Urban Areas' Readiness in Providing Learning Accommodations for Students with Disabilities Post-COVID-19 Pandemic

Lintang Al mar'atus Sholihah[1], Kholifatul Novita Ningsih[2], Wahyu Hardiani[3], Nur Hanifah Insani[4], Azizah Nurul Husnaini[5]

[123] Pendidikan Khusus, Fakultas Ilmu Pendidikan, Universitas Negeri Jakarta
[4] Pendidikan Bahasa dan Sastra Jawa, Fakultas Bahasa dan Seni, Universitas Negeri Semarang
[5] Pendidikan Teknik Mesin, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Sebelas Maret
Email Coressponden: lintang.al-maratus@unj.ac.id

Abstract
The shift in learning models following the COVID-19 pandemic, which occurred without adequate preparation, has added new challenges for students with special needs. As an educational institution in an urban area, Jakarta State University should be an ideal example of an inclusive campus. Although opportunities for students with special needs to enroll have expanded, this has not been matched by specific preparations for learning accommodations. This study aims to identify the challenges faced by students with special needs in obtaining appropriate learning accommodations. Additionally, this study seeks to explore the shift in learning accommodation needs of students with special needs post-pandemic COVID-19. A mixed-method research approach was selected, with quantitative data as the primary focus. Data collection was conducted through questionnaires and interviews, while quantitative data analysis utilized descriptive statistical analysis. The research subjects consisted of 34 students with special needs from eight faculties, enrolled between 2018 and 2024. The students with special needs involved in this study had visual impairments, hearing impairments, physical impairments, low vision, ADHD, learning difficulties, and autism. The results of the study showed diversity in learning accommodation needs for each type of special need. However, these differences could be predicted based on the type and level of special needs. The five aspects studied—course materials, teaching methods, facilities and equipment, peer support, and the need for self-regulation skills—highlight the importance of further attention from the university. These aspects of learning accommodations reflect a shift in learning modes influenced by the COVID-19 pandemic. This shift adds challenges for students with special needs in preparing themselves for the workforce.

Keywords: *Learning Accommodations, Post-COVID-19 Pandemic, Urban Areas, Children with Special Needs.*

INTRODUCTION

Opportunities for students with special needs (MBK) to pursue higher education globally (Rouweler, 2021; Ryder & Norwich, 2019) and nationally (Kemendiktisaintek), have shown an increase, although they remain at a minimal level (BPS, 2020). Jakarta State University (UNJ) is among 112 universities that have a Disability Services Unit (ULD). The main task of the ULD, according to Law Number 8 of 2016, is to ensure that people with disabilities have equal access to information, education, employment, health care, and other public services. UNJ, as an inclusive campus in an urban area, has seized this opportunity.

Jakarta, as an urban area, has demonstrated widespread access to higher education (BPS, 2020). However, its urban nature presents more complex socioeconomic, environmental, and educational challenges (Januari et al., 2024; Nasaruddin et al., 2020). Therefore, a more in-depth analysis of the challenges facing students with special needs in the provision of learning accommodations in higher education is needed.

Learning accommodations can be defined as adjustments and modifications to teaching methods, communication, and assessment. Accommodations are provided to students with special needs to develop the cognitive, psychomotor, and affective skills necessary to compete in the workforce. The competencies and skills needed to face the challenges of the workforce are divided into academic, social, and career aspects (Maris & Rahmi, 2022). The Central Statistics Agency (2020) stated that only 2.8% of the 17.9 million children with special needs were able to complete their education up to university level. Meanwhile, decent work data in Indonesia indicates that less than 1% are students with special needs, and employment opportunities in urban areas are smaller than in rural areas (BPS, 2024). Therefore, universities, especially inclusive campuses, must prioritize the work-readiness of students with disabilities in terms of these competencies and skills.

The basis for providing services by inclusive campuses is guided by Ministerial Regulation No. 30/PRT/M/2006 as a form of physical accommodation. The guidelines for providing appropriate non-physical accommodation are contained in Ministerial Regulation No. 39 of 2020. Appropriate learning accommodation for students with special needs, especially after the Covid-19 pandemic, can be seen from various aspects such as the campus' role in providing ULD (University Learning Units), its response to the transition from online to offline lectures (blended), accessibility of instruction, learning evaluation, and environmental support (Afrianty et al., 2021). The various aspects of assessing appropriate accommodations above present challenges that require further investigation.

