

Vocational Education for Students with Disabilities: A Qualitative Study of Teacher Challenges and Expectations

Gunarhadi¹, Joko Yuwono¹, Dewi Sri Rejeki¹, Mahardika Supratiwi¹, Leni Ambar

Cahyani^{1,*}, & Dhevendren Ayao^{1,2}

¹Department of Special Education, Universitas Sebelas Maret, Indonesia

²Sekolah Menengah Kebangsaan Bukit Kepayang, Malaysia

*Corresponding email: leniambar@staff.uns.ac.id

Received: 24 September 2025

Accepted: 31 October 2025

Published: 13 November 2025

Abstract: Vocational Education for Students with Disabilities: A Qualitative Study of Teacher Challenges and Expectations. Objectives: This research aimed to analyze the challenges and expectations in providing vocational education for students with disabilities in both special and inclusive vocational high schools in the Solo Raya region, Indonesia. It sought to understand the barriers faced by educators and explore their expectations for improvements in vocational training for students with disabilities. **Methods:** This qualitative research employed a phenomenological design, focusing on 20 vocational education teachers from both special and inclusive vocational high schools. Data was collected through Focus Group Discussions (FGD) with semi-structured, open-ended questions guided by a set of research-specific themes. The data analysis followed a phenomenological analytic framework. **Findings:** This study identified several key challenges faced by educators in delivering vocational education to students with disabilities, including the lack of a specialized curriculum, insufficient teacher training, inadequate resources and infrastructure, and limited support for job placement after training. Furthermore, teachers highlighted the need for professional development opportunities and improvement in schools' accessibility. Moreover, stronger partnerships between stakeholders were seen as crucial for enhancing vocational education for students with disabilities. These barriers hinder students' opportunities to gain essential vocational skills and transition successfully into the workforce in the Solo Raya Region. **Conclusion:** Vocational education for students with disabilities faces significant challenges; however, there are clear expectations for improvements in teacher training, infrastructure, and collaboration among stakeholders. Addressing these issues will not only enhance vocational education for students with disabilities but also empower them to gain greater independence, improve their quality of life, and contribute more fully to society. This provides critical insights into the context of Solo Raya, highlighting the need for targeted interventions to address these gaps.

Keywords: challenges, expectation, vocational education, students with disabilities.

To cite this article:

Gunarhadi, Yuwono, J., Rejeki, D. S., Supratiwi, M., Cahyani, L. A., & Ayao, D. (2025). Vocational Education for Students with Disabilities: A Qualitative Study of Teacher Challenges and Expectations. *Jurnal Pendidikan Progresif*, 15(4), 2385-2399. doi: 10.23960/jpp.v15i4.pp2385-2399.

■ INTRODUCTION

Vocational education for students with disabilities plays a critical role in promoting independence (Herrick et al., 2022; Morina & Biagiotti, 2022) and self-reliance (De Souza & Vongalis-Macrow, 2021). Independence in this

context is not only the ability to perform daily activities but also the capacity to manage one's life independently, participate in the workforce, and contribute to society in meaningful ways. This comprehensive view of independence ensures that individuals can participate in various aspects of

life, from work to social engagement, and beyond. For students with disabilities, acquiring vocational skills is a crucial step toward achieving personal and economic independence (Cahyani, 2025). These abilities not only create employment prospects but also help to diminish stereotypes by showing their potential (Almalki, 2022; Tschanz & Powell, 2020). It provides them with the skills and tools necessary to enter the labor market and achieve a higher quality of life. According to the World Health Organization (WHO), individuals with disabilities are at a higher risk of poverty and social exclusion, making the development of vocational skills even more crucial for their long-term well-being (WHO, 2023). Hence, vocational education serves as a foundational element in empowering students with disabilities to lead independent and fulfilling lives.

Solo was declared an Inclusive City in 2013. This initiative reflects the city's commitment to creating an environment that accommodates the needs of individuals with disabilities, including in the education sector. However, despite this progress, the implementation of inclusive education in Solo remains a work in progress, facing various challenges. These challenges include limited accessibility in schools (Yusuf, Yuwono, Mustaqimah, Supratiwi, & Cahyani, 2025), a lack of specialized curriculum, and inadequate teacher training (Salim, Hidayatullah, Nugraheni, & Dian Atnantomi, 2019), which hinder the full participation of students with disabilities in educational settings. While Solo has made strides in becoming a more inclusive city, the education system still struggles to fully integrate students with disabilities, highlighting a gap between policy and practice. Existing research on inclusive education in Solo has predominantly focused on the general educational needs of students with disabilities, but there is limited attention given specifically to vocational education.

Despite the importance of vocational education, numerous studies highlighted that

students with disabilities often struggle with independence (Ebuenyi, Rottenburg, Bunders-Aelen, & Regeer, 2020; MacKenzie, Owaineh, Bower, & Özkaya, 2023). Research has shown that many students with disabilities, whether in special schools or inclusive schools, face significant challenges in developing the skills necessary to live autonomously (Bloor, Ballantyne, Gillespie-Smith, Wilson, & Hendry, 2022; Lipka, Forkosh Baruch, & Meer, 2019; Sigstad & Garrels, 2023). These challenges are often connected to the lack of personalized educational strategies, insufficient resources, and inadequate training for educators (Mangope, Otukile-Mongwaketse, Dinama, & Kuyini, 2018; Solomon, Luger, & Ned, 2023). According to a previous study, students with disabilities often lack access to specialized vocational training programs (Venkatesh, Reddy, & Anggothu, 2023), which limits their ability to develop the competencies necessary for independent living. In many cases, the lack of family support or community involvement limits their opportunities to practice these skills (Delubom, Marongwe, & Buka, 2020). Furthermore, many schools fail to offer a curriculum tailored to meet the diverse needs of students with disabilities (Venkatesh et al., 2023), thereby exacerbating the gap in their vocational education. This lack of independence severely limits their ability to thrive in real-world settings.

