

Teacher Competence in the Implementation of the Malaysian Skills Certificate in Special Education Integration Programs

Siti Rafidah Raihan Rafei¹, Mimi Mohaffyza Mohamad^{1*}, Nofouz Mafarja²

¹ Faculty of Technical and Vocational Education
Universiti Tun Hussein Onn Malaysia

² Faculty of Education
Universiti Malaya

*Corresponding Author: mimi@uthm.edu.my
DOI: <https://doi.org/10.30880/ritvet.2024.04.02.006>

Article Info

Received: 17 December 2024
Accepted: 19 December 2024
Available online: 30 December 2024

Keywords

Competence Level, Knowledge,
Skills, Attitude

Abstract

This study evaluates the competence of Special Education Integration Program (SEIP) teachers in implementing the Malaysian Skills Certificate (MSC), focusing on skills, knowledge, and attitudes. Utilizing a quantitative approach, data were collected from 66 SEIP teachers across six secondary schools via a questionnaire. Descriptive statistics and one-way ANOVA were used for analysis. Results revealed that SEIP teachers demonstrated moderate levels of competence in skills and knowledge but high competence in attitude. Teachers with skill certification qualifications showed significantly higher skills and knowledge than those without such qualifications. However, no significant differences were observed in attitudes based on skill qualification levels. SEIP teachers exhibited a positive attitude towards implementing the MSC and fostering an inclusive learning environment. Additionally, significant differences emerged in training needs and skill levels ($F(4,61) (5.51)$) as well as knowledge levels ($F(4,61) (4.48)$), across different skill qualification levels. Conversely, attitudes and skill qualification levels were not significantly correlated ($F(4,61) (2.11)$). The findings highlight the importance of continuous professional development to enhance SEIP teachers' skills and knowledge for effective MSC implementation. These insights are instrumental in designing future training programs tailored to their needs.

1. Introduction

In Malaysia, special education needs students have been given the same consideration by the Ministry of Education as regular students for them to also be able to receive a high-quality education. The Malaysian Education Development Plan (PPPM) 2013–2025 states that the two components of educational access are making sure all students attend school and that they stay in school for the allotted amount of time. As a result, the Ministry of Education has developed a number of programmes that can assist special education needs students in receiving an equal education to that of regular students.

The increase in special education students in the Special Education Integration Programme (SEIP) in 2022 has increased from 85,362 students compared to 78,802 in 2021. Furthermore, the Malaysian Ministry of Education (KPM) has undertaken a number of projects and endeavours to assist the nation in enhancing and implementing

modifications to Malaysian education, particularly for students with disabilities. Offering the Secondary School Standard Curriculum (KSSM), which is tailored for special education, is one of them. According (Derapa & Mohamed, 2018), KSSM was produced for SEN, and it was implemented in 2017 to consider the curriculum and education that is appropriate to the problems experienced by SEN.

To assist and produce more competent SEN and to support TVET as a field that matches their level, the Ministry of Education and Culture also creates opportunities for SEN by offering vocational education programmes. Apart from that, it also gives SEN students the opportunity to learn and master vocational skills so that they can be independent and have suitable skills for work. Therefore, the KPM has marketed the abilities of SEN in the field of skills by obtaining the Malaysian Skills Certificate (MCS) or the National Modular Certificate so that they can be independent and competitive for a meaningful life.

The Ministry of Education and Culture has created Specific Vocational Skills (KVS) subjects that begin to be studied in form two and continue through form five, providing opportunities to SEN who have potential in the field of skills according to their level of functionality, talent, and interest. Follows the KSSM for special education, students will receive MCS if they pass and fulfil the standards established by the Skills Development Department (JPK). MCS includes high-quality technical and vocational education (TVET). SEN is no different in the 11th Malaysia Plan (RMK-11), contributing their skills in accordance with their functional level. To generate skilled human capital, SEN in day schools is also provided with this skill training, particularly in schools that have SEIP (Kama, 2019)

To obtain MCS for SEN, teachers also need to have a certificate recognized by the Ministry of Education and Culture in certain fields, so that they can reach the standard of skilled teachers who are able to assess SEN. Therefore, the skills, knowledge and attitude of teachers towards the implementation of MCS are important in shaping these individuals with disabilities into intellectually advanced people. Azian (2022) indicates that having highly qualified teachers is crucial for behaviour management and for instilling trust and confidence in parents or guardians to entrust special education teachers with their children's education. However, Salleh and Che Omar, (2018) state that the majority of special education teachers are concerned about their lack of special education knowledge and training. Cooc (2019) states that most schools face a shortage of special education teachers which causes many countries to hire staff without appropriate qualifications.

