

CHALLENGES FACED BY VOCATIONAL TEACHERS IN PUBLIC SKILLS TRAINING INSTITUTIONS: A REALITY IN MALAYSIA

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ABSTRACT

Teachers in Technical and Vocational Education and Training (TVET) play a pivotal role in ensuring skilled graduates with excellent personality. However, some TVET teachers in developing world face challenges in fulfilling this role. Thus, this study explored the challenges that are faced by vocational teachers (who are assigned to teach skills courses) from public skills training institutions in Malaysia. Using qualitative research design, this study conducted semi-structured interviews on 13 purposively selected participants from the Department of Skills Development and personnel under the Ministry of Human Resources and Ministry of Youth and Sports, which included six management staff and seven vocational teachers. Following the analysis using nVIVO, this study identified six core challenges faced by vocational teachers: (1) disinterest and lack of motivation in teaching the assigned skills subjects; (2) lack of skills qualifications and industrial experiences (which are necessary as vocational teachers); (3) meeting the needs of students with low academic grades which require extra teaching effort with high emotional intelligence; (4) difficulty in attending professional courses due to limited budget allocation, rotation system, and heavy workload; (5) difficulty in article writing task; and (6) difficulty in using English as the medium of instruction. These findings demonstrate the strong need to address the challenges faced by these vocational teachers, particularly for the teaching of programmes based on the National Occupational Skills Standard (NOSS), in the public skills training institutions to enhance the teaching and learning process in TVET.

Keywords: National Occupational Skills Standard; skills qualifications; teacher competence; qualitative design

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1. INTRODUCTION

The need for a competent and skilled vocational teacher is imperative for an effective teaching and learning process in Technical and Vocational Education and Training (TVET). The United Nations Educational, Scientific and Cultural Organisation (UNESCO) adopted the International Standard Classification of Education (ISCED) in 1997 that put forward TVET as an education and training process, which requires knowledge, practical skills, and understanding of the job requirements in the industry. The learning process in TVET focuses on training students—as the future workforce—to fulfil the job market according to the scope of skills needed and self-equip with adequate exposure of work experiences and knowledge, creativity, and communication and problem-solving skills (Romiszowski, 2009). Overall, TVET aims to produce globally competitive workforce, equipped with technical knowledge and skills required for the industry (Azmi, 2011; Alavi et al., 2013).

Back in 1897, the British first introduced TVET in Malaysia when the indigenous youth were trained as railway fitters and mechanics. Following that, the Razak Report of 1956 set the basis for the continuous transformation of TVET in Malaysia. TVET is implemented through entrepreneur schools as well as technical colleges and institutions with the adoption of competency-based training, specifically the National Occupational Skills Standard (NOSS) and occupational analysis (Ahmad, 2003). The earliest public skills training institutions, namely (1) Kuala Lumpur Industrial Training Institute under the Ministry of Human Resources and (2) Dusun Tua National Youth Skills Training Institute under the Ministry of Youth and Sports, were built in 1964 (EPU, 2015). The main leaders for the implementation of TVET in Malaysia are the Ministry of Education (MOE), the Ministry of Higher Education (MOHE) (for academic, vocational, and technical programmes), and the Department of Skills Development (DSD) under the Ministry of Human Resources for skills programmes (EPU, 2015). The DSD developed the Blueprint of the Training and Development of Skills and Occupation Malaysia 2008–2020. In fact, the development of TVET for skills programmes is in line with the objectives established in the blueprint, which outlined the following criteria in developing highly skilled workforce: (i) must be standard and legislated, (ii) must be certified, (iii) must provide training, (iv) teachers, (v) industrial-based training, and (vi) methodology. Evidently, the role of a vocational teacher is pivotal in ensuring the success of TVET.

Thus, this study aimed to explore the challenges among vocational teachers for the NOSS-based programmes in the public skills training institutions under the Ministry of Human Resources and the Ministry of Youth and Sports in Malaysia.

1.1 Criteria of competent TVET teachers

Competency reflects whether the job performance of an employee in an organisation is excellent or represents a performance indicator set for the development of professionalism (Shippmann et al., 2000; Mulder, 2001). A competent employee possesses the individual skills and abilities to efficiently and successfully execute the assigned task (Schultheiss, 2005), who also demonstrates excellent job performance (Spencer & Spencer, 1993; Woodruffe, 1993; Sultana, 2009). In line with Ellström (1997), a competent worker has diverse competencies—psychomotor intelligence, cognitive intelligence, behaviour, personality, and social skills. Accordingly, competency becomes an indicator of one's capacity of performing the assigned job (Mulcahy, 2000; Volmari et al., 2009).

