

## Research Article

Cite this article: Zainal, M. S. (2025). From Classroom to Career: Exploring Employment Pathways of Students with Disabilities with the Malaysia Skills Certificate. *Educational Process: International Journal*, 18, e2025468. <https://doi.org/10.22521/edupij.2025.18.468>

Received July 8, 2025

Accepted August 29, 2025

**Keywords:** Students with Disabilities, Career Transition, Malaysia Skills Certificate

**Author for correspondence:**

Mohd Syazwan Zainal

✉ [syazwanzainal@ukm.edu.my](mailto:syazwanzainal@ukm.edu.my)

✉ Universiti Kebangsaan Malaysia, Malaysia.

## From Classroom to Career: Exploring Employment Pathways of Students with Disabilities with the Malaysia Skills Certificate

Mohd Syazwan Zainal 

**Abstract**

**Background/purpose.** The difficulty faced by students with disabilities in obtaining employment after completing school is a global concern. In Malaysia, the government has implemented the Malaysia Skills Certificate (MSC) as a means of equipping student with disabilities with practical and vocational skills while still in school. However, little is known about the employment outcomes of students with disabilities who completed this program. Therefore, this study explores the post-school pathways of students with disabilities who have completed the MSC program in Malaysia.

**Materials/methods.** This qualitative case study explored the experiences of eight students with disabilities who had completed the MSC program. Participants were purposefully selected by ensuring that they were no longer in school and either currently employed or unemployed. Data were collected through semi-structured interviews and were analyzed thematically using the Atlas.ti 8 software.

**Results.** Four key themes emerged: (1) Employment Pathways and Vocational Readiness, (2) Workplace Challenges and Support Needs, (3) Aspirations for Independence and Contribution, and (4) Social and Environmental Influences on Career Engagement. However, this research also highlights that students with disabilities face barriers such as communication difficulties, inadequate support, and workplace exploitation. Their successful transition depends on emotional resilience, strong family backing, and sustained post-school support.

**Conclusion.** The findings underscore the need for more inclusive and adaptive vocational education policies that address the unique needs of students with disabilities. Collaborative efforts among educators, employers, and families are crucial to enhancing career readiness and facilitating a smoother transition from school to work for students with disabilities in Malaysia.



OPEN ACCESS

© The Author(s), 2025. This is an Open Access article, distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted re-use, distribution, and reproduction, provided the original article is properly cited.

## 1. Introduction

The transition from school to adulthood is a pivotal stage for youth with disabilities, as it represents their pursuit of independence, economic participation, and meaningful engagement in society. However, this transition often involves substantial challenges, particularly for those with cognitive, developmental, or multiple disabilities. Globally, students with disabilities continue to experience disproportionately high rates of unemployment and underemployment compared to their peers without disabilities, despite increased advocacy for inclusive education and vocational opportunities (Carter et al., 2010). Structural supports intended to facilitate this process are frequently inconsistent or underdeveloped, contributing to limited post-school outcomes. For many young people with disabilities, the transition system is fragile, lacking both sustainability and the adaptability required to respond to changing labor market needs.

Many nations have introduced specialized transition and vocational training programs to improve school-to-work outcomes for students with disabilities. While such initiatives demonstrate positive effects, participation often remains limited, particularly among individuals who require intensive or individualized support. A recurring challenge is the lack of professional preparedness among educators and transition personnel, which undermines the quality and consistency of service delivery (Carter et al., 2010; Awsumb et al., 2020). The COVID-19 pandemic further exacerbated these challenges, interrupting Career and Technical Education (CTE) and restricting access to vocational experiences, thereby stalling skill development during a critical phase in students' lives (Dougherty et al., 2022). For students with disabilities, the pandemic was not merely a temporary disruption but a significant structural setback that magnified existing weaknesses within transition systems.

In response to these limitations, professional certification programs have emerged internationally as a promising mechanism for strengthening employment outcomes. Certification provides formal recognition of vocational competencies, enhances employability, and increases credibility in the eyes of employers, particularly in industries that rely on standardized skill benchmarks (Curry et al., 2013; Szyjewski, 2023). Individuals holding certifications are more likely to be regarded as high-performing employees and to access advancement opportunities, compared to peers without such credentials. However, access to certification pathways is uneven. Students with disabilities from disadvantaged socioeconomic backgrounds often face barriers such as limited availability of training programs, affordability issues, and a lack of structured guidance (Reims & Tophoven, 2021). These inequities highlight the importance of designing certification-based vocational pathways that are both inclusive and responsive to the diverse needs of students with disabilities.