Selvam and Anal (2022), states that although various efforts have been implemented by the Ministry of Education, the knowledge, and skills that trainee teachers need to master in the trainee teacher education program are still not sufficient to teach students with special needs. Without sufficient training for special education teachers will cause the teacher to lack confidence and not be able to perform the task well (Abdullah et al., 2021). Measuring the SEIP teachers' level of competency is therefore crucial to this study to guarantee that special education students can successfully complete and pass the MCS. Therefore, the objective for this study is to be identifying the competency level of SEIP in the implementation of the MCS and identifying the differences between teacher competencies in terms of skills, knowledge and attitudes, SEIP in the implementation of MCS based on the qualification level of certification skills

2. Literature Review

Researchers have found that the need for continuous training is very important to produce competent teachers in preparing the Malaysian Skills Certificate (MCS) for students with Special Educational Needs (SEN). This issue is very important to ensure that teachers and students can go through the teaching and learning process smoothly and with quality. Therefore, the researcher has classified the literature study into several sub-topics that are relevant to the researcher's objective.

2.1 TVET in Malaysia

Technical and Vocational Education and Training (TVET) is not only focused on ordinary students, but it also focuses on students who do not have the ability to learn the skills available according to their functional level. Learning practical skills is prioritized in this TVET program because it gives students direct experience in the field (Abdul Halim, 2024) According to Khairi et al (2021) in TVET institutions, students with disabilities have equal rights with other students. This is because, TVET education is an activity to train oneself to be independent in doing something. The main leader of TVET in Malaysia at this point is the Malaysian Ministry of Education (KPM) for academic, vocational, and technical programs. In the context of students with SEN in the field of TVET, curriculum adaptation is emphasized to ensure that SEN can receive training that suits their abilities and needs.

The Malaysian Ministry of Education (KPM) also gave SEN the opportunity to become more competent and support the TVET field by providing appropriate vocational education programs (Syazwani Ahmad et al., 2020).

2.2 The Special Education Integration Program

According to the operation manual of the Special Education Integration Programs (SEIP), in the Special Education system in Malaysia, SEIP is the main contributor to the enrollment of students with SEN and it is implemented throughout the country. It is also known as a special education program that is specific for SEN who study in special education classes in an integrated way in government schools or in government aided schools. According to Marsya (2023) SEIP is a special program where classes of students with special learning needs are combined in the same school with mainstream student. According to the Malaysian Ministry of Education (KPM), the purpose of SEIP is to provide appropriate and relevant education to SEN and they will be given a detection/diagnostic test for appropriate group or class placement. According to Mohd. Sofi, Rohana and Amirmudin (2010) in Azian (2022) study, SEIP is a continuation of a quality program to meet the specific needs and abilities of children with special needs in a normal environment. Based on special education data for the year 2023, the number of SEN who followed the Integration Special Education Program at the secondary level was 39,002 people and Johor became the state with the highest number of SEN who followed the SEIP at the secondary level with a total of 4,442 people. According to the study of Azian and Mohd Mokhtar (2022), the implementation of SEIP in a school aims to provide educational needs by emphasizing development in skills.

2.3 Special Education Secondary School Standard Curriculum

Based on the Malaysian Education Development Plan (PPPM) 2013–2025, the Special High School Standard Curriculum (KSSMPK) and the Standard High School Curriculum (KSSM) have been implemented simultaneously. In the case where both implementations follow the National Curriculum as stipulated by Section 18 of the Education Act 1996 [Act 550], which is SEN by all high schools in the National Education System. In 2017, KSSMPK was introduced gradually, beginning with grade one. All medium and low functional level students with special educational needs (SEN) use it. In contrast, KSSM will be followed by high-functioning SEN who are enrolled in the inclusive programmed. High functioning SEN are, nevertheless, free to decide to adhere to KSSMPK. This KSSMPK is an extension of the Special Primary School Standard Curriculum where it was developed by the Special Education Division which designed a teaching curriculum that cannot be provided in the curriculum of regular students (Nur Hazwanie, 2020).