The challenges in question relate to a lack of awareness of Human Resources (HR) such as lecturers, educators, and students (Paramita et al., 2024; Rofiah et al., 2023), infrastructure (Heriyanto & Hudzaifi, 2023), regulations (Rahajeng et al., 2024; Rengganis & Purbaningrum, 2024), and inadequate curriculum design (Everett & Oswald, 2018; Hapsara, 2023; Rao et al., 2015) as well as the internal motivation of students with special needs. Through this research, UNJ, as an inclusive campus, can identify post-pandemic learning accommodations needed by students with special needs to support their readiness to face the world of work.

METHOD

This study used a mixed-methods approach, with quantitative methods as the primary data source. The combination of both methods allows for comprehensive, valid, and reliable data collection by selecting one method as the primary data source (Creswell & Creswell, 2018).

The subjects of this study were undergraduate students with disabilities from the 2018-2024 intake at Jakarta State University, spread across seven faculties. The subjects involved were 34 students with visual, hearing, and physical disabilities. Attention Deficit Hyperactivity Disorder (ADHD), autism, low vision, and learning difficulties. Diverse research subjects can provide a comprehensive picture of the effectiveness of existing accommodations.

The primary data collection method used a questionnaire, supplemented by interviews. The questionnaire used a Likert scale to determine which aspects of accommodations were most needed by students, depending on their specific needs. Validity and reliability testing of the instrument were not conducted due to sample limitations and the focus on learning accommodations. Meanwhile, an interview was conducted with one purposefully selected student with special needs for vision to obtain specific data, particularly in the context of understanding their experiences receiving learning accommodations.

The quantitative data collection technique used a closed-ended questionnaire based on a Likert scale, while the qualitative data was collected through semi-structured interviews. The questionnaires contained statements related to the aspects being studied, while the interviews were used to explore the students' experiences in more depth.

The quantitative data analysis technique used descriptive static analysis, which calculated the frequency, percentage, and average score of respondents' answers to the questionnaire. Qualitative data were taken from interviews and systematically analyzed by identifying themes that emerged from students' experiences. The results of the quantitative and qualitative analyses were then interpreted in an integrated manner to provide a comprehensive picture of students with special needs' perceptions of the campus' provision of learning accommodations.

This study used concurrent triangulation in mixed methods, where quantitative and qualitative data were collected simultaneously and complemented each other to strengthen the research findings (Creswell & Creswell, 2018).

This research flow shows the initial stages by formulating the problem, preparing and distributing online questionnaires to 34 students with special needs, conducting in-depth interviews with 1 selected student, analyzing quantitative and qualitative data separately, and integrating research results for the final report.

RESULTS AND DISCUSSION

This study found that each student's special needs have their own accommodation priorities. Therefore, this study will discuss the intersection of learning accommodation between special needs, the aspects studied include: (1) lecture materials, (2) lecturer teaching methods, (3) facilities & infrastructure, (4) peer mentoring, and (5) self-regulation skills of students with special needs.

1. **Lecture Materials**

Teaching materials and lecture materials are provided to students with special needs before the lecture begins. The files provided are in the following format: *Portable Document Format* (PDF) so that it can be read as an assistive application used by students with visual impairments. For students with visual impairments, *low vision* Students with hearing impairments, ADHD, and autism require concept maps for each course. However, students with physical disabilities have not yet been prioritized.
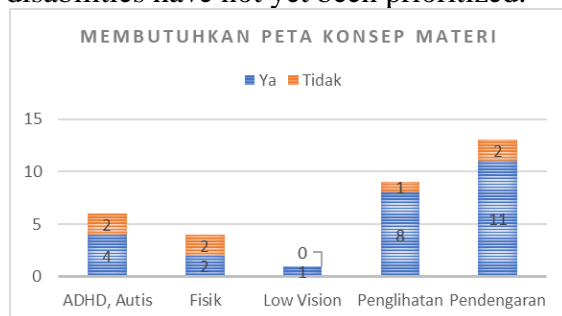