Several international initiatives illustrate the value of certification-linked vocational training. In the United States, the Employment Support Professional Certification Program enhanced the competencies of professionals providing employment services, resulting in better outcomes for individuals with disabilities (Novak et al., 2014). Similarly, Northern Ireland's Vocational Opportunities in Training for Employment (VOTE) initiative provided tailored vocational training, significantly increasing employment rates among participating students with disabilities (Dean et al., 2019). These examples suggest that certification programs, when integrated with targeted support, can mitigate systemic barriers and create more equitable opportunities for sustainable employment. At the same time, they underscore the importance of evaluating not only access to such programs but also their long-term impact on employment pathways.

In Malaysia, the government has introduced the Malaysia Skills Certificate (MSC) as part of the Integrated Special Education Program at secondary school to support students with disabilities in their transition to work (Alshoura, 2023). The MSC provides practical, industry-relevant training designed to enhance employability after graduation, reflecting a strong commitment to inclusive

vocational education. However, little is known about its effectiveness in securing meaningful and sustainable employment. Key concerns remain, such as whether graduates gain stable jobs, how well the training matches labor market needs, and how factors like workplace accommodations, employer attitudes, and family support influence outcomes (Latib et al., 2017). This lack of evidence highlights the need for research on the employment trajectories of MSC graduates. Understanding their experiences can reveal whether certification truly leads to labor market participation or whether systemic barriers persist (Abdullah, 2013). Situating the Malaysian context within international literature also offers comparative insights, emphasizing both unique challenges and transferable lessons for inclusive transition planning. This study, therefore, explores the post-school pathways of students with disabilities who completed the MSC program. Using qualitative data, this study examines the intersection of vocational training, workplace challenges, aspirations, and environmental influences, with the aim of informing policy and strengthening inclusive transition systems that foster employment and social inclusion.

## 2. Literature Review

CTE and professional certification are widely acknowledged as effective strategies for improving employment outcomes among youth with disabilities. Participation in CTE programs during secondary school has been associated with increased acquisition of practical skills, improved school completion rates, and access to industry-recognized credentials (Dougherty et al., 2018). Certifications serve as a formal validation of a student's vocational competencies, improving employability and job performance. Indeed, research shows that certified individuals are more likely to be viewed as high performers by employers and to receive better evaluations than their non-certified peers (Curry et al., 2013). Despite the advantages of certification, access remains unequal. Youth from lower socioeconomic backgrounds or rural communities often lack access to quality training centers, financial resources, or information about certification opportunities (Reims & Tophoven, 2021). This inequality is further magnified for students with disabilities, who may require individualized accommodations, specialized instruction, or additional job placement support. These challenges call for targeted interventions that consider both disability-related and socioeconomic barriers to workforce participation.

The COVID-19 pandemic further complicated this transition. Disruptions to in-person instruction and practical training impeded students' ability to gain hands-on experience and industry exposure, which are critical for skill development and confidence building (Dougherty et al., 2022). Youth with disabilities, who are already at greater risk of educational exclusion, were disproportionately affected. This scenario underscores the necessity for resilient and adaptable training models that can withstand systemic shocks while maintaining continuity in learning and access to certification. Programs such as Pre-Employment Transition Services (pre-ETS) have gained recognition for offering structured, work-based learning experiences and career counseling for youth with disabilities (Schutz & Carter, 2022). These programs exemplify the importance of early and proactive transition planning. They also reinforce the idea that career readiness is not solely about acquiring hard skills but involves soft skills, self-advocacy, and the development of realistic and motivating career goals.

Collaboration among stakeholders is another critical success factor. Effective transition planning requires coordinated involvement from educators, vocational rehabilitation agencies, employers, and families. However, many transition personnel report insufficient training and lack confidence in implementing evidence-based practices (Plotner et al., 2016). Schools and agencies must invest in ongoing professional development to ensure that staff are equipped to deliver high-quality, personalized services. Furthermore, employers often demonstrate limited engagement, with some expressing reluctance to hire individuals with disabilities due to misconceptions or unfamiliarity with accommodations (Jang et al., 2014). These attitudes reinforce exclusion and undermine efforts to create inclusive work environments. In addition to systemic factors, individual and family-level

variables also play a crucial role in shaping employment outcomes. Studies consistently show that early work experience—such as part-time jobs, job shadowing, or internships—predicts stronger post-school employment outcomes for students with disabilities (Carter et al., 2009; Schutz & Carter, 2022). These opportunities help students build workplace confidence, understand employer expectations, and develop transferable skills that are essential for success in the workplace. Likewise, parental involvement has been found to significantly influence the transition process. Parents who maintain high expectations and actively engage in career planning can help foster their children’s independence, self-efficacy, and long-term employment success (Giorgetti et al., 2022).

Despite these insights, many gaps remain—particularly in the Malaysian context—regarding how certification programs, such as the MSC, translate into real employment outcomes for students with disabilities. While the certificate aims to prepare students for the workforce, there is little evidence on how effectively it supports sustained employment, autonomy, or social inclusion. Understanding the lived experiences of students with disabilities can offer critical insights into the strengths and limitations of existing programs and inform future policy development.