2.4 Malaysian Skills Certificate

The Malaysian Skills Certificate (MSC) is a skills certificate issued by a selected skills institution under the auspices of the Malaysian Ministry of Human Resources. It was created to increase the number of workers in our country, whether skilled or semi-skilled. MCS is given to students who have the ability and competence in completing tasks according to the National Occupational Skills Standard (NOSS). NOSS is a document of skills required by a skilled worker for a certain field and job level and the path to achieve those skills. It is information that has been outlined by the Department of Skills Development (DSD). Malaysian Skills Certification can also be obtained through three methods, namely through training at Accredited Centers, National Dual Training System (NDTS) and through Prior Achievement Certification, (Sultan, 2022). In addition, MCS also focuses on equipping individuals with practical skills and knowledge that can be SEN directly for specific industries and jobs. Therefore, one of the things that makes the field of Technical and Vocational Education and Training (TVET) relevant is through the Malaysian Skills certification. In addition, the Malaysian government introduced the Malaysian Skills Certificate as a recognition that skills are important for good job performance. This is because it provides competency-based SEN training programs that focus on employee potential (Bakar, 2017).

2.5 Students with Special Needs

According to the 2013 special education regulations, there are six categories of students with special needs in the education system in Malaysia. 1. Visual disability, 2. Hearing disability, 3. Speech disability, 4. Physical disability, 5. Learning problem and 6. Multiple disability. According to Abdullah (2021) SEN requires special education and training that is different from normal students. Students with special needs include students with learning problems, emotional and behavioral problems, hearing problems, vision problems, language and communication problems, physical and health problems, autism, smart or talented and cognitive problems. According to I. Lokman (2021) SEN with moderate functionality with learning difficulties are among SEN who can be trained with basic skills in regular daily secondary schools through the Special Education Program for Integration (SEIP). SEN with

moderate functioning can master the basic skills of literacy and numeracy and is able in terms of language, communication, socio-emotional, behavioral, and psychomotor.

2.6 Competency

Competence comes from the term 'competent' or 'expertise' which indicates the optimal condition, quality, as well as the physical and intellectual abilities of individuals for the implementation of certain tasks (Salleh, 2015). Competence can also be defined as a combination of knowledge, abilities, and behaviours practiced to improve oneself (Khuzainey, 2020). Previous studies also stated that competence includes more than just knowledge and skills, rather it requires the ability to deal with multifaceted demands effectively through the provision of psychosocial resources, including skill sets and specific attitudes, in a specific context. According to Suhartika dan Rosadah (2020) The quality of education is influenced by various factors, including teacher competence, teacher education ability, teacher motivation, school facilities and the number of students. While Jesceyla Mogunting & Manisah Ali, (2023) clarified that the formation of SEN will be influenced by a teacher's competency. Therefore, the level of competence of teaching staff needs to be improved to support the Malaysian Ministry of Education's (KPM) goal of providing high-quality education for a prosperous nation and maintaining a high-quality education system for future generations.

3. Methodology

This study utilized a quantitative survey research design to evaluate the skills, knowledge, and attitudes of SEIP teachers in implementing the Malaysian Skills Certificate (MSC). The population comprised of special education teachers from secondary schools offering Special Education Integration Programs (SEIP) in the Pasir Gudang district. A purposive sampling method was employed to ensure that participants had specific qualifications and experience aligned with the study's objectives. The inclusion criteria focused on SEIP teachers from secondary schools within the Pasir Gudang district offering such programs. Data was collected using a structured questionnaire distributed to 66 teachers across six secondary schools with SEIP. The sample size and the schools involved are detailed in Table 1.

Table 1 The number of respondents and schools

Schools	Respondent
School A	19
School B	11
School C	10
School D	15
School E	5
School F	6
Total	66

3.1 Research Instruments

A research instrument is a material that can measure, evaluate, and analyze data. In this study, the level of competence of SEIP teachers can be obtained by the researcher when the researcher decides to use the instrument that will be based on the type of study conducted, which is the quantitative method. Therefore, a modified form of questionnaire by (Abd Patah, 2022) and (Omar et al., 2020) as the instrument. The questionnaire contains a total of 38 items, covering both demographic questions in Part A and measurement items related to competence of vocational skills in Part B. Part A collects demographic information such as information about gender, age, status, academic background, and certification skills qualification. The questionnaire items in Part B are contains questions related to the mastery of basic vocational skills which is the main point in the implementation of MCS. Part C items are involved with the knowledge of SEIP teachers. While part D focuses on the attitude of a special education teacher. The respondents will rate their agreement with each statement using a 5-point scale ranging from "Strongly disagree" to "Strongly agree". An example of the content of questionnaire, as provided in Table 2.