Figure 1. Concept Map Material Needs Graph

Format teaching materials in the form of images and videos, adjustments need to be made, such as using narration in videos for students with hearing impairments. Furthermore, teaching materials that include lengthy descriptions need to be marked with special symbols, such as *bold, italic, underline to* highlight the main keywords in the material. This is necessary for students with ADHD, autism, and visual impairments.
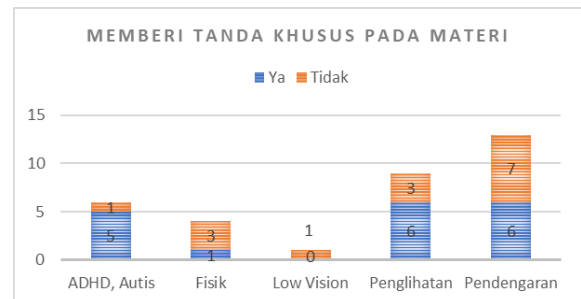

Figure 2. Graph of Special Mark Needs in Material

The use of varied learning media also supports the learning process of students with special needs. These adaptations are chosen based on their learning style, such as audio, visual and tactile.
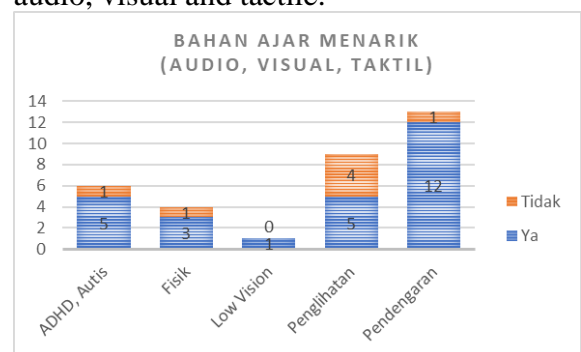

Figure 3. Graph of Teaching Material Needs

2. **How Lecturers Teach**

Oral delivery of material uses simple language and easy-to-understand conceptual analogies. Speak clearly and not too quickly, accompanied by visualizations of the material. This approach is a top priority for students with visual impairments, ADHD, and autism. Furthermore, it's important to allow for specific time intervals to allow students with special needs time to understand the lecture material. For students with physical, visual, or hearing impairments, you can ask them to do the following: *resume learning* outcomes at each meeting. This is done to determine the level of understanding of students with special needs.
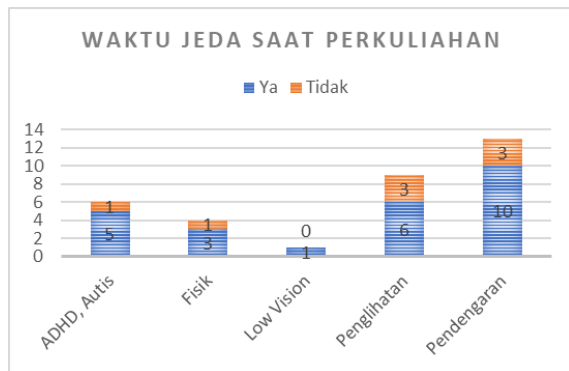
Figure 4. Graph of Break Time Needs During Lectures

Post Covid-19 pandemic, forcing lecturers to use communication technology through activities-*learning* incident resulted in suboptimal learning planning, further hindering and isolating students with special needs from obtaining an equal education (Nasir & Hameed, 2021).

The seating position of hearing and vision impaired students is placed in a location close to the lecturer, does not turn their back on the light source and can be observed comprehensively by students. As for students with ADHD and autism, it has not become a priority. As for students with physical disabilities, it is adapted with the aids used.