The lack of vocational training in students with disabilities is directly linked to broader socio-economic issues. These challenges include limited economic independence, lower employment rates, inadequate job skills, and a generally lower quality of life (Ananian & Dellaferrera, 2024). A report by the International Labour Organization (ILO) highlighted that employment rates for individuals with disabilities are considerably lower than those for the general population, with many facing barriers to gaining sustainable employment (Ananian & Dellaferrera, 2024). Moreover, the skills gap and lack of vocational training are often primary factors contributing to their health issues.

According to the World Health Organization, people with disabilities are likely to die earlier and have poorer health (WHO, 2023). It means the lack of vocational preparation not only limits their access to the workforce but also impacts their health. This problem also hinders their ability to break free from the cycle of poverty. As a result, individuals with disabilities face higher risks of living in poverty and experiencing social exclusion, which further restricts their opportunities for personal and economic growth (Ananian & Dellaferrera, 2024). Addressing these barriers through targeted education and training could significantly improve their ability to integrate into society and contribute to the economy.

In both special and inclusive schools, vocational education is designed to equip students with disabilities with practical skills that can be applied directly in the workforce (Collins, Azmat, & Rentschler, 2019). However, the implementation of vocational education faces complex challenges that involve multiple stakeholders. Policymakers often constrain limited funding allocations and inconsistent regulations (Delubom et al., 2020; Fischer & Kilpatrick, 2023). School administrators often struggle with limited facilities and curriculum options that do not fully meet the diverse needs of students (Bunbury, 2020; Venkatesh et al., 2023). Parents may lack awareness or resources to support their children's vocational learning outside of school (Sigstad & Garrels, 2023; Venkatesh et al., 2023). Employers, who are expected to absorb graduates, frequently hesitate to provide job opportunities due to concerns about productivity or additional costs, such as creating an environment that meets the criteria for an inclusive workplace (Fischer & Kilpatrick, 2023). Students encounter barriers such as low self-confidence, societal stigma (MacKenzie et al., 2023; Rath, 2022), and limited accessibility (Muzite & Gasa, 2024). Among these various

stakeholders, teachers stand at the frontline of vocational education for students with disabilities, since they are directly responsible for teaching and supporting in the classroom. Therefore, gaining insights from teachers' perspectives is essential to help uncover systemic issues that have been documented in other studies but remain inadequately addressed. Understanding the teachers' perspective is crucial, as they are the ones who navigate and address these challenges daily. Their voices are key to understanding the root causes of the gaps in current systems and identifying realistic solutions. Teachers serve as critical intermediaries between policies, school resources, and the needs of students, and thus, their feedback is essential to comprehending how to improve vocational education programs and create more inclusive environments, particularly in local contexts like Solo Raya, where regional and socio-economic challenges may exacerbate the gaps in service delivery.

Despite these challenges, vocational education remains a vital program for enhancing the skills and overall quality of life of students with disabilities (Hornby, 2021; Moriña & Biagiotti, 2022). It enables them to acquire job-specific technical competencies, as well as essential soft skills such as communication and collaboration, which are crucial for success in the workplace. Previous research has found that students with disabilities who receive vocational training have higher chances of employment, achieve financial independence, and experience better social integration (De Souza & Vongalis-Macrow, 2021; Moriña & Biagiotti, 2022). Given the central role of teachers as the direct implementers of vocational instruction, understanding their perspectives is vital. Teachers not only deliver lessons but also serve as a bridge between policies, school resources, parental involvement, and the demands of the industry. Therefore, examining vocational education through the lens of teachers would provide

valuable insight into how these multifaceted challenges can be addressed and create a more accessible and inclusive system.

This study aimed to analyze the challenges faced in providing vocational education to students with disabilities and to explore expectations for improvement and future development. By identifying the barriers and opportunities within the current system, this research seeks to contribute to the ongoing dialogue on how to make vocational education more inclusive and effective for students with disabilities. Through this study, we aim to provide recommendations that can lead to more effective policies, improved curricula, and enhanced training programs, enabling students with disabilities to achieve greater independence and a higher quality of life.

METHOD

Participants

The participants of this study consisted of 20 vocational education teachers who are actively involved in teaching students with disabilities. Of the 20 teacher participants, 10 were from special

needs schools and 10 were from inclusive vocational high schools. This balanced composition allowed the study to capture variations of lived experience across different educational environments. The sample was selected using purposive sampling based on specific inclusion criteria: (1) teachers must have direct teaching experience with students with disabilities, (2) they must be employed at either a special school or an inclusive vocational high school, and (3) they must have at least one year of experience working in the field of vocational education for students with disabilities. The exclusion criteria included teachers without direct experience with students with disabilities or those who were not currently teaching in vocational education programs. All of the teachers had direct teaching experience with students with disabilities, making them valuable resources of insight into the realities of vocational education. By focusing on teachers with proven engagement in vocational education for students with disabilities, the study sought to gather rich, credible, and contextually grounded data. The table below provides general information about the participants.