Table 2 Dimension of questionnaire

Part	Construct	Dimension	No. Item	Total
A	Demographics	Respondent Information	1-8	8
B	Competence of vocational skills	Technical skills	1-12	10
C	Competence of Knowledge	MCS Knowledge	13-20	8
D	Attitude Competence	Teaching and learning process	21-30	10
			TOTAL	38

4. Data Analysis

The data analysis carried out is a descriptive data analysis of demographics, skill competency levels, knowledge, and attitudes of respondents in the implementation of MCS for special education students. In the meantime, the researcher also measured and identified differences in training needs on the level of skill certificate qualification as a teacher at the National Secondary School in Pasir Gudang District by using inferential statistical one-way ANOVA method. All the data analysis has been conducted by using software SPSS 25.

5. Result

5.1 Respondent's Demography

This section will provide an explanation of the findings from the study's demographic analysis of the participants. Researchers can analyze the percentage of gender, school, status, age, teaching experience, highest level of education attained by respondents, level of skill qualification attained by them, and attendance status in technical courses. They are 66 teachers who are involved in this study. Table 3 has shown the details of each analysis of the items.

Table 3 Demography

Item	Construct Item	Frequency	Percentage (%)
Gender	Male	9	13.6
	Female	57	86.4
	Total	66	100
Status	Single	16	24.2
	Married	50	75.8
	Total	66	100
Academic background	Special Education	31	47.0
	Not Special Education	35	53.0
	Total	66	100
Age	20 - 30 years	16	24.2
	31 - 40 years	22	33.3
	41 - 50 years	23	34.8
	51 years and above	5	7.6
	Total	66	100
Teaching experience	3 - 5 years	19	28.8
	6 - 10 years	9	13.6
	11 - 15 years	26	39.4
	16 years and above	12	18.2
	Total	66	100
Academic qualification	SPM/SPMV/STPM	4	6.1
	Diploma	0	0
	Bachelor's degree	55	83.3

	Master's degree/PhD	7	10.6
Malaysian Skills Certificate (MCS)	SKM level 1	5	7.6
	SKM level 2	3	4.5
	SKM level 3	5	7.6
	DKM level 4	2	1.5
	None	51	78.8
	Total	66	100
Attend Skills Courses	Yes	26	39.4
	No	40	60.6
	Total	66	100

Based on table 3, according to the descriptive analysis for gender showed that female teachers outnumber male teachers in this study with a total 57 female teachers and 9 male teachers. This disparity suggests that the study is predominantly represented by female teachers, highlighting a gender imbalance within the sample population. In this study, the data on marital status reveals that a majority of SEIP teachers, totaling 50 individuals, are married. Additionally, 16 teachers in the study are single. However, out of the total sample of 66 teachers, 35 of them do not have a specialized background in special education, indicating they may have entered the field from other educational disciplines. In contrast, 31 teachers have a background specifically in special education, suggesting they have received formal training or certification in this area before joining the SEIP program.

This study also shows that the highest number of respondents were SEIP teachers aged 41-50 years (23), followed by those aged 31-40 years (22), 20-30 years (16), and the fewest were aged 51 years and above (5). Next, teachers with 11-15 years of experience were the most numerous (26), followed by those with 3-5 years (19). There were (12) teachers with 16 years or more of experience, and (9) teachers with 6-10 years of experience. For level academic, among SEIP teachers, 55 of them have a degree, 7 of them have a master's degree, and 4 have academic qualifications equivalent to SPM/SPMV/SPM. Besides that, out of the teachers surveyed, 51 teachers do not have a Malaysian Skills Certificate. However, there are 5 teachers that have Malaysian Skills Certificate Level 1 and Level 3 each, three teacher that have MSC Level 2, and 2 teachers have DKM level 4. Lastly, demographic data shows that 40 SEIP teachers have not attended a skills course, while 26 teachers have.