### 3. Methodology

This study employs a qualitative approach with a case study design. According to Yin (Creswell & Creswell, 2018), case studies are frequently utilized in various contexts and serve as a common research strategy in disciplines such as psychology, sociology, political science, social work, business, and community planning. Cohen et al. (2020) also emphasize that case studies can be adapted across all stages of research design, from data collection to analysis and reporting. This study utilizes purposive sampling, a technique in which participants are selected based on specific criteria. These criteria ensure that the selected participants can provide relevant and comprehensive information related to the study. This approach facilitates an in-depth, efficient, and detailed collection of respondents’ experiences to effectively address the research questions.

**Table 1.** Research Respondent Demographics

| Respondent | Year of school completion | Sex    | Work experience |
|------------|---------------------------|--------|-----------------|
| R1         | 2024                      | Male   | No              |
| R2         | 2024                      | Male   | No              |
| R3         | 2022                      | Male   | No              |
| R4         | 2024                      | Female | Yes             |
| R5         | 2017                      | Female | Yes             |
| R6         | 2024                      | Male   | Yes             |
| R7         | 2019                      | Female | Yes             |
| R8         | 2022                      | Male   | Yes             |

In this study, the selected respondents are students with disabilities who have completed their schooling under the Integrated Special Education Program at the age of 20 and above. These individuals also received vocational training during their school years. Data collection primarily relies on in-depth interviews (Creswell & Creswell, 2018). This approach allows researchers to explore the emotions, thoughts, and lived experiences of the participants. The study employs a semi-structured interview protocol, where open-ended questions encourage participants to freely share their views

without restrictions. To facilitate meaningful discussions, the interview protocol is structured consistently, including opening questions, introductory questions, transition questions, key questions, and concluding questions. To ensure the validity of the interview protocol, experts were consulted to evaluate and review the questions before conducting the interviews. The interview questions are divided into four sections:

Section A: Background Information

Section B: Learning Experiences in Vocational Training

Section C: Work Experiences After Completing the MSC

Section D: Experiences During Unemployment

The data collection process began with obtaining the contact details of selected participants through collaboration with schools and training centers that offer the MSC. Prior to participation, informed consent was sought from both the participants and, where appropriate, their family members to ensure ethical compliance and voluntary participation (Spencer et al., 2003). Once consent was secured, the researcher contacted participants directly to explain the purpose of the study, address any questions, and schedule interview sessions at times convenient for them.

Interviews were conducted either face-to-face or via online platforms, depending on the accessibility and preferences of the participants. Each session lasted between 45 and 90 minutes and was audio-recorded with consent. An interview protocol guided the sessions to ensure consistency, focusing on vocational training experiences, transition support, workplace challenges, and personal aspirations. Field notes were also taken during and after each interview to capture contextual details and non-verbal cues, supporting a richer understanding of participants' experiences (Spencer et al., 2003).

All interviews were transcribed verbatim and analyzed thematically using Atlas.ti version 8. Thematic analysis was conducted using Braun and Clarke's (2006) six-phase framework: familiarization with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the final report. The researcher immersed themselves in the data through repeated readings of the transcripts before initiating coding. Open codes were generated manually and then refined using axial and selective coding, with the assistance of Atlas.ti, which supported systematic data management and organization. Emerging themes were carefully reviewed, named, and structured to align with the study's objectives. Data saturation was considered achieved when no new codes or patterns emerged across interviews, reinforcing the depth and completeness of the findings (Braun & Clarke, 2006).

To strengthen reliability and trustworthiness, multiple validation strategies were employed. Participants were invited to review their transcripts (member checking) to ensure factual accuracy. Credibility was further enhanced through peer debriefing, where two independent researchers critically reviewed the coding and thematic development process. An audit trail was maintained to document all analytical decisions, while the researcher practiced reflexivity to minimize bias during the interpretation process. In line with Spencer et al. (2003), divergent perspectives and alternative interpretations were incorporated to capture the complexity of participants' experiences. Representative quotes from participants were also included in the findings to ensure transparency and authenticity of the themes.

#### 4. Results

This study aimed to investigate the employment experiences and aspirations of students with disabilities who have completed the MSC. Through thematic analysis of interview data, four key themes emerged: (1) Employment Pathways and Vocational Readiness, (2) Workplace Challenges and

Support Needs, (3) Aspirations for Independence and Contribution, and (4) Social and Environmental Influences on Career Engagement. These themes collectively shed light on how students with disabilities navigate the transition from school to the workforce.