Teaching and learning activities that incorporate discussion still require further consideration. This is because discrimination against students with special needs continues to occur in the discussion process. This limited opportunity can be one of the reasons why students with special needs feel pressured and unable to compete beyond their capabilities.
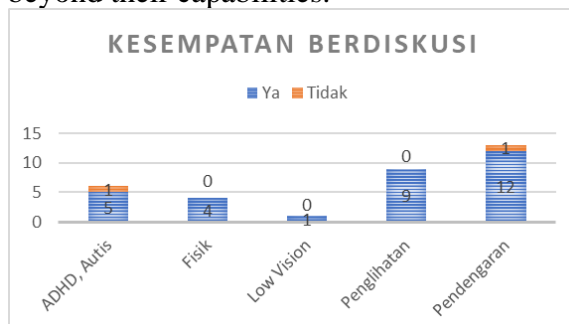
Figure 5. Equal Opportunity Discussion Graph

Assignments and final projects are assessed using methods appropriate to the learning styles of students with special needs. Essay assignments will assist students with visual impairments of *low vision* as a top priority. It's quite helpful for students with hearing and physical disabilities. However, for students with ADHD and autism, it's not necessary. They need assignments that utilize visual skills.
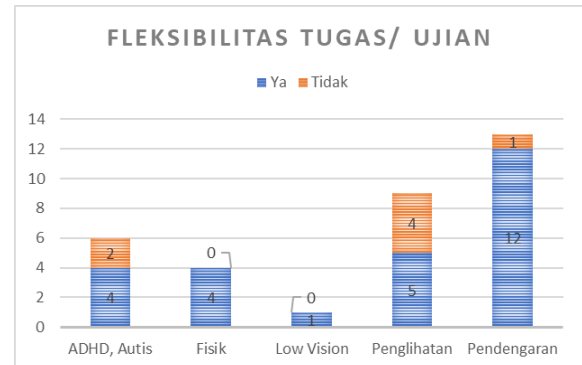
Figure 6. Graph of Flexibility Needs for Assignment or Exam Delivery

Lecturers' awareness of the importance of providing learning accommodations for students with special needs is currently still uneven.
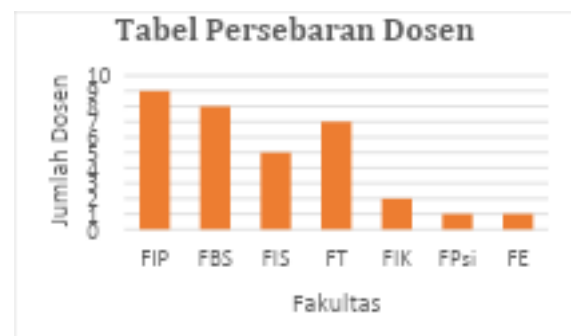
Figure 1. Lecturer Distribution Graph

The number of new students admitted through the disability pathway at UNJ has increased year after year (unj.ac.id). However, this opportunity for students with special needs to obtain appropriate learning accommodations has not yet been fully realized. Of the seven faculties, only three with more than five lecturers provide learning accommodations. Furthermore, none of them has more than 10 lecturers per faculty, so awareness of the importance of

providing learning accommodations remains low.

3. Facilities & Amenities

Accessibility for students with special needs is a proactive approach to implementing facilities designed to meet their needs. This includes adequate physical infrastructure and support services. Verbal explanations by lecturers should be amplified using amplification to reduce distractions from other sounds. For students with hearing impairments, this can help improve the accuracy of transcripts. *Software text-to-speech* on the reading application.

Applications and software are needed by students with special needs both at home and on campus. In general, students with special needs do not have the same technological needs. A screen magnifying device *of Windows Microsoft* needed by students' *low vision*, while the application of *The Dragon Natural Speaking needed* by students with learning difficulties (Gloria et al., 2024). These differences in needs can be predicted, as they have needs based on the type and level of their specific needs.

Accessibility of buildings, classrooms, other learning facilities, and road access still needs improvement. *Lift, ramp* and accessible stairs are still not evenly distributed in every building. For students with visual impairments and *low vision* Maintaining safety and ease of mobility orientation is a priority. Holistic service accessibility can provide a positive and supportive learning experience for students with special needs.