5.2 Descriptive analysis

There are three research questions that the researcher wants to study which cover part B, C and D of the researcher's questionnaire which are using descriptive analysis to determine the mean score value, standard deviation, and average score. Based on Table 4, there are average mean score value, standard deviation (SD), and their interpretation level for the items for skills, knowledge, and attitude. All the items show the level of competence of SEIP teachers in Pasir Gudang High School.

Table 4 Competency Analysis

Item	Average mean score	Standard deviation	Interpretation
1) Skills	3.78	0.49	Moderate
2) Knowledge	3.84	0.53	Moderate
3) Attitude	4.19	0.38	High

Based on table 4, according to the analysis of this first research question, the overall skill competence of SEIP teachers in the implementation of MCS is ($M = 3.78$, $SD = 0.49$) and it shows SEIP teachers at National Secondary Schools in Pasir Gudang district could implement MCS at a moderate level in terms of skills. For knowledge competence, SEIP teachers' overall knowledge competency in MCS implementation is ($M = 3.81$, $SD = 0.53$) and it showed that SEIP teachers in Pasir Gudang district can implement MCS at a moderate level in terms of knowledge. Lastly, for the teacher's attitude, the result showed that it has high level ($M = 4.19$, $SD = 0.38$) and this shows that SEIP teachers generally have a positive attitude towards the development of their competence and behavior towards SEN in terms of teaching and learning.

5.3 Teacher's Competence based on the level of skill qualification.

Inferential analysis was carried out using one-way ANOVA to find differences in teacher competence in terms of skills, knowledge, and attitudes on the level of skill qualifications to determine whether the study's hypothesis was accepted, a one-way ANOVA was employed. Also, the significant value is on the p value, $p=0.05$. Table 5 has shown the findings of one-way ANOVA analysis of the differences in teacher competence in terms of skills, knowledge, and attitudes and the level of skill qualifications.

Table 5 One-way ANOVA Analysis

Competencies	MSC Level	One-way ANOVA			
		<i>M</i>	<i>SD</i>	<i>df</i>	<i>Sig.</i>
1) Skills	Level 1	4.18	0.31	65	0.001
	Level 2	4.00	0.00	65	
	Level 3	4.41	0.53	65	
	Diploma (Level 4)	4.37	0.53	65	
	No skill certificate	3.78	0.44	65	
2) Knowledge	Level 1	4.25	0.26	65	0.003
	Level 2	4.00	0.00	65	
	Level 3	4.42	0.52	65	
	Diploma (Level 4)	4.43	0.61	65	
	No skill certificate	3.84	0.49	65	
3) Attitudes	Level 1	4.38	0.48	65	0.09
	Level 2	4.33	0.57	65	
	Level 3	4.54	0.44	65	
	Diploma (Level 4)	4.40	0.56	65	
	No skill certificate	4.12	0.34	65	

Based on the findings in Table 5, teachers who have this skill certificate have a different level of skill and knowledge than teachers who do not have it. However, in the context of the SEIP teachers' attitude towards the implementation of MCS, they have a positive attitude in delivering and providing an inclusive learning environment. Overall, there is a significant difference between the training requirements and the skills $F(4,61) = 5.51, p = 0.001$ and knowledge $F(4,61) = 4.48 p = 0.003$ of SEIP teachers at National Secondary Schools in the Pasir Gudang district in the implementation of MCS based on the level of skill qualification. However, the teacher's attitude and level of skill qualification showed no significant difference for the teacher's attitude and level of skill qualification $F(4,61) = 2.11, p = 0.09$.

6. Discussion

This study examines the factors influencing SEIP teachers' implementation of the Malaysian Skills Certificate (MCS), focusing on adaptation strategies, training needs, teacher attitudes, and certification impact. SEIP teachers show strong adaptability, aligning teaching methods with student and industry needs, but require enhanced skills and training for effective curriculum implementation. While teacher attitudes are highly positive, fostering student engagement and success, gaps in technical knowledge and MCS familiarity persist. Higher certification levels improve teaching effectiveness, though all teachers express willingness to develop professionally. Addressing these areas through tailored training programs is essential for enhancing MCS implementation and educational quality.