#### **4.1. Employment Pathways and Vocational Readiness**

The participants described a variety of jobs they engaged in after completing school, predominantly in the food and beverage sector. Several had worked as restaurant assistants, kitchen helpers, or in small family-run food businesses. Their responsibilities included preparing food, taking orders, cleaning, and general assistance.

*"After school, I worked, teacher. I worked at a food stall with my sister." (R4)*

*"I work at a Chinese restaurant. I'm a part-timer. I help in the kitchen and the restaurant... my job includes lifting items, setting tables, and taking out trash." (R6)*

For some, employment came through personal or family connections, rather than formal job placement services. These informal pathways often made the transition into employment smoother, especially for those lacking experience or confidence in independent job-seeking.

*"I always contact my friend. He shares his work experience... it makes me want to work with him." (R3)*

Participants also reflected on the relevance of their vocational school training, especially those who studied bread-making or agriculture. Many recalled specific skills such as baking donuts and pizzas or planting vegetables, and some were able to relate these directly or indirectly to their current work tasks.

*"I learned how to make bread since Form 1. We made donuts, buns, and pizza." (R1)*

*"I help with carrying things, setting the table, and taking out the trash... it's similar to what we did in school, like following the teacher's instructions to take out trash." (R6)*

Despite this, a few participants noted that the skills acquired in school were not always sufficient for the demands of the real-world workplace, suggesting the need for additional hands-on support and real-life work exposure during their schooling years.

#### **4.2. Workplace Challenges and Support Needs**

While several participants had found employment, their work experiences were not without difficulties. Communication barriers emerged as a significant issue, particularly when colleagues or supervisors spoke in a language different from their own. Others faced interpersonal difficulties with customers or struggled to meet performance expectations due to a lack of workplace adaptation or understanding of their needs.

*"I worked for a year at Times Square... but I quit... there were salary issues. The employer didn't pay and always delayed the salary." (R8)*

Another participant shared how they had to leave their job due to business closure:

*"I worked at my aunt's food stall... but didn't last long because the boss closed the shop." (R7)*

Some participants expressed emotional discomfort when facing unfamiliar situations, such as job interviews or interacting with new people. These moments often intensified their sense of vulnerability.

*"I'm scared because I've never been to an interview. I didn't know how to answer questions... I stayed silent." (R1)*

Others emphasized that they would only feel confident entering the workforce if they had peers or friends alongside them:

*"I need a friend. Only then I'll be brave." (R7)*

This highlights a strong need for ongoing post-school support, including emotional preparation, job-matching services, and supported employment models that cater to the unique needs of students with disabilities.

#### **4.3. Aspirations for Independence and Contribution**

Despite the challenges they faced, participants consistently expressed a deep motivation to work, rooted in their desire for financial independence, contributing to their family, and personal growth. Having a job was perceived not only as a source of income but also as a symbol of adulthood and responsibility.

*"I hope to work, support my family, and buy what we need like groceries." (R3)*

*"I'm happy, teacher. Satisfied to have my own money. I can help my family. Now, I'm paying for my motorcycle myself." (R4)*

*"I want to work independently, without burdening others to send me." (R3)*

The sense of purpose and dignity associated with employment was a recurring sentiment. Many were willing to accept any job that paid a salary, showing flexibility and determination.

*"I accept any kind of job. I'm willing to work as long as there's a salary." (R1)*

This sense of self-reliance was a key driver of their employment goals, even among those who remained unemployed at the time of the study.

#### **4.4. Social and Environmental Influences on Career Engagement**

Both personal and external factors heavily influenced participants' journeys. Family support emerged as one of the most consistent enablers of career engagement. Many participants shared how their parents and siblings provided encouragement and emotional support.

*"My family motivates me a lot... my parents and two brothers always tell me not to be shy or afraid." (R6)*

However, family approval was also viewed as a prerequisite for employment, especially among those who required assistance with transportation or accommodation.

*"If there's a hostel or a place to stay, then my parents will allow it." (R1)*

*"I need to think about who will send me to work. I also need family permission." (R3)*

Participants who lacked strong support systems or who faced economic disruptions—such as unpaid wages or job loss during the pandemic—were more likely to withdraw from the workforce or delay re-entering. These findings illustrate that the transition from school to employment for students with disabilities is not solely dependent on vocational training, but also shaped by emotional readiness, family dynamics, and broader systemic supports.

In summary, students with disabilities with the MSC demonstrate a clear willingness and motivation to work. They engage in a range of employment experiences, often facilitated through informal networks and grounded in the skills they acquired in school. However, their transition to the workforce is complicated by communication difficulties, lack of formal support, and vulnerability to workplace exploitation. Emotional resilience, family involvement, and post-school support services are critical to ensuring that their aspirations for independence and contribution can be fully realized. These findings suggest that while vocational training lays the foundation, structured transition

planning and inclusive employment practices are essential to sustain meaningful work outcomes for this group.

