

CHALLENGES FACED BY TRAINEE TEACHERS AT IPGKPT IN TECHNICAL AND VOCATIONAL EDUCATION TRAINING (TVET) FOR SPECIAL NEEDS STUDENTS

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ABSTRACT

This study examine the challenges faced by trainee teachers at Institut Pendidikan Guru Kampus Pendidikan Teknik (IPGKPT) in providing Technical and Vocational Education Training (TVET) to students with special needs. A trainee teacher refers to an individual who enrolled in a teacher education program at IPGKPT. As trainee teachers, they are undergoing training to become a qualified teacher and typically required to complete a teacher training and internship as part of their program. The research aims to analyze the challenges faced by trainee teachers in teaching TVET for students with special needs from three aspects which are, professional development, competencies and skills, and attitudes and motivation of student teachers towards teaching TVET to students with special needs. By examining these three aspects, the researchers can provide a more in-depth understanding of the challenges and develop effective strategies for addressing them. The research design use in this study is the survey research design. The primary instrument for data collection was a questionnaire and the reliability of the questionnaire as certain using Cronbach's Alpha test. In this context, TVET serves as a tool to help students with special needs acquire the necessary skills and knowledge to compete in the job market. Therefore, this research is expected to provide insights into how TVET teaching and learning can be tailored to the needs of students with special needs so that these challenges can be overcome by trainee teachers at IPGKPT. The findings of this research also could help trainee teachers and the education system to support students with special needs and improve the quality of education they receive.

Keywords: special needs, TVET, inclusive, trainee teachers

INTRODUCTION

The education system has developed rapidly and various changes have taken place to meet the needs of society. Education plays a major role in the economic growth and development of a country (Ministry of Education Malaysia, 2013). Education is the basic right of all human beings and in terms of philosophy, all people in this world have the right to learn and know something. According to Kail (2001), almost 4% of the world's population consists of extraordinary individuals. Although they are not perfect and have shortcomings, some of them have the potential to compete in the world of education. Therefore, in an effort to improve the abilities of students with special needs, the Malaysian Ministry of Education (MoE) through the Special Education Division has designed and provided educational services for students with special needs students. Category of students with special needs includes students with visual disabilities, hearing disabilities, speech disabilities, physical disabilities, multiple disabilities and learning problems such as Autism, Down Syndrome, Hyperactivity (ADHD), and Dyslexia (Ministry of Education Malaysia, 2013). MoE has focused on the implementation of the Inclusive Education Program (PPI) and set the government's intention to increase MBK's (Special Needs Student) involvement in the PPI in the Malaysian Education Development Plan (PPPM) 2013-2025. This plan has outlined MoE's objective of getting 75% of students with special needs to enroll in inclusive education programs by 2025. This proves that MoE cares about all children and is determined to provide educational opportunities to all students.

In an effort to improve employment opportunities for students with special needs to realize national aspirations and missions, the government is working hard to improve the quality of skills training for people with special needs in Malaysia so that they can compete with the job market. In an effort to educate people with special needs, the high skills they possess, especially in the technical field, are expected to help them feel not left out and be able to learn more effectively. Therefore, teacher for this group also actually needs special training that is different from teaching normal students. This is supported by Mazlinah (2009) who states that the modification of teachers' teaching practices, especially for teachers involved in inclusive programs, must be based on the ability and skills of students with special needs.

Based on the development and development of education in our country, the field of special education has been introduced in Malaysia with the aim of giving exposure to special people to learn and master Design and Technology (DT). Basically, these special needs' teachers need to adapt their learning methods to the various types of disabilities experienced by the students under their guidance. The approach and methods used also tend to the ability of special students in the long term, not only able to cultivate independent qualities among them but also able to enhance their role as part of the community contributing to the development of the country as a whole.

Aims and Objectives

This study examine three aspects of the readiness of IPGKPT trainee teachers towards Technical and Vocational Education (TVET). The three aspects are professional development, competencies and skills, and attitudes and motivation towards students with special needs.

1. To identify the level of professional development of IPGKPT TVET trainee teacher in dealing with special needs student.
2. To identify the level of competencies and skills of IPGKPT TVET trainee teacher in dealing with special needs student.

3. To Identify the level of attitude and motivation of IPGKPT TVET trainee teacher in dealing with special needs student.