Usage *website or* certain applications that support the learning process, display complex displays that cannot be read by assistive applications of *website* and applications are selected based on the readiness of students with special needs and the availability of assistive technology.
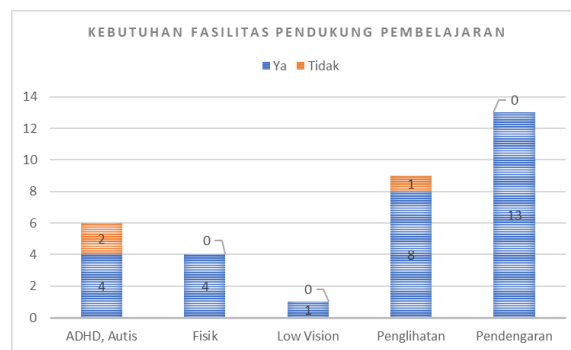

Figure 7. Graph of Supporting Facilities Needs During Learning

Usage *Learning Management System* (LMS) in some courses can generally help students take distance learning courses (Derosari et al., 2025). However, for students with total visual impairments, who use assistive applications on laptops or *cellphone* actually creates difficulties. The menus in the LMS are too complex for visually impaired students to understand and use independently. As a result, they become highly dependent on others when lecturers require their students to use the LMS.

4. Peer Mentoring

All students with special needs agree that peer and senior mentors are essential for completing course administration. These mentors are needed when selecting courses each semester, helping explain and correct understanding of the material being taught. Currently, awareness of inclusive culture, especially among regular students who are not in the same class as students with special needs, remains low. Consequently, they struggle to adapt, both in terms of course material and social communication.
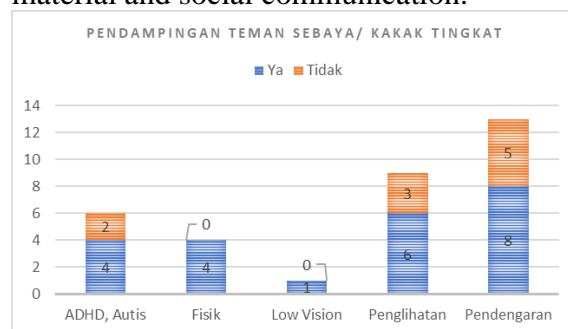

Figure 8. Graph of Need for Mentoring by Peers or Seniors

The number of volunteers with special needs available is disproportionate to the number of students with special needs. Furthermore, it's difficult to coordinate the time between students with disabilities and volunteers. This is due to the voluntary nature of volunteers and the responsibility of participating in lectures as fellow active students. Nevertheless, the presence of Disability Volunteers supports improving the quality of learning and strengthening the values of diversity on an inclusive campus. *Sustainable Development Goals* (SDGs) number 4 (University of Indonesia, 2023).

5. Self-Regulatory Ability

Self-regulation skills in coping with various changes are crucial for students with special needs. The need for additional activities, such as therapy and organizational activities, is often difficult to balance with the constant flow of lectures. This can lead to difficulties managing their time, poor communication skills, and even a decrease in self-confidence.
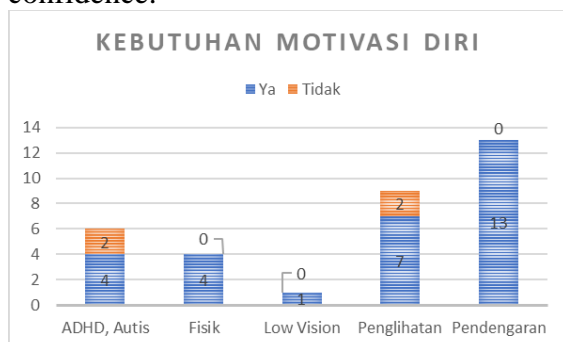

Figure 9. Graph of Motivation Needs in Students

The majority of students with special needs in other studies show that they experience difficulties when attending *Online* lectures (Magedi et al., 2023). This difficulty still occurs, because some faculties implement *online* lectures either fully or incidentally. This adds to the psychological pressure on students.

The transition from high school to college can present serious challenges for students with disabilities. Additional challenges include accountability, competition, academic pressure, and time management (Aliedan et al., 2023). If students with disabilities receive few opportunities to participate, this can exacerbate emotional and behavioral problems.

