the influence of global calls, but higher education also needs to see efficiency in terms of funding and the use of funds for purposes that are in accordance with student needs. Higher education also needs to combine academic quality assurance autonomy, not just fulfilling government policies (Scott, 2020).

However, Sanata Dharma University with the spirit of walking together with the marginalized, has made various improvements and will continue to do so. From various experiences of dynamics with students with disabilities and the results of studies of government policies and accommodation needs voiced by students with disabilities, follow-up actions have been carried out such as meetings with lecturers representing study programs and education staff by inviting experts from universities who already have experience in inclusive education; sharing from lecturers who teach students with disabilities; a moment of sharing knowledge from speakers with lecturers in modifying the curriculum that can accommodate students with disabilities; increasing awareness of educators regarding disabilities; meetings with the rectorate to better organize the system for accepting new students with

disabilities so that they can be better accommodated; sharing moment meetings with PSIBK assistants and students with disabilities to align perceptions in mentoring. There are still many more good practices that need to be maintained, improvements, and continuous improvements that can be made in order to create inclusive education that is friendly to disabilities in higher education.

Conclusion

This study has tried to uncover the concerns of students with disabilities in inclusive higher education. From the results of the identification and photographing of problems, problems found were regarding accessibility, availability of infrastructure, understanding of deaf and autistic culture, and career problems. These problems have been conveyed to stakeholders, and some have been followed up and are expected to be followed up in the future. The photovoice method allows respondents to convey their aspirations and at the same time become agents of change for the creation of beneficial systemic policies.

There are certainly many other voices that could have been expressed by the participants in this study. Due to the limitations of the photos collected, it is important for participants to have the opportunity to voice their opinions from various perspectives and on various themes. Further research can be implemented to achieve a more inclusive higher education through empathetic service and a willingness to listen to the voices of various groups, including those with disabilities.

References

- Alanazi, M. (2021). Communicating with deaf students in inclusive schools: Insights from Saudi university faculty*. *Eurasian Journal of Educational Research*, 95(95), 188–209. <https://doi.org/10.14689/EJER.2021.95.11>
- Amnesti, S. K. W., Jundiani, J., Zulaichah, S., Noh, M. S. M., & Fitriyah, L. (2023). Higher education with disabilities policy: Ensuring equality inclusive education in Indonesia, Singapore and United States. *Journal of Human Rights, Culture and Legal System*, 3(3), 412–440. <https://doi.org/10.53955/jhcls.v3i3.135>
- Batista, M. Á. H., & García, N. S. (2023). Deaf students and the challenges they face in higher education. *South Florida Journal of Development*, 4(6), 2473–2491. <https://doi.org/10.46932/sfjdv4n6-021>
- Butschi, C., & Hedderich, I. (2021). How to involve young children in a photovoice project: Experiences and results. *Forum Qualitative Sozialforschung*, 22(1), 1–26. <https://doi.org/10.17169/fqs-22.1.3457>
- Capous-Desyllas, M., & Bromfield, N. F. (2018). Using an arts-informed eclectic approach to photovoice data analysis. *International Journal of Qualitative Methods*, 17(1). <https://doi.org/10.1177/1609406917752189>
- Chinn, D., & Balota, B. (2023). A systematic review of photovoice research methods with people with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities*, 36(4), 725–738. <https://doi.org/10.1111/jar.13106>
- Cluley, V. (2017). Using photovoice to include people with profound and multiple learning disabilities in inclusive research. *British Journal of Learning Disabilities*, 45(1), 39–46. <https://doi.org/10.1111/bld.12174>