Table 1. Participants' general information

	Teaching Experience (Years)			Qualification		
	1-5	5-10	10≤	Diploma	Undergraduate	Postgraduate
n	9	5	6	1	16	3
Σ	20			20		

Research Design and Procedures

This study employed a qualitative phenomenological approach. The phenomenological design was selected to systematically explore and interpret the lived experiences of vocational education teachers in their interactions with and support of students with disabilities. The focus of this study was to reveal the essence of the shared experience among teachers in both special and vocational high schools in the Solo Raya region, Indonesia. The research procedures followed a systematic set of steps within a 3-month period.

In the pre-study preparation phase, the research began by obtaining ethical approval and recruiting participants through purposive sampling. Data was then collected through Focus Group Discussions (FGDs) involving 20 vocational education teachers, based on their direct and substantial experience working with students with disabilities, aligning with phenomenological sampling principles. After data collection, thematic analysis was performed using *ATLAS.ti (version 9)* software. The final phase involved reporting and recommendations, where the findings were

synthesized to provide insights into the challenges faced by teachers and their suggestions for improving vocational education for students with disabilities.

Instruments

The data collection for this study was conducted through Focus Group Discussions (FGDs), facilitated with semi-structured interview questions. The FGD provided teachers with opportunities to openly share their experiences in their schools. Although FGD data can sometimes lead to group consensus or surface-level responses, this format was chosen to provide teachers with an opportunity to discuss their shared experiences and expectations in a group setting, which allowed for richer discussions and the emergence of diverse perspectives. The use of FGD was deemed appropriate for this study because it fostered interaction among teachers, enabling a deeper understanding of shared experiences in vocational education for students with disabilities. The questions were designed to prompt discussion about the challenges and expectations that teachers faced in vocational education for students with disabilities. While the interview questions were open-ended, a set of guiding questions developed by the researchers helped to steer the conversation and ensure that key themes related to the research objectives were addressed. In qualitative research, the researchers served as the primary instruments, engaging with participants while guiding the discussions according to a set of prepared questions. The discussion guide was developed collaboratively by the research team, providing a focused framework for eliciting in-depth insights into the multiple challenges and expectations from the teachers. To ensure content validity, the guide was collaboratively reviewed by experts in the field. Reliability was achieved through consistent application of the guide across all FGDs. These guiding questions emphasized two key areas: teachers' day-to-day experiences

in teaching students with disabilities and their suggestions for strengthening vocational education in both special and inclusive school settings.

Data Analysis

The data analysis in this study followed a phenomenological analytic framework that emphasized the systematic uncovering of meaning structures within participants' lived experiences. The researchers used *ATLAS.ti (version 9)*, a qualitative data analysis software that facilitated coding, categorization, and comprehensive data organization. The analysis began with phenomenological reduction, where researchers bracketed prior assumptions to focus solely on participants' descriptions. Transcripts from the FGDs were read repeatedly, and significant statements were identified through horizontalization, meaning each statement was initially treated with equal value before clustering them into meaning units. These meaning units were then organized into thematic clusters that reflected shared experiential structures across participants. Visual outputs, such as network diagrams, were generated to map the relationships among meaning units and experiential themes. The final stage involved synthesizing these thematic clusters into an integrated description of the phenomenon's essence. This synthesis captured the core meanings of teachers' lived experiences and offered a deeper understanding of how vocational educators navigate their roles when working with students with disabilities.

■ RESULT AND DISCUSSION

The findings from the Focus Group Discussions (FGDs) with 20 vocational education teachers across both special and inclusive schools in the Solo Raya region revealed several significant challenges faced in providing vocational education for students with disabilities. These challenges were not limited to a single issue, but spanned multiple dimensions. While the challenges are considerable, the teachers also expressed a

range of expectations for improving vocational education for students with disabilities in the future. The network coding results on challenges and expectations in vocational education for students with disabilities using the *ATLAS.ti* application is shown in the diagram below:

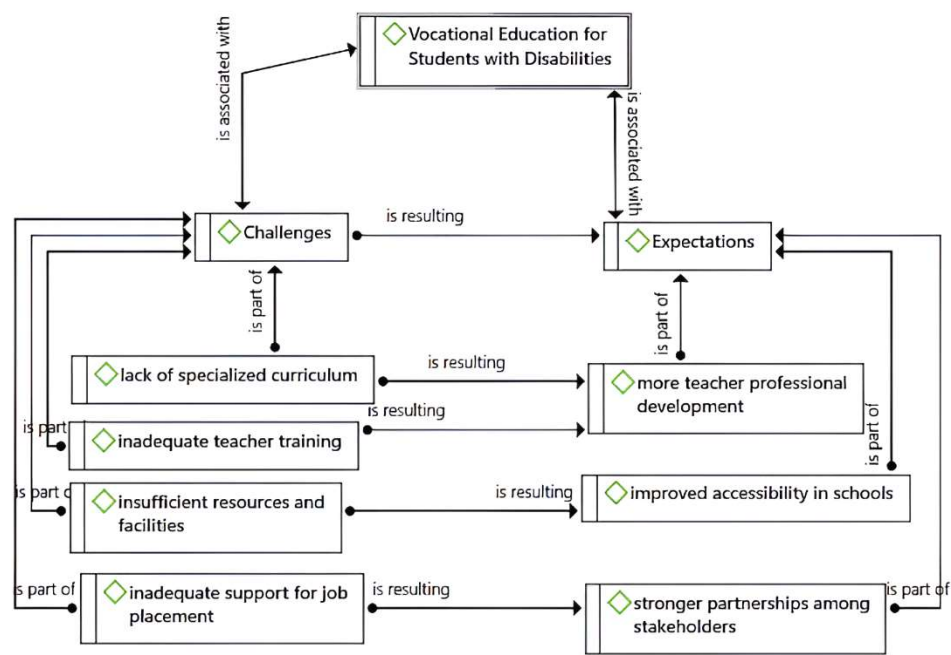


Figure 1. Network coding results using the ATLAS.ti

The following Sankey diagram visually represents the key challenges and proposed solutions identified by participants during the Focus Group Discussion (FGD) on the vocational education of students with special needs. This diagram illustrates the flow of these challenges and corresponding responses, with a focus on two types of schools: Special Needs Schools (SLB) and Vocational High Schools (SMK).