6.1 Adaptation Strategies

Adapting teaching strategies to meet the needs of students with special needs is essential for achieving meaningful learning outcomes. The findings revealed that SEIP teachers demonstrated a high level of ability to adapt their teaching strategies to meet the needs of students with special needs. This shows that these teachers are skilled in ensuring that their teaching aligns with industry requirements, maximizing student benefits. As Kandimba (2023)

highlighted, effective curriculum adaptation includes modifications to teaching methods, resources, learning environments, and assessments to better support students with intellectual disabilities, fostering engagement and attention. SEIP teachers effectively apply these strategies when conducting practical classes. This aligns with Nor Zulia's (2024) assertion that educators must vary teaching strategies to maintain student interest and motivation. However, these adaptations require enhanced skills and targeted training to fully achieve curriculum objectives.

6.2 Training Needs

Training and professional development are key to equipping teachers with the skills and knowledge required for effective MCS implementation. The study found that while SEIP teachers demonstrated moderate competence in skills and knowledge, there remains a critical need for continuous training to bridge these gaps. Teachers need additional skills training to ensure students with special needs can follow the learning process effectively. As Rahim Razalli (2020) pointed out, SEIP programs have yet to fully implement the teaching and learning of specific vocational skills. Teachers' understanding of the Malaysian Skills Certificate (MCS) remains at a moderate level, with limited familiarity with its structure and application. This is consistent with Musa et al.'s (2021) findings, which reported moderate readiness among teachers in terms of knowledge, skills, and attitudes. Moreover, Nor (2024) emphasized that many special education teachers involved in vocational education lack specific technical training, further underscoring the need for professional development programs tailored to MCS implementation.

6.3 Teacher Attitudes

A positive attitude among teachers plays a significant role in enhancing the quality of education for students with special needs. Despite the gaps in skills and knowledge, SEIP teachers displayed a high level of positive attitudes toward implementing MCS. This attitude plays a pivotal role in ensuring the success of special education programs. Mohd Tajuddin and Shaffeei (2023) found that teachers with positive attitudes significantly impact student outcomes and development. Similarly, Shahrina and Siti Hasmah (2010) noted that enthusiastic and supportive teachers create a cheerful and engaging learning environment. These findings suggest that while professional development programs are necessary, the existing positive attitudes of SEIP teachers provide a strong foundation for implementing improvements in teaching practices.

6.4 Impact of Certification

The level of certification held by SEIP teachers significantly influences their ability to implement MCS effectively. The study also revealed that the level of certification significantly influences SEIP teachers' skills and knowledge. Teachers with higher certifications tend to demonstrate better skills in implementing MCS and are more adept at monitoring and evaluating student performance. Kaviza (2018) emphasized the importance of educators having foundational knowledge, skills, and a variety of relevant teaching activities to foster meaningful classroom experiences. Teachers with higher certification levels are better equipped to communicate effectively, explain complex concepts, and create varied teaching activities tailored to diverse student needs. However, the study also found that special education teachers with lower certifications remain open to improving their competencies and are willing to pursue further professional development, as noted by Seriyuna (2019).

In summary, the findings underscore the importance of adapting training programs to the specific needs of SEIP teachers at varying certification levels. The need for continuous professional development remains a priority to enhance skills, knowledge, and vocational teaching strategies. By addressing these training gaps, SEIP teachers will be better equipped to implement MCS effectively, fostering a more inclusive and impactful learning environment for students with special needs.

7. Conclusion

This study was conducted to identify the competence of Special Integration Education Program (SEIP) teachers in implementing the Malaysian Skills Certificate (MSC). The findings revealed that while SEIP teachers demonstrated moderate levels of competence in skills and knowledge, their attitude toward implementation was notably high. This highlights a strong willingness among teachers to adapt and improve their professional abilities, which is a positive indicator for the success of skills certification initiatives. However, the data analysis also underscored the need for targeted and continuous training programs to enhance teachers' skills and knowledge. Improved teacher competence is critical not only to strengthen instructional quality but also to ensure that students under SEIP programs develop practical skills that make them competitive and marketable in the workforce. Continuous

professional development programs, such as workshops, skills-based training, and certification pathways, should be prioritized to bridge these gaps. Therefore, it is essential for teachers currently teaching Special Education Needs (SEN) students, as well as those planning to teach in this field, to actively pursue skills training and obtain relevant skills qualifications. By doing so, SEIP teachers will be better equipped to implement the Malaysian Skills Certificate effectively and empower their students with industry-relevant skills. Ultimately, this will contribute to creating a generation of skilled, confident, and employable individuals, fostering a more inclusive and competitive workforce.