## 5. Discussion

The transition from school to postsecondary life represents a critical juncture for all students, but it is particularly complex for students with disabilities, who often encounter multifaceted barriers to employment, social participation, and independent living. This study explored the employment pathways of students with disabilities who completed the MSC, and the findings highlight several interrelated themes: the importance of coordinated transition planning, the strengths and limitations of vocational training, the precarious nature of employment outcomes, the role of family and social networks, and the impact of systemic barriers. Collectively, these findings affirm existing concerns in the literature while offering new insights into the contextual realities faced by students with disabilities in navigating post-school transitions (Plotner et al., 2012; Awsumb et al., 2020; Schutz & Carter, 2022).

A systematic summary of the findings underscores several points. First, participants consistently demonstrated willingness and enthusiasm to work, often motivated by aspirations of independence, financial autonomy, and contribution to family life. Many had secured part-time or informal employment, particularly in food and service sectors, where they were able to apply competencies learned through MSC training. Bread-making, agriculture, and other vocational skills served as useful foundations for employment, aligning with existing research that supports CTE as a critical mechanism for enhancing postsecondary outcomes among students with disabilities (Dougherty et al., 2018; Plotner et al., 2016; Schutz & Carter, 2022). However, inconsistencies were evident between the training received and the realities of job demands, with participants highlighting difficulties in applying technical skills without additional support or real-world exposure. This suggests a need for improved alignment between training and labor market needs, consistent with prior work emphasizing the centrality of authentic, work-based learning in transition programming (Dougherty et al., 2022; Awsumb et al., 2020; Bakken, 2019).

These findings must be interpreted in light of prior scholarship on transition and employment pathways. Existing literature has long emphasized the systemic gaps in transition preparation, particularly the insufficient alignment of school-based vocational training with actual labor market conditions (Plotner et al., 2012; Awsumb et al., 2020; Giorgetti et al., 2022). The present study contributes to this discourse by illustrating how these gaps manifest within the context of MSC graduates, where training in bread-making and agriculture provided useful but incomplete foundations for long-term employment. This reinforces the argument that while CTE programs are resilient and adaptable (Dougherty et al., 2022; Dougherty et al., 2018), their effectiveness ultimately depends on their ability to provide authentic, work-based learning experiences closely tied to labor market needs (Bakken, 2019; Schutz & Carter, 2022).

Moreover, the precarious employment outcomes reported in this study—marked by part-time work, communication challenges, emotional distress in job-seeking, and incidents of employer exploitation—echo prior findings on the vulnerability of young workers with disabilities (Plotner et al., 2016; Schutz & Carter, 2022; Reims & Tophoven, 2021). However, the present results extend this knowledge by showing how these vulnerabilities are compounded by local conditions, including limited workplace protections, socioeconomic constraints, and disruptions caused by the COVID-19 pandemic. These findings highlight the vulnerability of employment opportunities for students with disabilities in contexts where structured transition support and robust regulatory protections are lacking (Awsumb et al., 2020; Challenger et al., 2024; Carter et al., 2009).

A notable theme emerging from the data is the reliance on informal social networks, such as siblings, extended family, and friends, as primary avenues for job acquisition. While these networks

provided valuable entry points into the workforce, they also underscored the absence of coordinated, formalized transition planning between schools, families, and community agencies. These findings are consistent with calls in the literature for more collaborative, multi-stakeholder approaches to transition planning that integrate educational institutions, vocational rehabilitation, families, and employers (Challenger et al., 2024; Jang et al., 2014; Giorgetti et al., 2022). At the same time, they demonstrate the critical role of social capital in contexts where institutional pathways to employment remain underdeveloped (Plotner et al., 2012; Carter et al., 2009; Schutz & Carter, 2022).

The study also underscores the role of student-centered transition planning. Participants expressed clear aspirations for self-sufficiency, meaningful work, and contribution to family life, highlighting the importance of embedding the student's voice within transition frameworks. This aligns with research advocating for student-centered approaches that actively incorporate student preferences and capacities (Jang et al., 2014; Giorgetti et al., 2022; Plotner et al., 2016). By foregrounding the aspirations of students with disabilities themselves, transition planning can move beyond a deficit-oriented model and instead emphasize empowerment and agency. The present findings thus reinforce the value of student voice as a cornerstone of effective transition practice (Awsumb et al., 2020; Carter et al., 2009; Schutz & Carter, 2022).