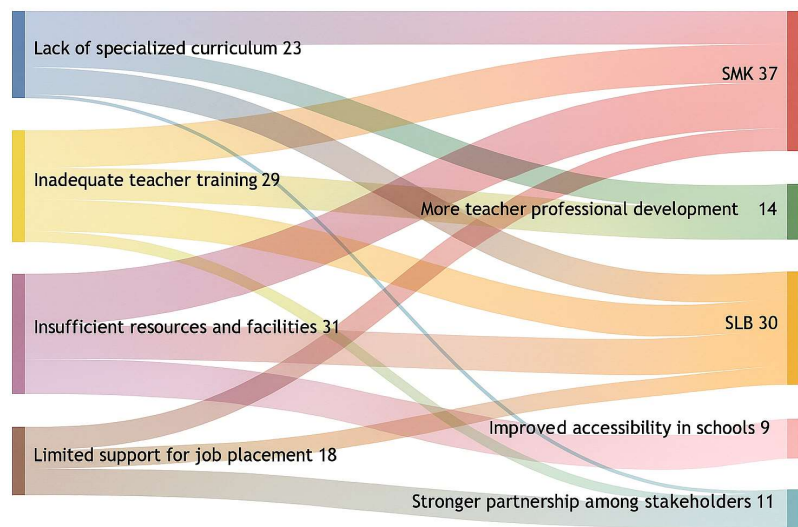


Figure 2. Sankey diagram

The following table presents insights gathered from the FGD with teachers from special needs schools and inclusive vocational high schools regarding the challenges they face in educating students with special needs. It highlights key themes, such as the lack of specialized curricula, inadequate teacher training, insufficient resources and facilities, and limited support for job placement, along with the perspectives of teachers from both types of schools.

Table 2. Analysis of FGD teacher quotes from special needs schools and inclusive vocational high schools

Themes	FGD Special Needs Schools Teacher Quotes	FGD Inclusive Vocational High Schools Teacher Quotes	Analysis
Lack of specialized curriculum	"The lack of a specialized vocational curriculum for children with special needs, with many schools using a general curriculum with individual adjustments by teachers."	"At that time, we did not have a separate curriculum." "Apologies, but in inclusive vocational high schools, we accept all students who come. There is no screening." "There is no assessment yet. There are no instruments."	Both special needs and inclusive vocational high schools lack a dedicated curriculum for students with disabilities. Special needs schools employ flexible adjustments, whereas inclusive vocational high schools lack a specific approach and do not screen students for special needs.
Inadequate teacher training	"Many vocational teachers in special needs schools are not graduates of vocational education, but they teach based on their interest or personal experience." "They have the skills, but they are confused about how to teach it."	"We do not have training on how to teach children with special needs, so we do not know." "Inclusive vocational high schools do not provide training because there are not many cases of children with special needs."	Both schools lack specialized training for teachers working with students with disabilities. Teachers in special needs schools rely on personal experience, whereas teachers in inclusive vocational high schools often lack training opportunities.
Insufficient resources and facilities	"We have the tools, but there is no space. So, we can only make use of the classrooms." "There is a lack of teachers or experts who are qualified to teach vocational skills to students."	"The space is small, and the network is slow." "E-learning at home is not possible because it cannot be done." "If a wheelchair is needed, the space should be wider."	Both schools face limitations in resources and space. Special needs schools often have limited equipment but lack sufficient space, while inclusive vocational high schools struggle with inadequate infrastructure, including slow internet connections.
Inadequate support for job placement	"However, the collaboration for job placement is still very limited." "Parents usually have their own businesses. It is not through a system, but based on personal connections."	"Students with special needs usually face difficulties when it comes to internships due to industry regulations."	Both schools face challenges in job placement. Special needs schools often have limited collaboration, while inclusive vocational high schools' students with special needs struggle to find internship opportunities due to industry regulations.

Challenges in Vocational Education for Students with Disabilities

The FGDs with 20 vocational education teachers revealed several significant challenges faced in providing vocational education for students with disabilities. These challenges include the lack of specialized curriculum, insufficient resources and facilities, inadequate teacher training, and a lack of structured support for job placement. One of the primary challenges identified by the teachers was the absence of a specialized vocational curriculum for students with disabilities. Most schools continue to use general education curricula, with only minor adaptations for students with disabilities. As one of the participants revealed, *“At our vocational school, we happened to receive a student with a physical disability, and since the student only had one functional hand, we had to give different kinds of support. At that time, we did not have a separate curriculum for such cases. Honestly, in vocational schools, we accept all students who come to us. There is no screening process.”* This illustrates a core experiential tension (accept-all policy vs. preparedness), which repeatedly surfaced across participants as a fundamental meaning of the practice. This lack of tailored curricula is consistent with the findings of previous researchers, who noted that vocational education programs often fail to meet the diverse needs of students with disabilities due to a generalized approach that does not account for their specific learning requirements (Venkatesh et al., 2023). Beyond mere consistency with prior literature, the data specify how the absence of specialized curricula was experienced locally. Teachers reported improvisational adaptations that relieved immediate difficulties but cumulatively produced a reactive mode of teaching and a sense of instructional fragility. In response to this issue, teachers often engage in ad hoc adaptations to support students with disabilities, particularly by modifying tasks and expectations to match the

individual needs of each student. These adaptations, while helpful in the short term, reveal the tension between the school's policy of accepting all students and the lack of preparedness to support students with disabilities effectively. This tension has significant implications for the quality of education provided, as the absence of a structured, specialized curriculum often leads to a reactive approach rather than a proactive, systematic plan for meeting the needs of students with disabilities. The study localizes this tension within the Solo Raya governance context, demonstrating that teachers' reactive practices are shaped not only by generic global barriers but also by the decentralized implementation of policy.