Acknowledgement

The authors would like to thank the Ministry of Education, especially to the Special Education Division, State Education Department (Johor) and District Education Office (Pasir Gudang) for supporting this research.

References

- Abd Patah, M. F. (2022). *Analysis of Training Needs for Improving the Competence of Automotive Lecturers at Tvet Mara Institutions*.
- Abdul Halim, M. F. (2024). *Management of Students with Disabilities in Technical and Vocational Education (Tvet)*. 2(1), 19–27.
- Abdullah, N. H. L., Mohd Jamil, S. F., Ibrahim Mukthar, M., Mohamed, M., & Paimin, A. N. (2021). The Perception of Prospective Special Education Teachers towards Special Education in Malaysia. *Humanities*, 6(1). <https://doi.org/10.33102/Sainsinsani.Vol6no1.260>
- Azian, T. (2022). Teachers' Acceptance of the Implementation of the Special Education Program for Integration (SEIP) in Sibu District. *Jurnal Dunia Pendidikan*. <https://doi.org/10.55057/Jdpd.2022.4.1.10>
- Bakar, A. R. (2017). Technical Vocational Education & Training (Tvet) In Malaysia: Selected Works. In *Technical Vocational Education & Training (Tvet) In Malaysia: Selected Works* (Vol. 2, Issue 1). <http://mycc.my/document/files/pdf>
- Cooc, N. (2019). Teaching Students with Special Needs: International Trends in School Capacity and The Need for Teacher Professional Development. *Teaching And Teacher Education*. <https://doi.org/10.1016/j.tate.2019.03.021>
- Derapa, N. F., & Mohamed, S. (2018). Preparedness of Special Education Teachers in Implementing Basic Plant Subjects. *Journal of Orthopedagogy*, 4(1). <https://doi.org/10.17977/Um031v4i12018p066>
- Derapa, N. F., Satari, N. A., & Mohamed, S. (2020). The Readiness of Special Education Teachers in Teaching Basic Vocational Skills for Agriculture. *Journal Of Technical Education and Training*, 12(2). <https://doi.org/10.30880/jtet.2020.12.02.007>
- Jesceyla Mogunting, & Manisah Ali. (2023). The Implementation of The Integrated Special Education Program in A Private School. *Jurnal Dunia Pendidikan*, 5(1), 482–496.
- Kama, S. (2019). Development of a Vocational Skills Screening Instrument for Special Needs Students with Learning Disabilities for the Preparation of the Malaysian Skills Certificate. *Internasional Conference on Social Sciences and Technology for Postgraduates and Researchers, April*.
- Kandimba, H. C., Mandyata, J., & Simalalo, M. (2023). Teachers' Understanding of Curriculum Adaptation for Learners with Moderate Intellectual Disability in Zambia. *European Journal of Special Education Research*, 9(1). <https://doi.org/10.46827/Ejse.V9i1.4653>
- Kaviza, M. (2018). Teaching Experience or Teachers' Professional Training in Affecting The Application Of Historical Thinking Skills In History Subjects In High School. *Educatum Journal of Social Sciences (Ejoss)*, 4(1), 40–47.
- Khuzainey, I. (2020). *Relationship Model of Competence and Work Performance of Tvet Instructors in Malaysia. June 2020*.
- Lokman, I. (2021). *The Level of Interest, Understanding and Mastery of the Components of Pastry-Making Activities Among Pupils with Special Functional Needs and Moderate Learning Disabilities*.
- Marsya, M., Abdullah, S., & Ibrahim, M. H. (2023). The Effectiveness of the Implementation of Teaching and Learning at Home (Pdpr) Among the Students of the Integrated Special Education Program (SEIP). *Jurnal Dunia Pendidikan*, 4(4), 234–248. <https://doi.org/10.55057/Jdpd.2022.4.4.20>