Similarly, a competent TVET teacher typically displays the following attributes: (1) demonstrates professionalism, (2) knowledgeable, (3) skilful, (4) establishes social network, and (5) possesses good personality (UNESCO, 1999). A competent teacher applies experiences and knowledge to provide hands-on guidance; establishes good relationship with the students; motivates the students (Fjellström, 2014); conducts lessons well with adequate knowledge on the curriculum and proficiency in the teaching and learning process, including the subject content; skilfully conducts research for self-development and

career development as a teacher (Pantic & Wubbels, 2010; Papier, 2011); and has the capability to deliver effective teaching (Marinkovic et al., 2010; Muller & Gamble, 2010).

Undoubtedly, a competent and skilled vocational teacher is essential for an effective teaching and learning process in a skills training institution, which is in line with the notion propounded by Baartman & De Bruijn (2011) that the learning process in TVET involves the application of knowledge into practice. Therefore, knowledgeable and skilled teachers are needed to ensure effective teaching and learning process in TVET institutions (Spöttl, 2009). **Figure 1** illustrates the competency level of teachers according to the competency standard proposed by Klaus Bader-Labarre, (2013).

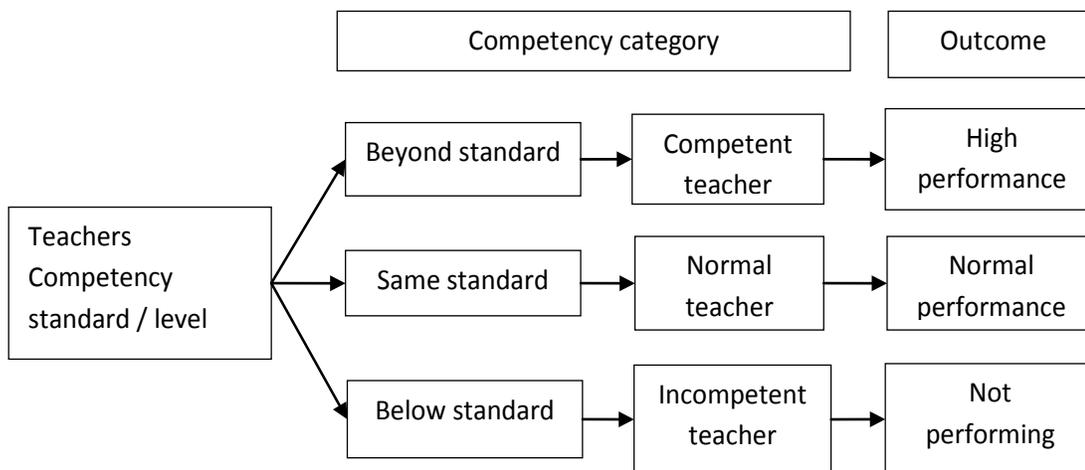


Figure 1: Teachers competency level

1.2 Vocational teachers for NOSS-based programmes in public skills training institutions

Vocational teachers in the DSD accredited centres teach 30% theory and 70% practical subjects according to the NOSS, which is a document developed by industry experts for specific occupations in Malaysia, describing the associated skills needs, occupation level, and the path to attain those skills. The NOSS provides a complete list of duties and tasks for an occupation, which is known as competency unit. The NOSS based skills training are offered in both public and private training institutions (Minghat et al., 2013). According to the June 2017 DSD Report, about 1,792 NOSS have been produced in various skills programmes, with 18,301 vocational teachers, (Verifier Officers), 569 public and 668 private accredited centres. Also, there are 1,641,572 students who have succeeded from these programmes between 2002 and 2017 (June). **Table 1** presents the number of DSD accredited centres and vocational teachers in both public and private skills training institutions.

Table 1: Number of DSD Accredited Centres and Vocational Teachers According to State

No	States	Accredited Centres		Vocational teachers
		Public	Private	Public and private institutions
1.	Selangor	58	202	3764
2.	Kuala Lumpur	28	97	1257
3.	Perak	56	54	1614
4.	Johor	64	49	1090
5.	Sarawak	54	31	1252
6.	Sabah	46	35	860
7.	Pulau Pinang	34	46	1170
8.	Kedah	43	27	1274
9.	Negeri Sembilan	30	41	1130
10.	Terengganu	38	33	945
11.	Pahang	45	16	1090
12.	Melaka	24	22	815
13.	Kelantan	31	14	781
14.	Perlis	11	1	320
15.	Labuan	5	0	121
16.	Putrajaya	2	0	9
	Total	569	668	18,301