In this study, teachers from both special needs schools and inclusive vocational high schools highlighted that many students with disabilities, particularly those with intellectual disabilities, face difficulties in following a standard curriculum, which ultimately hampers their ability to develop essential vocational skills. Moreover, the schools reported significant gaps in the availability of teaching materials and tools that are adapted for students with disabilities. This issue is not unique in Indonesia, as similar concerns have been raised by other researchers who emphasized the need for appropriate teaching resources to support the effective delivery of vocational education to students with disabilities (Abdillah, Widianingsih, Buchari, & Nurasa, 2025). Without access to suitable tools and learning materials, vocational training becomes less effective, limiting students' opportunities to acquire the practical skills required for future employment. Phenomenologically, teachers described a recurring meaning structure of “resource-workarounds,” in which they borrowed, modified, or privately sourced aids to support their teaching. This generated feelings of moral responsibility but also fatigue, uncertainty, and uneven instructional quality across schools.

Another major challenge identified was the insufficient training and professional development for teachers working with students with disabilities. Many teachers in this study reported that they had received little to no formal training in special education or vocational pedagogy, which directly affects their ability to deliver effective vocational training to students. As one participant said, "At our school, there is no training. Moreover, even when the education office does provide one, it is very limited, so it is just not enough." This finding is consistent with some studies, which found that a lack of specialized training for teachers in vocational education for students with disabilities significantly impacts the quality of education provided (Ebuenyi et al., 2020; Shaffeei, Razalli, & Hanif, 2020; Solomon et al., 2023). This analysis is extended by specifying a local causal chain, limited branch-level capacity to commission disability, and specific upskilling leads to sporadic, short-format trainings, which influenced teachers' reliance on experiential improvisation. This eventually results in inconsistent accommodations across schools. This chain was repeatedly articulated in participants' narratives as a felt pattern of being underprepared. In this study, several teachers expressed limited knowledge of how to modify vocational tasks for students with varying disabilities, resulting in inconsistent teaching practices and a lack of confidence in addressing the specific needs of their students. This challenge is exacerbated by teachers' reliance on informal methods of support, which often depend on personal experience and ad-hoc solutions rather than structured, evidence-based approaches. Teachers working in inclusive vocational high schools, for instance, often have to rely on their general teaching experience and instinctual approaches rather than specialized training on how to work with students with disabilities. This gap in professional development is a significant barrier to the effective integration of students with disabilities into vocational education programs.

The teachers also pointed out significant deficiencies in facilities and infrastructure, particularly the lack of disability-friendly amenities, such as classrooms that can accommodate students with physical disabilities. One of the participants implied, "*It is mostly in the computer lab for students with disabilities. When there are assignments, they have to use the computer. However, the room is small, it is hard to get in, and the internet connection is slow. Learning through e-learning at home does not work either, because they do not know how to use it, and they do not have the facilities.*" These findings align with the earlier study, which identified the inadequacy of physical infrastructure as a key barrier to inclusive vocational education (Muzite & Gasa, 2024). In the Solo Raya region, many schools still lack the basic infrastructure necessary to support students with disabilities, limiting their participation in vocational training and hindering their ability to access the full range of learning experiences available to their peers. Some schools have made efforts to adapt existing spaces, but these adjustments are often temporary and insufficient to meet the diverse needs of students. The experiential core here is an "environmental squeeze", meaning the teachers feel compelled to prioritize access over quality, which, in turn, reshapes task design and reduces authentic vocational practice time.

A further challenge lies in the lack of structured support for job placement and vocational integration following graduation. While some schools have informal partnerships with local businesses for internships and practical training, these opportunities are limited, and there is no formal system for tracking the employment outcomes of students with disabilities. As one participant revealed, "*In the special school, yes, there is. Coincidentally, our parents are involved in small businesses, so we usually work together with them. However, it is not yet systematic.*" This reliance on informal networks, while helpful in some cases, can be

seen as a coping strategy due to the failure of the formal system to provide adequate job placement support. These informal networks often provide limited opportunities and can create inequalities in access, particularly for students whose parents are not entrepreneurs or are not connected to local businesses. As a result, students without these familial connections may face additional barriers to securing internships or employment opportunities. This dependency on informal networks highlights the need for a more equitable, formalized system that ensures all students, regardless of their family background, have equal access to vocational training and job placement resources. The findings of this study align with those of the International Labour Organization, which reported that students with disabilities often face significant barriers to securing stable employment after completing their vocational education (Ananian & Dellaferrera, 2024). Without proper job placement programs or structured support from businesses, students with disabilities remain at a higher risk of unemployment, and many are not able to successfully transition from school to work.