Family involvement further emerged as both an enabler and a barrier to employment engagement. On the one hand, supportive families provided critical logistical assistance (e.g., transportation), emotional encouragement, and permission to work. On the other hand, limited family resources or restrictive attitudes regarding safety and housing curtailed opportunities for some participants. These findings resonate with prior studies that highlight the central role of families in shaping post-school outcomes for students with disabilities (Carter et al., 2009; Plotner et al., 2016; Awsumb et al., 2020). They also suggest the need to broaden transition planning frameworks to explicitly include families as active partners. Education, counseling, and support services for families may enhance their capacity to contribute meaningfully to their child's transition process, ultimately strengthening postsecondary outcomes (Challenger et al., 2024; Schutz & Carter, 2022; Giorgetti et al., 2022).

Beyond individual and family-level dynamics, the findings reflect systemic challenges. Participants described experiences of wage theft, employer misconduct, and job instability during the pandemic, underscoring the precarious nature of their employment conditions. These accounts align with broader scholarship that highlights the structural disadvantages faced by students with disabilities in the labor market, where poverty, a lack of job placement services, and limited community-based employment opportunities exacerbate existing barriers (Reims & Tophoven, 2021; Plotner et al., 2012; Schutz & Carter, 2022). Importantly, these systemic issues are not unique to the present study's context but reflect global trends in the employment of individuals with disabilities. Nonetheless, by documenting how these structural barriers specifically affect MSC graduates, the study provides localized evidence of the urgency for stronger policy frameworks and enforcement mechanisms (Awsumb et al., 2020; Dougherty et al., 2018; Carter et al., 2009).

The importance of early and structured work exposure also emerged as a key finding. Participants who had opportunities for internships, job exploration, and early workplace experiences appeared better positioned to transition into employment. This finding is consistent with research that emphasizes the role of early work experiences in promoting employment success for students with disabilities, as they foster work-related behaviors, enhance self-efficacy, and facilitate role transition (Bakken, 2019; Plotner et al., 2016; Schutz & Carter, 2022). For students from lower-income households, these opportunities may represent the only viable pathway to stable employment, further highlighting the intersection of disability and socioeconomic inequality (Reims & Tophoven, 2021; Awsumb et al., 2020; Challenger et al., 2024). This study thus reinforces the argument that transition programs must be both disability-responsive and equity-oriented,

addressing the compounded barriers faced by students from disadvantaged backgrounds (Giorgetti et al., 2022; Carter et al., 2009).

Taken together, these findings make several unique contributions to the field. First, the study provides empirical evidence on the employment pathways of MSC graduates, a population that remains underrepresented in the literature. By situating the experiences of these students within broader debates on CTE, transition planning, and labor market inclusion, the study fills a critical gap in understanding how institutional training translates—or fails to translate—into meaningful postsecondary outcomes (Dougherty et al., 2018; Dougherty et al., 2022; Plotner et al., 2012). Second, the study highlights the nuanced role of informal networks and family involvement in employment transitions, offering a culturally and contextually specific perspective that extends existing research (Challenger et al., 2024; Carter et al., 2009; Jang et al., 2014). Finally, by documenting the systemic vulnerabilities of students with disabilities within the labor market, including exploitation and instability, the study contributes to ongoing discussions on the need for policy reforms, interagency collaboration, and greater accountability in employment practices (Reims & Tophoven, 2021; Schutz & Carter, 2022; Awsumb et al., 2020).

In summary, the discussion confirms that while CTE programs, such as MSC, provide valuable foundations for employment, they must be integrated within broader frameworks of coordinated transition planning, student-centered practices, family involvement, and systemic protections. Sustained employment for students with disabilities requires not only technical skill development but also support in building self-advocacy skills, developing workplace navigation strategies, and accessing equitable opportunities. The present study underscores the urgency of addressing these interrelated factors to ensure that the transition from school to postsecondary life becomes not a point of vulnerability but a foundation for independence and social inclusion (Plotner et al., 2016; Schutz & Carter, 2022; Dougherty et al., 2022).

## 6. Implication for Practice

The findings from this study highlight several critical implications for improving transition outcomes for students with disabilities, particularly those who have completed the MSC. First, there is a pressing need to strengthen professional development for educators, vocational trainers, and transition specialists. These professionals must be equipped not only with technical knowledge of EBPs but also with the skills to support diverse learners through culturally responsive, individualized, and inclusive transition planning. Ongoing training should focus on preparing SEN students for both the technical and social aspects of the workplace, including communication skills, interview readiness, and real-world problem-solving.

Furthermore, the role of CTE must be re-examined and reinforced within special education programs. The study reveals that while vocational training provided foundational skills, there is a need to enhance the relevance and application of these skills in real employment settings. Schools should ensure that CTE programs are not only accessible to all students with disabilities but also aligned with current labor market needs. Embedding more structured, hands-on work experiences—such as internships, job shadowing, or partnerships with local businesses—can better prepare students for sustainable employment.