The stress experienced by students with special needs can be overcome by providing motivation to study. Motivation can be provided by peers, volunteers with special needs, and even lecturers. This is necessary to increase self-confidence in their abilities. This self-confidence is the foundation for students with special needs to push themselves to their full potential to compete with regular students.

CONCLUSION

Based on the research results, it can be concluded that learning accommodations for students with special needs are still very much needed. Providing these accommodations is crucial for students with special needs, who appreciate the efforts and programs they have experienced since entering higher education at Jakarta State University. However, learning materials, teaching methods, facilities, peer mentoring, and improving self-regulation skills still require more attention. The implementation of an inclusive culture is not yet fully recognized in practice by the entire academic community.

Changes in learning models following the Covid-19 pandemic have added challenges for students with special needs. Campus readiness and socioeconomic conditions are crucial for attending *online* lectures Still needs to be improved. Campus and lecturer policies related to *online* lectures needs to be communicated well in advance. Students with special needs hope that the campus will provide facilities that better support the learning process. Jakarta State University, as an institution in an urban area, is expected to identify problems and find appropriate and prompt solutions. This is essential to ensure that students with special needs receive equal educational opportunities and are able to compete in the job market with its wide-open opportunities.

SUGGESTION

This research is expected to lead to further research from the perspective of other

types of special needs. Indicators for each aspect being studied need to be developed. This will provide technical guidance and recommendations for developing academic guidelines for students with special needs at Jakarta State University.

ACKNOWLEDGEMENT

BIBLIOGRAPHY

Afrianty, D., Thohari, S., Rahajeng, U. W., & Firmanda, T. H. (2021). Perguruan Tinggi dan Praktik Akomodasi Layak bagi Mahasiswa Penyandang Disabilitas di Indonesia di Masa Pandemi COVID-19. In *Australia-Indonesia Disability Research and Advocacy Network (AIDRAN)*.

Aliedan, M. M., Elshaer, I. A., Zayed, M. A., Elrayah, M., & Moustafa, M. A. (2023). Evaluating the Role of University Disability Service Support, Family Support, and Friends' Support in Predicting the Quality of Life among Disabled Students in Higher Education: Physical Self-esteem as a Mediator. *Journal of Disability Research*, *2*(3), 48–59. https://doi.org/10.57197/JDR-2023-0035

BPS. (2020). Indikator Kesejahteraan Rakyat Tahun 2020. In *BPS RI: Vol. 4102004.64*.

BPS. (2024). *Indikator Pekerjaan Layak di Indonesia 2024* (8). https://doi.org/ISSN 2745-5858

Creswell, J. W., & Creswell, J. D. (2018). *Research Design: Qualitative, Quantitative adn Mixed Methods Approaches* (5th ed., Vol. 3). Sage.

Derosari, K., Sogen, M. M. B., Tabala, Y. E., & Aleut, I. Y. (2025). Informatics Education Students' Perceptions of the Use of Edlink LMS in Data Structure Courses. *JUPE : Jurnal Pendidikan Mandala*, *10*(2), 577. https://doi.org/10.58258/jupe.v10i2.8915

Everett, S., & Oswald, G. (2018). Engaging and training students in the development of inclusive learning materials for their peers. *Teaching in Higher Education*, *23*(7), 802–817. https://doi.org/10.1080/13562517.2017.1421631

Gloria, D. S., Pelayo, E. T. C., & Castro, R. (2024). Lived Experiences and Support Needs of Students With Disabilities: A Phenomenological Approach To Achieving Sdgs 3,4, 10, and 11. *Journal of Lifestyle and SDG'S Review*, *4*, 1–27. https://doi.org/10.47172/2965-730X.SDGsReview.v4.n04.pe02578

Hapsara, A. S. (2023). Evaluasi Pelaksanaan Akomodasi Kurikulum untuk Peserta Didik dengan Hambatan Penglihatan pada Pelajaran Sosiologi. *Ideguru: Jurnal Karya Ilmiah Guru*, *9*(1), 46–55. https://doi.org/10.51169/ideguru.v9i1.761