The persistence of these challenges in the Solo Raya region can be attributed to a combination of factors related to local policies, infrastructure, and resources. One key factor is the regional variation in the implementation of vocational education programs, which is due to the decentralized nature of the local education system. In Central Java, the Governor Regulation (Pergub) of Central Java Province Number 49 of 2018 governs the organization and work procedures of regional branch offices within the Department of Education and Culture. These regional branches operate independently, resulting in significant differences in the resources and strategies employed for vocational education among students with disabilities. The 13 regional branches often develop their own approaches to special education, leading to fragmented support and inconsistent application of policies and programs for students with disabilities. This causal

mechanism from policy to practice can be explained from teachers' narrative, which revealed that 13 semi-autonomous branches generate divergent (i) training menus, (ii) procurement priorities, and (iii) partnership strategies, which in turn produce school-level disparities in curricula adaptation, resource availability, and industry linkage. The lack of uniformity in program execution and insufficient policy coordination between these regional branches exacerbates the problem, resulting in unequal access to resources and support. Some regions may have better infrastructure or more comprehensive teacher training programs, while others lack the basic facilities and resources to implement effective vocational training. This disparity makes it difficult to establish a cohesive system of vocational education that can adequately support all students with disabilities in the region. Hence, the pattern of fragmentation and inequity in Solo Raya is shown to be causally plausible under Pergub 49/2018's decentralized architecture, as experienced and described by teachers.

The declaration of Solo as an Inclusive City in 2013 is mentioned in teachers' accounts as a symbolic commitment with limited operational impact in vocational education. Participants reported that there were no clear budget lines, standards, or monitoring mechanisms tied to the declaration at the school level. This produces a rhetoric–implementation gap; inclusive language exists at the city level, but branch-level planning, resourcing, and accountability remain heterogeneous, leaving teachers to understand inclusivity into ad-hoc practice. Phenomenologically, this gap is experienced as a tension between the policy promise (hope, legitimacy) and the instructional reality (scarcity, improvisation).

Expectations for the Future of Vocational Education for Students with Disabilities

While the challenges are considerable, the teachers also expressed a range of expectations for improving vocational education for students

with disabilities in the future. These expectations primarily focus on providing better training for educators, improving infrastructure, and establishing stronger links between education and employment opportunities. Teachers expressed a strong desire for more professional development opportunities, particularly in the areas of special education and vocational training for students with disabilities. As one participant from a special needs school said, *"In the special school, we ask for experts to be invited to train the teachers in certain skills."* Meanwhile, in inclusive schools, they expect a training focusing on how to educate students with disabilities, as one of the teachers said, *"Teachers' knowledge about students with special needs, especially in vocational high schools, is very limited because we do not have any basic education or training about teaching students with special needs."* This expectation aligns with the findings of previous research, which have emphasized the importance of ongoing teacher training in improving the quality of vocational education for students with disabilities (Adaka, Adigun, Lalu, & Mngomezulu, 2022; Ebuanyi et al., 2020; Solomon et al., 2023). Teachers in this study suggested that specialized training would help them better understand the needs of students with different disabilities and equip them with the skills needed to modify tasks and teaching strategies accordingly. Providing teachers with the tools to effectively teach students with disabilities will not only improve the quality of education but also increase educators' confidence in their ability to address the diverse needs of their students.

Another key expectation from the teachers was a significant improvement in the physical infrastructure of schools to make them more accessible for students with disabilities. Many teachers indicated that the lack of disability-friendly infrastructure, such as accessible toilets and specialized classroom equipment, severely limits the ability of students with disabilities to fully participate in vocational training. One of the

teachers said, *"At our school, there is no special toilet. There is no one to assist either, so the student has to use diapers. Furthermore, in vocational high school, the schedule is full, from morning until afternoon (7 a.m. to 4 p.m.)"*. This expectation aligns with the findings of previous researchers, who have argued that enhancing physical accessibility is crucial for inclusive education (Liu et al., 2024; Morña & Morgado, 2018). Teachers in the current study suggested that schools should be equipped with the necessary infrastructure to accommodate students with physical disabilities, enabling them to engage fully in vocational activities.

Finally, teachers expressed the need for stronger partnerships between teachers, schools, parents, and the local branch of the education office to ensure that students with disabilities have better support in vocational education. One of the teachers said, *"What we need are cooperative parents. For example, there are regular parenting sessions about vocational issues. We explain the available programs, and parents also share their preferences. So, we try to align our perspectives. We hope that parents will be cooperative and support the programs for their children. At the policy level, it is the local education branch office that should bring together all the components, so that the policy implementation can be aligned across the branch"*. This finding is consistent with previous studies that highlight the importance of collaboration among stakeholders in supporting students with disabilities, particularly the role of parental involvement (Almalki, 2022) and policy-level coordination (Delubom et al., 2020; Solomon et al., 2023). The emphasis on cooperation also reflects the reality that without alignment between families and schools, vocational programs often lack continuity and effectiveness.

However, the limited capacity of local education offices to systematically integrate all stakeholders may explain why such partnerships

remain underdeveloped in practice. In accordance with the Governor Regulation (Pergub) of Central Java Province Number 49 of 2018, which governs the organization and work procedures of regional branch offices within the Department of Education and Culture of Central Java Province, the local education offices are structured into 13 regional branches. This decentralized system results in significant variations in the implementation of vocational education programs for students with disabilities across different regions. Each branch office tends to develop and implement its own programs, which often leads to a lack of standardization and continuity in the support provided to these students. The absence of a centralized policy framework or consistent guidelines for vocational education for students with disabilities further complicates efforts to align these various initiatives. Consequently, the lack of uniformity in program implementation results in fragmented support, making it difficult to establish a comprehensive system that meets the diverse needs of students with disabilities across the region. To address this, it is essential to develop a more coordinated approach that fosters collaboration among the 13 regional branches and ensures consistent policy application across all regions. By strengthening the capacity of local education offices to integrate efforts and share best practices, a more systematic and unified approach to vocational education for students with disabilities can be achieved.