In addition, the importance of collaborative and student-centered transition planning cannot be overstated. Families, educators, and community stakeholders must work in tandem to support SEN students in setting meaningful career goals and identifying practical steps to achieve them. Family engagement is particularly crucial in the Malaysian context, where parental approval and logistical support often determine a student's ability to enter and remain in the workforce. Transition plans should actively involve families, provide clear information about employment options, and offer support in navigating post-school systems.

Finally, schools must acknowledge and address the socioeconomic barriers that disproportionately affect students with disabilities. These include limited access to transportation, safe housing, and fair employment conditions. Targeted interventions—such as financial aid for job-related expenses, accessible job placement services, and advocacy training—can help close the opportunity gap for students with disabilities from disadvantaged backgrounds. By taking a holistic and equity-driven approach, educational institutions and policymakers can foster more inclusive and effective pathways to adulthood and employment for students with disabilities.

## 7. Conclusion

The work experiences of students with disabilities from the MSC program remain modest, revealing persistent gaps between vocational training and sustainable employment. Despite possessing foundational skills, many face challenges related to communication, access to opportunities, and systemic support. Moving forward, a coordinated, multi-stakeholder approach is essential. The Ministry of Education must work closely with special education teachers, curriculum developers, and vocational agencies to design transition-focused interventions that emphasize real-world application, job-seeking skills, and workplace readiness. Parental involvement must be strengthened through awareness programs that help families support their children's aspirations. At the same time, collaboration with industries should be institutionalized through job coaching, work-based learning, and inclusive hiring initiatives. Employers have a pivotal role in creating accessible, supportive environments that recognize the value of neurodiverse and differently-abled workers. Ultimately, this study affirms the strong desire for independence and contribution among students with disabilities. Empowering them through inclusive practices not only supports their right to meaningful work but also fosters a more equitable and productive society.

## 8. Suggestion

Moving forward, enhancing employment outcomes for students with disabilities requires a multi-tiered, collaborative strategy. First, vocational curricula such as the MSC must be better aligned with actual labor market demands through employer partnerships and work-based learning. Educators and vocational trainers need continuous professional development to deliver effective, individualized support. Post-school transition services must be formalized to ensure that students with disabilities receive guidance on navigating job searches, interviews, and workplace integration. Additionally, greater family involvement and targeted support for low-income students are essential to overcome socioeconomic barriers. Inclusive employment policies, employer sensitization, and sustained inter-agency collaboration will ensure that vocational skills translate into meaningful, long-term employment opportunities.

## Declarations

**Author Contributions.** Authors contributed equally to the current research. All authors have read and approved the published version of the article.

**Conflicts of Interest.** There is no conflict of interest.

**Funding.** This research was funded by the Faculty of Education, Universiti Kebangsaan Malaysia, under grant GG-2024-054.

**Ethical Approval.** This study was approved by the Ministry of Education Malaysia Ethics Committee on 9 October 2024, under the decision number KPM.100-6/1/18 Jid. 14 (83).

**Data Availability Statement.** To review the data from this study, contact the primary author for more discussion about the request.

**Acknowledgments.** The commitment of the respondents is sincerely appreciated. Gratitude is extended to the Faculty of Education, Universiti Kebangsaan Malaysia for supporting the publication

of this article. Appreciation is also given to all parties who directly contributed to the success of this research.