Heriyanto, D. S. N., & Hudzaifi, M. S. (2023). Establishing an Inclusive Legal Framework for People with Disabilities in Islamic Higher Education Institutions in Indonesia. *KnE Social Sciences*, *2023*, 506–514. https://doi.org/10.18502/kss.v8i9.13364

Januari, A. D. W. I., Rusdayanti, N., Kardian, S., & Shara, S. (2024). Urbanisasi Jakarta dan Dampaknya terhadap Sosial Ekonomi dan Lingkungan. *Sustainable Transportation and Urban Mobility*, *1*(1), 21–37. https://journal-iasssf.com/index.php/STUM/article/view/448/471

Layanan Mahasiswa Disabilitas. Diakses pada 16 Agustus 2025, dari Kemendiktisaintek website: https://ptinklusif.kemdiktisaintek.go.id/s/3/unit-layanan-disabilitas

Magedi, M. J., Rakgogo, T. J., Mnguni, O. S., Segabutla, M. H., & Kgwete, L. (2023). COVID-19 and It's Impact on Students with Disabilities: A Social Justice Expression at A South African University. *Transformation in Higher Education*, *8*(2017), 1–14.

https://doi.org/10.4102/the.v8i0.212

Maris, A. W. I., & Rahmi, I. (2022). Strategi Lembaga Pendidikan Tinggi Inklusif dalam Meningkatkan Kemampuan Kerja Mahasiswa Difabel: Praktik baik di Indonesia. *Seminar Nasional Inovasi Vokasi*, *1*(1), 106–115. http://prosiding-old.pnj.ac.id/index.php/sniv/article/

Nasaruddin, M. M., Manaf, M., & Saleh, H. (2020). Pengaruh Pengembangan Kawasan Perumahan Terhadap Sosial Ekonomi dan Minimalisasi Gejala Urban Sprawl. *Urban and Regional Studies Journal*, *2*(1), 15–24. https://doi.org/10.35965/ursj.v2i1.203

Nasir, S., & Hameed, M. (2021). Impact of COVID-19 on the Learning Processes of Typically Developing and Special Needs Students in Pakistan. *Asian Journal of University Education*, *17*(3), 67–75. https://doi.org/10.24191/ajue.v17i3.14526

Paramita, P. P., Asthana, M. K., Amin, A. S., & Hassim, N. (2024). Inclusive Education for Students with Disabilities: Perspectives from Indonesian and Malaysian Higher Education. *Jurnal Komunikasi: Malaysian Journal of Communication*, *40*(3), 247–261. https://doi.org/10.17576/JKMJC-2024-4003-14

Penerimaan Mahasiswa Baru, Diakses pada 19 Agustus 2025, dari Universitas Negeri Jakarta, website: https://penmaba.unj.ac.id/penmaba-jalur-disabilitas/

Rahajeng, U. W., Hendriani, W., & Paramita, P. P. (2024). Navigating Higher Education Challenges: A Review of Strategies among Students with Disabilities in Indonesia. *Disabilities*, *4*(3), 678–695. https://doi.org/10.3390/disabilities4030042

Rao, K., Edelen-Smith, P., & Wailehua, C. U. (2015). Universal design for online courses: applying principles to pedagogy. *Open Learning*, *30*(1), 35–52. https://doi.org/10.1080/02680513.2014.991300

Rofiah, K., Tanyu, N. R., Sujarwanto, S., &

Ainin, I. K. (2023). Inclusive education at Universitas Negeri Surabaya: Perceptions and realities of students with disabilities. *International Journal of Special Education*, *38*(2), 14–25. https://doi.org/10.52291/ijse.2023.38.18

Rouweler, L. (2021). *The impact of dyslexia in higher education* [University of Groningen]. https://doi.org/10.33612/diss.190485392

Ryder, D., & Norwich, B. (2019). UK higher education lecturers' perspectives of dyslexia, dyslexic students and related disability provision. *Journal of Research in Special Educational Needs*, *19*(3), 161–172. https://doi.org/10.1111/1471-3802.12438

Universitas Indonesia. (2023). *Universitas Indonesia Sebagai Model Kota Kampus Berkelanjutan dengan Teknologi Hijau untuk Energi Bersih Indonesia.*