■ CONCLUSION

This study has highlighted significant challenges and expectations regarding vocational education for students with disabilities in the Solo Raya region, based on Focus Group Discussions (FGDs) with 20 vocational education teachers. The findings demonstrate that teachers face substantial barriers, including a lack of specialized curricula, insufficient teaching resources, inadequate teacher training, and the absence of

structured support for job placement. These challenges hinder the effectiveness of vocational education for students with disabilities and limit their opportunities for meaningful participation in the workforce. From a phenomenological perspective, the study emphasized the importance of understanding the lived experiences of teachers, allowing the research to capture the essential meanings behind how they perceive, interpret, and navigate these challenges in their daily practice. This approach enabled the identification not only of surface-level issues but also of the deeper experiential structures that shape teachers' actions, expectations, and emotional responses when working with students with disabilities. The contribution of this study is both theoretical and practical. From a theoretical perspective, the research adds to the body of knowledge on vocational education for students with disabilities, specifically by foregrounding teachers' subjective experiences and the essences that emerged from their reflections during the FGDs. The study also deepens our understanding of how phenomenological insights into teachers' perceptions and experiences can clarify the complex realities they face in supporting students with disabilities in vocational settings. From a practical standpoint, the study offers concrete recommendations for policymakers and educational leaders. These recommendations include: 1) implementing targeted, comprehensive teacher training programs that focus on the unique needs of students with disabilities, 2) improving school infrastructure to accommodate the diverse learning needs of these students, and 3) strengthening collaboration between educators, parents, and local educational offices to create a more cohesive and supportive educational environment. Furthermore, policymakers should consider developing formalized job placement systems and establishing partnerships with local businesses to ensure that students with disabilities have the necessary resources and opportunities to transition successfully into the workforce. By

aligning these elements, vocational education for students with disabilities can be significantly improved, fostering a more inclusive and supportive environment that empowers these students to succeed in their educational and professional lives.

■ ACKNOWLEDGEMENT

“The researcher would like to express gratitude to Universitas Sebelas Maret for supporting this research. This research was funded by RKAT Universitas Sebelas Maret Fiscal Year 2025 through the Research Strengthening Research Group Capacity (PKGR-UNS) B scheme with Research Assignment Agreement Number: 371/UN27.22/PT. 01.03.2025.”

■ REFERENCES

- Abdillah, A., Widianingsih, I., Buchari, R. A., & Nurasa, H. (2025). Inclusive resilience in Indonesia: case of disability anticipation within inclusive development. *Discover Social Science and Health*, 5(1). <https://doi.org/10.1007/s44155-025-00190-9>
- Adaka, T. A., Adigun, O. T., Lalu, J., & Mngomezulu, T. P. (2022). Effect of mentorship on regular teachers' self-efficacy towards implementation of inclusive education at the basic education level. *Specijalna Edukacija i Rehabilitacija*, 21(4), 233–253. <https://doi.org/10.5937/specedreh21-37192>
- Almalki, S. (2022). Transition services for high school students with intellectual disability in Saudi Arabia: issues and recommendations. *International Journal of Developmental Disabilities*, 68(6), 880–888. <https://doi.org/10.1080/20473869.2021.1911564>
- Ananian, S., & Dellaferrera, G. (2024). A study on the employment and wage outcomes of people with disabilities. In *A study on the employment and wage outcomes of people with disabilities*. <https://doi.org/10.54394/ycrn8597>
- Bloor, D., Ballantyne, C., Gillespie-Smith, K., Wilson, C., & Hendry, G. (2022). Investigating the challenges of teaching sex education to autistic learners: A qualitative exploration of teachers' experiences. *Research in Developmental Disabilities*, 131(October 2021), 104344. <https://doi.org/10.1016/j.ridd.2022.104344>
- Bunbury, S. (2020). Disability in higher education—do reasonable adjustments contribute to an inclusive curriculum? *International Journal of Inclusive Education*, 24(9), 964–979. <https://doi.org/10.1080/13603116.2018.1503347>
- Cahyani, L. A. (2025). *Pendidikan Kewirausahaan bagi Siswa Disabilitas melalui Pembelajaran Vokasional/ : Analisis Pengalaman Guru [Entrepreneurship Education for Students with Disabilities through Vocational Learning: An Analysis of Teachers' Experiences.] Journal of Economic and Education* 22(2), 12–19. <https://doi.org/10.21831/jep.v22i2.90004>
- Collins, A., Azmat, F., & Rentschler, R. (2019). ‘Bringing everyone on the same journey’: revisiting inclusion in higher education. *Studies in Higher Education*, 44(8), 1475–1487. <https://doi.org/10.1080/03075079.2018.1450852>
- De Souza, D. E., & Vongalis-Macrow, A. (2021). Evaluating a pilot education-to-work program for adults with Down syndrome. *Studies in Educational Evaluation*, 70(March), 101016. <https://doi.org/10.1016/j.stueduc.2021.101016>
- Delubom, N. E., Marongwe, N., & Buka, A. M. (2020). Managers' challenges on implementing inclusive education: Technical Vocational Education and Training Colleges. *Cypriot Journal of Educational Sciences*, 15(6), 1508.
- Ebuenyi, I. D., Rottenburg, E. S., Bunders-Aelen,