## References

- Abdullah, M. N. L. Y. (2013). Embracing diversity by bridging the school-to-work transition of students with disabilities in Malaysia. In R. Maclean, S. Jagannathan, & J. Sarvi (Eds.), *Technical and vocational education and training: Issues, concerns and prospects* (Vol. 17, pp. 163–183). Springer. [https://doi.org/10.1007/978-94-007-5107-1\\_9](https://doi.org/10.1007/978-94-007-5107-1_9)
- Alshoura, H. (2023). Critical review of special needs education provision in Malaysia: Discussing significant issues and challenges faced. *International Journal of Disability, Development and Education*, 70(5), 869–884. <https://doi.org/10.1080/1034912X.2021.1913718>
- Awsumb, J. M., Carter, E. W., Schutz, M. A., & McMillan, E. D. (2020). Perspectives of pre-employment transition services providers on preparing youth with disabilities for employment. *Journal of Vocational Rehabilitation*, 53(2), 205–218. <https://doi.org/10.3233/JVR-201097>
- Carter, E. W., Trainor, A. A., Cakiroglu, O., Swedeen, B., & Owens, L. A. (2010). Availability of and access to career development activities for transition-age youth with disabilities. *Career Development for Exceptional Individuals*, 33(1), 13–24. <https://doi.org/10.1177/0885728809344332>
- Carter, E. W., Trainor, A. A., Cakiroglu, O., Cole, O., Swedeen, B., Ditchman, N., & Owens, L. (2009). Exploring school-employer partnerships to expand career development and early work experiences for youth with disabilities. *Career Development for Exceptional Individuals*, 32(3), 145–159. <https://doi.org/10.1177/0885728809344590>
- Challenger, C. D., Lombardi, A. R., Duquette, K., Esposito, C., & DeJesus, J. (2024). Strategies to increase collaboration between school counselors and transition specialists: A multi-tiered approach to college and career readiness. *Journal of Education*. Advance online publication. <https://doi.org/10.1177/00220574241309103>
- Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education* (8th ed.). Routledge.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE.
- Curry, D., Eckles, F., Stuart, C., Schneider-Muñoz, A. J., & Qaqish, B. (2013). National certification for child and youth workers: Does it make a difference? *Children and Youth Services Review*, 35(11), 1795–1800. <https://doi.org/10.1016/j.childyouth.2013.08.005>
- Dean, D., Pepper, J., Schmidt, R., & Stern, S. (2019). The effects of youth transition programs on labor market outcomes of youth with disabilities. *Economics of Education Review*, 68, 68–88. <https://doi.org/10.1016/j.econedurev.2018.11.006>
- Dougherty, S. M., Ecton, W. G., Bonilla, S., & McGuinness, S. (2022). The effects of the COVID-19 pandemic and recession on career preparation during high school. *Peabody Journal of Education*, 97(3), 326–343. <https://doi.org/10.1080/0161956X.2022.2079911>
- Dougherty, S. M., Grindal, T., & Hehir, T. (2018). The impact of career and technical education on students with disabilities. *Journal of Disability Policy Studies*, 29(2), 108–118. <https://doi.org/10.1177/1044207318771673>
- Giorgetti, M., Magenes, S., Boerchi, D., Cancer, A., & Antonietti, A. (2022). Parents' expectations regarding the choice of secondary school and future employment for students with specific learning disabilities. *Life Span and Disability*, 25(1), 87–119.

- Latib, A. A., Subari, K., Ahmad, A., Udin, A., Inti, M. M., & Daley, S. E. (2017). Factors affecting the level of employment core ability skills of trainees with physical disabilities. *Advanced Science Letters*, 23(1), 190–193. <https://doi.org/10.1166/asl.2017.7271>
- Jang, Y., Wang, Y.-T., & Lin, M.-H. (2014). Factors affecting employment outcomes for people with disabilities who received disability employment services in Taiwan. *Journal of Occupational Rehabilitation*, 24(1), 11–21. <https://doi.org/10.1007/s10926-013-9433-1>
- Novak, J., Parent-Johnson, W., Owens, L. A., & Keul, P. (2014). National certification initiative for employment support professionals: Promoting quality integrated employment services. *Journal of Vocational Rehabilitation*, 40(2), 99–107. <https://doi.org/10.3233/JVR-140679>
- Plotner, A. J., Mazzotti, V. L., Rose, C. A., & Carlson-Britting, K. B. (2016). Factors associated with enhanced knowledge and use of secondary transition evidence-based practices. *Teacher Education and Special Education*, 39(1), 28–46. <https://doi.org/10.1177/0888406415599430>
- Plotner, A. J., Trach, J. S., & Strauser, D. R. (2012). Vocational rehabilitation counselors' identified transition competencies: Perceived importance, frequency, and preparedness. *Rehabilitation Counseling Bulletin*, 55(3), 135–143. <https://doi.org/10.1177/0034355211427950>
- Reims, N., & Tophoven, S. (2021). Double burden of disability and poverty: Does vocational rehabilitation ease the school-to-work transition? *Social Inclusion*, 9(4), 92–102. <https://doi.org/10.17645/si.v9i4.4649>
- Schutz, M. A., & Carter, E. W. (2022). Elevating the employment outcomes of transition-age youth with disabilities: Four decades of intervention research. *Journal of Vocational Rehabilitation*, 57(1), 1–21. <https://doi.org/10.3233/JVR-221194>
- Szyjewski, G. (2023). Implementation of a hybrid certificate approach: Enhancing efficiency and credibility in ICDL certification process. *Procedia Computer Science*, 225, 4713–4721. <https://doi.org/10.1016/j.procs.2023.10.470>

### About the Contributor(s)

Mohd Syazwan Zainal, Universiti Kebangsaan Malaysia, Malaysia.

Email: [syazwanzainal@ukm.edu.my](mailto:syazwanzainal@ukm.edu.my)

ORCID: <https://orcid.org/0000-0002-1450-2760>

---

**Publisher's Note:** The opinions, statements, and data presented in all publications are solely those of the individual author(s) and contributors and do not reflect the views of Universitepark, EDUPIJ, and/or the editor(s). Universitepark, the Journal, and/or the editor(s) accept no responsibility for any harm or damage to persons or property arising from the use of ideas, methods, instructions, or products mentioned in the content.

---