LITERATURE REVIEW

Technical and Vocational Education and Training (TVET) were introduced in 1918 in several schools in the Federated Malay States. At that time, TVET was known as the Tinker School. TVET includes academic and skill fields with the aim of delivering professional labor and a partial professional-based partial professional specialty in engineering. Design and Technology (DT) is one of the subject that part of TVET. In addition, TVET plays an important role in realizing various educational transformations established by the MoE to produce quality human capital required for economic development. According to Mariani et al. (2013), TVET plays a challenging role in the century following the development of the current transformation.

Chia (2011) states that TVET in Malaysia plays an important role in providing basic skills training for necessary for human resource. TVET was able to provide students with skills and knowledge to fulfill job needs and life skills. Based on UNESCO and ILO (2002), TVET is characterized as a sector of education that offers lifelong learning and preparation for citizenship, as well as preparation for the workforce and workplace adaptability. TVET is also considered a way to encourage sustainable development and fight poverty.

In 1999, during the Second International Congress in Seoul and the 30th UNESCO General Conference in Paris, it was agreed to define TVET as a combination of educational and training processes with the primary objective of getting jobs. According to the definition provided by the Learnovation Consortium (2008), TVET aims to provide individuals with skills and competencies that can be used in the work market.

In Malaysia, in its early stages, special education programs were aimed at giving students special disclosure requirement to study and master life skills (Anizam Mohamed Yusof et al, 2012). At that time, special education syllabus was only focused on fulfilling the needs of life (Mohd Tahir Lokman, Mustafa Nurul Qspecial, & Mohd Yassin Mohd Hanafi, 2009). However, since special needs students can also become important assets for the country and contribute to economic development, the MoE provides engineering and vocational education programs for them. This program provides the opportunity for students with special needs to acquire knowledge and training in skills related to work.

A study conducted by Zainudin bin Hassan, Sanitah Bt. Mohd Yusof, and Sabilah bt. Wahab (2006) focused on the application of practical skills in daily life among students with learning disabilities. The results of their study showed positive effects of life skills subjects that need to be learned by students with learning disabilities. Special education teachers who teach life skills subjects should possess various suitable strategies to engage the students and help them master the life skills subjects. According to Airulliza (2012) in their study, it was stated that the interest demonstrated by a student during the teaching and learning process can have an impact on their achievement and mastery of the subject being taught.

According to Hannah Aqilah Amran (2014), the study found that the role of special education teachers in the 21st century is challenging and requires high competency. Competent teachers are capable of handling any challenges and issues rationally. High motivation and self-efficacy of special education teachers are also necessary in implementing effective teaching and

learning approaches that enhance the success and holistic development of students. Therefore, it is essential for all stakeholders to work together, support, and collaborate with special education teachers, directly or indirectly, in order to elevate the quality of the national education system. According to Ismail, K., and Mohd Nopiah, Z. (2011), the study found that vocational teachers in various training institutions across the country have contributed to the production of skilled workforce to meet industry demands. The existence of skilled workers is a result of competent and positively-minded vocational teachers. Vocational teachers in Malaysia face various challenges, such as lack of interest in teaching unfamiliar subjects, lack of industry experience, emotional control requirements, article writing tasks, and the use of the English language in the teaching and learning process. These challenges are encountered by vocational teachers in public skills training institutions and should not be overlooked by relevant stakeholders, especially the Ministry and related departments.

METHODOLOGY

This study has been conducted at the Institut Pendidikan Guru Kampus Pendidikan Teknik (IPGKPT) located in Negeri Sembilan. 29 Design and Technology (DT) trainee teachers has participated in the survey. These trainee teachers have undergone teacher training at school for three months and undergo internship for 4 weeks. They also took MBK (students with special needs) course. According to Krejcie & Morgan (1970), with a population of 29 respondents, the number of sample sizes of 27 is appropriate.

The study will use the quantitative survey method through the use of questionnaire forms cited and adapted from questionnaire forms of a questionnaire from Muhammad Azim & Mohd Hanafi (2021) and Nirmala & Hanafi (2021). The instrument was an online questionnaire with Likert Scale using Google Forms software where it is distributed to respondents for feedback and information related to research problems. This study focused on the perception of trainee teacher in three aspects which are professional development, competency and skill, and motivational development. There is four-part questionnaire as shown in Tab. 1.