- J. F. G., & Regeer, B. J. (2020). Challenges of inclusion: a qualitative study exploring barriers and pathways to inclusion of persons with mental disabilities in technical and vocational education and training programmes in East Africa. *Disability and Rehabilitation*, 42(4), 536–544. <https://doi.org/10.1080/09638288.2018.1503729>
- Fischer, S., & Kilpatrick, S. (2023). Vocational education and training (VET) career pathways for school students living with disability: Working with employers. *Journal of Teaching and Learning for Graduate Employability*, 14(2), 87–103. <https://doi.org/10.21153/jtlge2023vol14no2art1797>
- Herrick, S. J., Lu, W., Oursler, J., Beninato, J., Gbadamosi, S., Durante, A., & Meyers, E. (2022). Soft skills for success for job seekers with autism spectrum disorder. *Journal of Vocational Rehabilitation*, 57(2), 113–126. <https://doi.org/10.3233/JVR-221203>
- Hornby, G. (2021). Are inclusive education or special education programs more likely to result in inclusion post-school? *Education Sciences*, 11(6). <https://doi.org/10.3390/educsci11060304>
- Lipka, O., Forkosh Baruch, A., & Meer, Y. (2019). Academic support model for post-secondary school students with learning disabilities: student and instructor perceptions. *International Journal of Inclusive Education*, 23(2), 142–157. <https://doi.org/10.1080/13603116.2018.1427151>
- Liu, Z., Jamil, E., Sawadengdist, A., Hui, X., Kalai, K., & Tang, L. (2024). Delivering an inclusive built environment for students with disabilities in a Malaysian public university. *Qualitative Research Journal*, (2017). <https://doi.org/10.1108/QRJ-07-2024-0157>
- MacKenzie, A., Owaineh, M., Bower, C., & Özkaya, C. (2023). Barriers to inclusive education under occupation: An evaluative approach using Nussbaum's capabilities approach. *International Journal of Educational Research Open*, 5 (October). <https://doi.org/10.1016/j.ijedro.2023.100299>
- Mangope, B., Otukile-Mongwaketse, M., Dinama, B., & Kuyini, A. B. (2018). Teaching practice experiences in inclusive classrooms: The voices of University of Botswana special education student teachers. *International Journal of Whole Schooling*, 14(1), 57–92.
- Moriña, A., & Biagiotti, G. (2022). Inclusion at university, transition to employment and employability of graduates with disabilities: A systematic review. *International Journal of Educational Development*, 93(July), 0–2. <https://doi.org/10.1016/j.ijedudev.2022.102647>
- Moriña, A., & Morgado, B. (2018). University surroundings and infrastructures that are accessible and inclusive for all: listening to students with disabilities. *Journal of Further and Higher Education*, 42(1), 13–23. <https://doi.org/10.1080/0309877X.2016.1188900>
- Muzite, P., & Gasa, V. (2024). Experiences of students with disabilities in technical vocational education and training colleges. *African Journal of Disability*, 13, 1–10. <https://doi.org/10.4102/AJOD.V13I0.1477>
- Peraturan Gubernur Provinsi Jawa Tengah Nomor 49 Tahun 2018. (2018). *Tentang organisasi dan tata kerja cabang dinas pada dinas pendidikan dan kebudayaan provinsi jawa tengah. pemerintah provinsi jawa tengah*. [Governor regulation of central java province number 49 of 2018. (2018). on the organization and work procedures of regional branch

- offices at the department of education and culture of central java province. government of central java province.]
- Rath, V. (2022). Social engagement: Hearing the experiences of disabled students in higher education in Ireland. *Frontiers in Education*, 7(August), 1–10. <https://doi.org/10.3389/feduc.2022.895392>
- Salim, A., Hidayatullah, M. F., Nugraheni, P. P., & Dian Atnantomi, W. (2019). Investigating effectiveness of disability friendly education training modules in Indonesian schools. *International Journal of Education and Practice*, 7(3), 286–293. <https://doi.org/10.18488/journal.61.2019.73.286.293>
- Shaffeei, K., Razalli, A. R., & Hanif, M. H. M. (2020). Career transition program for special need students: a preliminary survey. *International Journal of Academic Research in Business and Social Sciences*, 10(9), 736–746. <https://doi.org/10.6007/ijarbss/v10-i9/7863>
- Sigstad, H. M. H., & Garrels, V. (2023). Norwegian teachers' efforts in preparing students with mild intellectual disability for working life. *European Journal of Special Needs Education*, 38(6), 788–802. <https://doi.org/10.1080/08856257.2023.2172895>
- Solomon, E. T., Luger, R., & Ned, L. (2023). Experiences of teachers in vocational programmes in special needs schools, City of Cape Town. *African Journal of Disability*, 13, 1–12. <https://doi.org/10.4102/AJOD.V13I0.1333>
- Tschanz, C., & Powell, J. J. W. (2020). Competing institutional logics and paradoxical universalism: School-to-work transitions of disabled youth in Switzerland and the United States. *Social Inclusion*, 8(1), 115–167. <https://doi.org/10.17645/si.v8i1.2373>
- Venkatesh, K., Reddy, S. K., & Anggothu, H. (2023). Vocational skill training programs for persons with intellectual disability (PID) and trainers' perspective during and post vocational skill training. *Journal of Family Medicine and Primary Care*, 12(2), 3142–3148. <https://doi.org/10.4103/jfmpe.jfmpe>
- Yusuf, M., Yuwono, J., Mustaqimah, U., Supratiwi, M., & Cahyani, L. (2025). Assessing inclusivity of faculties and school at sebelas maret university utilizing uns inclusion metric standards. *Jurnal Pendidikan Progresif*, 14(2), 1114–1124. <https://doi.org/10.23960/jpp.v14.i2.2024>
- World Health Organization. (2023). Disability. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/disability-and-health> 2 September 2025.