- Dassah, E., Aldersey, H. M., & Norman, K. E. (2017). Photovoice and persons with physical disabilities: A scoping review of the literature. *Qualitative Health Research*, 27(9), 1412–1422. <https://doi.org/10.1177/1049732316687731>
- Do, P. L., Frawley, P., Goldingay, S., & O’Shea, A. (2021). The use of photovoice in research with people on the autism spectrum: A meta-synthesis of the literature. *Research in Autism Spectrum Disorders*, 87(November 2020), 101828. <https://doi.org/10.1016/j.rasd.2021.101828>
- Donnellan, L., & Mathews, E. S. (2021). Service providers’ perspectives on life skills and deaf and hard of hearing students with and without additional disabilities: Transitioning to independent living. *European Journal of Special Needs Education*, 36(4), 547–561. <https://doi.org/10.1080/08856257.2020.1776982>
- Hidayah, H., Sarwoprasodjo, S., & Matindas, K. (2020). Photovoice as a participatory extension approaches method in expressing youth views of agricultural work. *Jurnal Penyuluhan*, 16(2), 303–322. <https://doi.org/10.25015/16202031773>
- Mabruroh, A. F., Gunarhadi, G., & Widyastono, H. (2022). A photovoice study exploring deaf students experiences during the COVID-19 pandemic. *AL-ISHLAH: Jurnal Pendidikan*, 14(1), 631–642. <https://doi.org/10.35445/alishlah.v14i1.1120>
- McKeown, C., & McKeown, J. (2019). Accessibility in online courses: Understanding the deaf learner. *TechTrends*, 63(5), 506–513. <https://doi.org/10.1007/s11528-019-00385-3>
- O’ Malley, L., & Munsell, S. (2020). Photovoice: An innovative qualitative method in research and classroom teaching. *Educational Research: Theory and Practice*, 31(1), 26–32. <https://files.eric.ed.gov/fulltext/EJ1250278.pdf>
- Overmars-Marx, T., Thomése, F., & Moonen, X. (2018). Photovoice in research involving people with intellectual disabilities: A guided photovoice approach as an alternative. *Journal of Applied Research in Intellectual Disabilities*, 31(1), 92–104. <https://doi.org/10.1111/jar.12329>
- Ronzi, S., Pope, D., Orton, L., & Bruce, N. (2016). Using photovoice methods to explore older people’s perceptions of respect and social inclusion in cities: Opportunities, challenges and solutions. *SSM - Population Health*, 2, 732–745. <https://doi.org/10.1016/j.ssmph.2016.09.004>
- Scott, P. (2020). *Encyclopedia of international higher education systems and institutions*. Dordrecht: Springer. <https://doi.org/10.1007/978-94-017-9553-1>
- Shaw, A. (2024). Inclusion of disabled higher education students: Why are we not there yet? *International Journal of Inclusive Education*, 28(6), 820–838. <https://doi.org/10.1080/13603116.2021.1968514>
- Strack, B. R. W., Aronson, R. E., Orsini, M. M., Seitz, C. M., & McCoy, R. (2018). Using photovoice to uncover campus issues and advocate change for black males. *Journal of College Student Development*, 59(4), 491–498. <https://doi.org/10.1353/csd.2018.0046>
- Sutton-Brown, C. A. (2014). Photovoice: A methodological guide. *Photography and Culture*, 7(2), 169–185. <https://doi.org/10.2752/175145214X13999922103165>

- Teti, M., Cheak-Zamora, N., Lolli, B., & Maurer-Batjer, A. (2016). Reframing autism: Young adults with autism share their strengths through photo-stories. *Journal of Pediatric Nursing*, 31(6), 619–629. <https://doi.org/10.1016/j.pedn.2016.07.002>
- Tsang, K. K. (2020). Photovoice data analysis: Critical approach, phenomenological approach, and beyond. *Beijing International Review of Education*, 2(1), 136–152. <https://doi.org/10.1163/25902539-00201009>
- Wang, C., & Burris, M. A. (1997). Photovoice: Concept, methodology, and use for participatory needs assessment. *Health Education and Behavior*, 24(3), 369–387. <https://doi.org/10.1177/109019819702400309>
- Wang, C. C. (1999). Photovoice: A participatory action research strategy applied to women's health. *Journal of Women's Health*, 8(2), 185–192. <https://doi.org/10.1089/jwh.1999.8.185>
- Wass, R., Anderson, V., Rabello, R., Golding, C., Rangi, A., & Eteuati, E. (2020). Photovoice as a research method for higher education research. *Higher Education Research and Development*, 39(4), 834–850. <https://doi.org/10.1080/07294360.2019.1692791>