Table 1: Questionnaire items

Part	Items	Quantity
A	Demography	5
B	Level of professional development of IPGKPT TVET trainee teachers	10
C	Level of competencies and skills of IPGKPT TVET trainee teachers	10
D	Level of attitude and motivation of IPGKPT TVET trainee teachers	10

The indication for Likert Scale (Generated, et. al, 2015) used in this survey are shown in Tab. 2.

Table 2: Likert Scale indicator

Likert Scale	Indicator
1	Strongly Disagree
2	Disagree
3	Agree
4	Strongly Disagree

According to Salman (2021), the investigation process usually starts with an objective or a problem of the study you want to reach and can be measured. Thus, the procedure for data

analysis was conducted based on the predetermined study issues. After all the questionnaire data is collected, the data is set to be numbers.

Table 3: Mean score interpretation

Mean score	Interpretation
1.00-2.00	Low
2.01-3.00	Moderate
3.01-4.00	High

The data collected was then analyzed using the Statistical Package for Social Sciences (SPSS) software. Next, the analytical process involves two kinds of analyzes, which is descriptive analysis and inference analysis. According to Laerd Statistics (2018), descriptive analysis is method of summarizing or explaining collected data. Thus, this study is an investigation using a type of descriptive analysis which is mean values and standard deviation. Tab. 3 shows the interpretation of mean data used in this study.

RESULTS AND FINDING

Data in Tab. 4 shows that trainee teachers have high level of Professional development aspect. The highest mean 3.65 (SD 0.53) in item B2 shows that trainee teachers have attended courses that relate to Special Needs Program. They have a good understanding in Inclusive Education Program and ready to stay updated to latest practice in the field.

Table 4: Level of Professional Development of trainee teachers

	Sub-construct	n	mean	SD	level
B1	I understand about the Inclusive Education Program (PPI).	29	3.58	0.50	high
B2	I took courses related to the Inclusive Education Program for student with special needs.	29	3.65	0.48	high
B3	Inclusive Education Course provided help me run the Inclusive Education Program at school	29	3.62	0.56	high
B4	I know the goal of the students placed in the Inclusive Education Program	29	3.55	0.50	high
B5	I know the program that is suitable for students with special needs, either the Full Inclusive Program or the Partial Inclusive Program	29	3.48	0.57	high
B6	I know the features and student criteria that need to be included.	29	3.51	0.57	high
B7	I know the teacher's job resources and accompanying teachers that can be used during the Inclusive Education program	29	3.58	0.50	high
B8	I know the teacher's job resources and accompanying teachers that can be used during the Inclusive Education program	29	3.51	0.50	high
B9	As a Design and Technology (DT) teacher, I need to collaborate with accompanying teachers and Special Education teachers in implementing the Inclusive Education Program	29	3.58	0.50	high
B10	I know the problem and how to cope in implementing Program Inclusive Education in teaching for Design and Technology (DT) subjects	29	3.24	0.68	high
			3.53	0.53	high

Data in Tab. 5 shows that trainee teachers have high level of Competency and Skills aspects. The highest mean 3.65 (SD 0.48) in item C7 shows that trainee teachers have the skills of preparing the material that will suit special needs student. They are able to adapt teaching method and accommodate different learning style.

Table 5: Level of Competency and Skills of trainee teachers

	Sub-construct	n	mean	SD	level
C1	I understand teaching strategies for inclusive education program (PPI) in Design and Technology (DT) subjects	29	3.27	0.59	high
C2	I use appropriate teaching strategies in inclusive teaching and learning (PPI)	29	3.31	0.54	high
C3	I ranked the students according to the training model of the inclusive education program (PPI)	29	3.44	0.50	high
C4	I use colour cards and pictorial harnesses for student with special needs in Design and Technology (DT) subjects	29	3.48	0.57	high
C5	I conduct group activities based on students' abilities including student with special needs for Design and Technology (DT) subjects	29	3.44	0.50	high
C6	I will make sure assignments are given according to the ability of student with special needs for Design and Technology (DT) subjects.	29	3.55	0.50	high
C7	I prepare Design and Technology (DT) teaching materials that are compatible with student with special needs ability level.	29	3.65	0.48	high
C8	I will give opportunity for student with special needs to mix with students who get higher achievement for Design and Technology (DT) subjects.	29	3.62	0.49	high
C9	I often provide encouragement and support for students including students with special needs	29	3.62	0.49	high
C10	I believe the social development between student with special needs and norm students can improve academic achievement for Design and Technology (DT) subjects	29	3.58	0.50	high
			3.49	0.52	high