1.3 Issues of vocational teachers in Malaysia

Malaysia is of no exception when it comes to the issues of TVET teachers. Mahazani (2015) stated that the inadequacy in field competencies, communication, pedagogical knowledge, and teaching methods affect the quality of TVET teachers at Malaysia technical institutions. The educational background of these vocational teachers in the public skills training institutions includes engineering and technology, with specific certificates or diplomas, Bachelor's degree, and Master's degree obtained locally or abroad. These vocational teachers gained different work experiences, which resulted in different competency level (Khuzainey, 2008). Hanapi et al. (2015) highlighted that incompetent teachers are one of the factors that contribute to the unemployment of vocational and technical students in Malaysia. Based on their interviews with lecturers, teachers, and industrial workers, the issues of incompetent teachers reside in their teaching methods, weak classroom management, lack of industrial experiences, lack of competency skills, and disinterest in teaching the assigned subjects. Rus et al. (2014) also agreed that the pedagogical skills and industrial experiences of these vocational teachers affect the employability of these vocational and technical students. These vocational and technical students encounter employability issue because the TVET training they received cannot be maximised in their workplace with their lack of skills and quality—that the employers have to provide extra training for them (Rus et al., 2014). This supports the notion that the learning process in the public skills training institutions cannot be optimally transferred by the vocational teachers, as the main domain of knowledge transfer.

2 METHODOLOGY

Using the qualitative research design, this study performed semi-structured interviews among 13 purposively selected participants from the Department of Skills Development, Ministry of Human Resources and the Ministry of Youth and Sports. The 13 participants, comprised of seven vocational teachers and six management staff, had respectively, more than 15 and 20 years of work experience. The vocational teachers were selected based on their teaching experience and involvement in the local or international skills competition. The management staff who participated in this study were either in Grade DV52 or DV54, and were appointed as either Director or Assistant Director of the department, ministry, or public skills training institutions.

This study developed a set of interview questions and conducted a pilot study with two vocational teachers prior to the interviews. The interviews, which were recorded using a tape recorder, lasted for 55 minutes on average. The semi-structured interview sessions were done face-to-face, at the participants' offices. During these interviews, the participants shared their viewpoints on the issues and challenges faced by vocational teachers. Following that, the interviews were transcribed and synthesised according to relevant themes using nVIVO, particularly focusing on the descriptive information and experiences of these participants. The data were analysed using the qualitative thematic analysis (Braun & Clarke, 2006). The data analysis was conducted to critically analyse and report any dominant patterns (themes) in the insights provided by the participants. Additionally, the transcripts were given to the participants for two weeks before gathering their transcripts.

3 RESULTS

Based on the interview sessions held with the thirteen participants, six main challenges faced by the vocational teachers in the public skills training institutions were identified and the challenges will be discussed in the following sub-sections.

3.1 Disinterest and lack of motivation among vocational teachers in newly assigned skills subjects

In addition to having adequate knowledge and skills in the respective fields, the teachers' do have strong interests in the subjects that they were teaching which motivates them to deliver effective teaching. However, rapid technological changes have resulted in new NOSS-based programmes being introduced requiring teachers to teach new skills subjects. Therefore, the vocational teachers are forced to multitask and master new skills subjects to meet the current technological needs and changes. One of the participants (management staff) responded to this matter:

TVET is a fast-growing field; nevertheless, many subjects offered here are outdated. For instance, at ILP Kuantan, we have subjects on fixing radios and televisions; which are already obsolete. This is the challenge we are currently facing in TVET, and we need to improve to meet the industrial and technological needs. This upgrading will involve revision in government policies, whereby, the government has to bear the cost of latest equipment and machines, and this is challenging.

(Dr A., Director of IKTBN)

The other participants (vocational teachers) revealed their situation and the lack of motivation in teaching new subjects which are beyond their expertise:

To me, teachers teach subjects which are from their areas of interests. If we are asked to teach subjects from a different field which we have not mastered, we will be disinterested to teach, and thus cannot teach efficiently. I have many friends who have lost their motivation to teach some subjects because of their lack of interest in those subjects.

(Mr. Z., ILP Teacher)

We have only 3 teachers from the pure automotive field at ADTEC; the remaining teachers are from general mechanical and mechanical manufacturing fields. How can we regard them as specialists when they are not from those specific fields? For instance, I do not consider myself as a specialist if I was asked to teach subjects which are not from my field of expertise, as it will be difficult for me to perform well.

(Mr. T., ADTEC Teacher)

A teacher must be interested and have practical experience in their field in order to teach well. When a teacher has the interest in the field that he is teaching, he will be inspired to teach and be able to facilitate the students through the NOSS modules.