- Mathiyalagan, N. R., & Toran, H. (2023). Knowledge Level of Special Education Teachers in Socioemotional Management of Autistic Pupils. *Malaysian Journal of Social Sciences and Humanities (Mjssh)*, 8(4), E002151. <https://doi.org/10.47405/Mjssh.V8i4.2152>
- Mohd Tajuddin, N., & Shaffeei, K. (2023). Preparedness of Special Education Teachers in the Implementation of the Career Transition Program. *Jurnal Pendidikan Bitara Upsi*, 16(1), 2821–3173. <https://doi.org/10.37134/Bitara.Vol16.Sp1.2023>
- Musa, R. T., Abd Karim, N. S., Adenan, N. H., Tarmizi, R. A., Md Junus, N. W., & Anak Kelong, V. E. (2021). Level of Preparedness of Upsi Mathematics Trainee Teachers in Implementing Pak21. *Bitara Upsi Education Journal*, 14, 82–91. <https://doi.org/10.37134/Bitara.Vol14.Sp9.2021>
- Ni, L. Y., & Tahar, M. M. (2023). Knowledge of Pictorial Communication System (PECs) Among Teachers of Special Education Program Integration (SEIP) with Learning Disabilities. *World Journal of Education*, 5(1), 512–523. <https://doi.org/10.55057/Jdpd.2023.5.1.40>
- Nor Zulia, S., Kama, S., & Abdul Rahim, R. (2024). Teacher Readiness in the Implementation of the Malaysian Skills Certificate in the Integration Special Education Program for Pupils with Special Education Needs. *Bitara Upsi Education Journal*, 17(1), 30–36. <https://doi.org/10.37134/Bitara.Vol17.1.3.2024>
- Nur Hazwanie, A., Isa, H., & Mohd Hanafi, M. Y. (2020). The Level of Training and Skills of Special Education Teachers Facing the Challenge of Implementing Specific Vocational Skills Subjects Based on the Special Education Middle School Standard Curriculum. *Research Journal*, 37, 24–34.
- Omar, M. K., Zahar, F. N., & Rashid, A. M. (2020). Knowledge, Skills, And Attitudes as Predictors in Determining Teachers' Competency in Malaysian Tvet Institutions. *Universal Journal of Educational Research*, 8(3 3c). <https://doi.org/10.13189/Ujer.2020.081612>
- Rahim Razalli, A. (2020). The Use of Cipp Model in Carrying Out the Teaching of Specific Vocational Skills Among Special Needs Students with Average Ability. *Social Sciences, Education and Humanities (Gcssseh)*, 4, 489–493. <http://creativecommons.org/licenses/by-nc/4.0>
- Salleh, K. M., Khalid, N. H., Sulaiman, N. L., Mohamad, M. M., & Sern, L. C. (2015). Competency Of Adult Learners in Learning: Application of The Iceberg Competency Model. *Procedia - Social and Behavioral Sciences*, 204. <https://doi.org/10.1016/j.sbspro.2015.08.160>
- Selvam, D. A/P, & Anal, A. (2022). Knowledge and Skills of Special Education Teachers in Implementing Special Education Programs for Hearing Impaired Integration (SEIP). *Bitara Upsi Education Journal*, 15(1).
- Seriyayuna. (2019). Issues and Challenges of Special Education Teachers in Malaysia and the United States: A Comparative Study. *Jurnal Al-Sirat*, 1(Bil 18), 170–184.
- Siti Fatimah Salleh, & Mustafa Che Omar. (2018). Teacher Teaching Problems in Inclusive Education Programs in Schools. *Asian People Journal (Apj)*, 1(2).
- Suhartika Kasimun, & Rosadah Majid. (2020). The Level of Knowledge and Skills and the Level of Special Education Teacher Training in Teaching Special Education. *International Conference on Social Sciences and Humanities Ke-5 (Pasak5 2020) – Dalam Talian*, 5(November), 402–414.
- Sultan, P., Abdul, S., Shah, A., Usahawan, P., U1, S., Alam, S., & Darul Ehsan, S. (N.D.). Skill Standards. In the 2022 Guidebook.
- Syazwani Ahmad, Wan Norfadila Wan Abdul Jalil, & Reezlin Abdul Rahman. (2020). Skm-Kvs Pre-Pilot Program for Pastry Making: Pastry Production Skills by Special Needs Pupils (SEN) In Tvet Curriculum Collaboration with Sungai Petani Community College. *International Conference on Special Education in Southeast Asia Region 10th Series 2020*, 4, 42–57. <https://doi.org/10.32698/Gcs-04308>