Data in Tab. 6 demonstrates that trainee teachers still exhibit high levels of Attitudes and Motivation despite the lowest mean 3.00 (SD 0.48), which indicates that trainee teachers do experience anxiety when working with special needs students.

Table 6: Level of Attitudes and Motivation of trainee teachers

	Sub-construct	n	mean	SD	level
D1	I give full attention while teaching in inclusive classes including Design and Technology (DT) subjects.	29	3.62	0.49	high
D2	I like to read materials related to the development of students with special needs.	29	3.37	0.77	high
D3	I am interested in attending a course related to teaching students with special needs in Design and Technology (DT) subjects.	29	3.44	0.63	high
D4	I often look for information related to learning problems among students with special needs in the mass media.	29	3.34	0.76	high
D5	As a Design and Technology (DT) subject teacher, I like to discuss and share teaching methods with other special education teachers	29	3.48	0.73	high
D6	I do not feel stressed when managing students with special needs in Design and Technology (DT) subjects.	29	3.00	1.00	moderate
D7	I am interested in inclusive special education because of the opportunities it opens up for further education and career development.	29	3.13	0.69	high

D8	I agree that the Inclusive Education Program can increase self-confidence and positive changes for students with special needs through Design and Technology (DT) subjects.	29	3.58	0.50	high
D9	I feel proud to be a Design and Technology (DT) subject teacher involved in the Inclusive Education Program.	29	3.55	0.50	high
D10	I am always attentive and friendly when communicating with students with special needs.	29	3.62	0.49	high
			3.41	0.66	high

DISCUSSIONS, RECOMMENDATIONS AND CONCLUSIONS

According to the data, trainee teachers' professional development is continuously growth. They tend to stay updated with the latest research, strategies, and best practices in the field related to special needs students. In order to stay updated, these trainee teachers readily attending workshops, conferences, and seminars and engaging in collaborative learning with colleagues. IPGKPT has also provides these trainee teacher efficient courses related to special need student.

As for competency and skills for trainee teachers, they do familiar with various types of disabilities, the characteristics and the impact on learning and development. This understanding helps the trainee teachers to tailor instruction and support to meet student's individual needs. Due to individual's specific needs, thus different instruction is also essential. IPGKPT TVET Trainee teachers able to adapt different teaching methods, materials and assessments to accommodate different learning styles, abilities and interests that special students have. A good teacher is a good collaborator. Teaching with effective communication, teamwork and coordination will contribute to comprehensive support and maximizing student success.

Table 6 shown that IPGKPT TVET trainee teachers demonstrate empathy and understanding towards special needs student. They encourage these students to believe their potential thus fostering positive learning environment and strive for success. Nevertheless, as student with special needs required additional time, support and alternative strategies to grasp concepts and demonstrate their learning, the trainee teachers has high level of patience and flexibility. But, as a human being one cannot run from fear of having imperfection. This feeling leads to anxiousness. This might be good impact or the otherwise. One that is optimist will take it as a challenge and make it as a driving force to do better. While the other will somehow make it as a point to be demotivated. As a wrap, IPGKPT TVET trainee teachers do have moderate feeling of being stressful but manage to cope it at the end.

Conclusions

Working with students with special needs requires trainee teachers to focus on three important aspects: professional development, competencies and skills, and attitudes and motivation. Professional development involves continuous learning to stay updated with the latest research, strategies, and best practices. trainee teachers possess competencies and skills such as understanding disabilities, developing individualized education plans, implementing differentiated instruction, and engaging in collaborative teamwork. Attitudes and motivation are crucial in creating an inclusive environment, including demonstrating empathy, setting high expectations, practicing patience and flexibility, and using positive reinforcement and individualized motivation techniques. By addressing these aspects, trainee teachers can provide effective support and create a conducive learning environment for students with special needs.

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