(Mr. R., IKTBN Teacher)

It is imperative that the vocational teachers are able to master and teach in their designated fields. The vocational teachers are likely to be demotivated if they were required to take on new subjects that are beyond their expertise. They should be first provided with the opportunity to enhance their knowledge and skills through courses or training in the newly assigned field. Additionally, these vocational teachers should be initiative in their learning if they were required to teach new subjects that are in line with the implemented policies.

3.2 Academic graduates and without industrial experiences as vocational teachers

The vocational teachers in the public skills training institutions are engineering graduates, either from local universities or abroad. Their learning experience has been mostly theoretical in nature, but teaching the NOSS-based curriculum requires more teaching of skills (70%) and less of theories (30%). Therefore, the teaching poses a great challenge to the novice teachers who have to teach skills subjects. Thus, it is pivotal that the vocational teachers have hands-on knowledge and skills in the respective fields that are in line with the competency unit in NOSS.

Novice teachers who are fresh graduates are not well equipped with sufficient knowledge and skills in the fields that they are teaching. For example, we have a new teacher with a degree in Mechanical and the Director asks him to teach Machinery. How is he going to teach this subject? Before teaching this new subject, he needs to be an independent learner and firstly familiarise himself with the competency unit in the NOSS.

(Mr. J., CIAST Deputy Director)

In my opinion, it is difficult for us to deliver knowledge efficiently as novice teachers (fresh graduates). Being first class graduates does not guarantee that we can teach these skill subjects effectively. Even if a teacher holds masters and degree certificates, he will not be able to contribute much in the classroom if he does not have hands-on experience and knowledge in the skill areas

(Mr. K, ILP Director)

Fresh graduates who just started working are still uncertain about engines, hand tools, and safety. If they teach only the theoretical aspect of the skill subject, the students will not understand the work process and this does not comply with skill teaching. The teachers must have the practical knowledge in the fields that they teach.

(Miss J., JTM Director)

New teachers without industrial or hands-on experiences are more likely to encounter difficulties in the classroom especially when they are required to handle specific equipment, hand tools, machines, certain work process, or any latest technology. Besides that, it will be challenging for them to share and explain any industrial experiences to the students.

I do not have sufficient industrial experience because I only worked with Proton Edar for just 8 months. At first, it was difficult for me to apply the skills and knowledge in the automotive field. I had to attend many courses and be an independent learner to enhance my knowledge and skills. I took the initiative to spare some time during weekends to learn more from my friends who are

experienced teachers.

(Mr. F., IKTBN Teacher)

Novice teachers who are diploma or university graduates, especially those without industrial experiences, have difficulty in delivering quality teaching.

Industrial work experience is one of the best tool that can facilitate the vocational teachers in the teaching process. A competent teacher with industrial work experience will be able to deliver and share his hands-on experiences, the practical steps, and what is needed in the industry to his students. These teachers will be able to demonstrate that what actually happens outside is not the same as what is learned at the institute.

(Mr. Z., ILP Teacher)

It is undeniable that public skills training institutions teachers who have industrial work experience are better teachers; and those without industrial work experience are facing difficulties. They need to attend courses to gain more experience and knowledge in theory and practice. The industrial work experience helps the teachers to provide an insight of their experiences and the current technology with the students.

(Mr. R., IKTBN Teacher)

Vocational teachers who are engineering graduates typically encounter challenges in teaching skills subjects during their early years of teaching. Accordingly, relevant courses in pedagogy and skills should be provided to these vocational teachers to ensure effective teaching and learning process.

3.3 The need of students with low academic grades for extra teaching effort with high emotional intelligence

TVET in Malaysia is publicly perceived only as an alternative for skills subjects. Adding to that, students with high academic performance tend to further their studies in other learning institutions (such as community colleges, polytechnics, and universities) for engineering and technology-related courses. Meanwhile, students with lower academic performance are likely to continue their studies only in skills programmes. The participants in this study revealed that these students are more interested in practical learning, which are likely due to their psychomotor intelligence for practical learning, rather than the cognitive intelligence for theoretical learning. Besides that, these vocational teachers must have good emotional and discipline control when they encounter students that require extra teaching effort. These are the challenges that the vocational teachers encounter in order to transform students with no basic knowledge in the selected field into skilful students. The participants described the scenario of such students in the following:

Malaysians generally view TVET as a second choice. This results in the teachers having difficulties managing the students. Therefore, the vocational teachers must be well equipped with soft skills; and their emotional intelligence has to be higher than university lecturers.

(Dr A, IKTBN Director)

The emotional control of vocational teachers is higher than that of university lecturers. This is because it can be difficult to handle some of the TVET students These students are usually forced by their parents to enrol into the TVET programmes. As a result, they undertake the programmes without any interest or motivation to learn. These are the students who usually have problems with attending classes on time, submitting assignments and projects, and focusing on their studies....

(Mr. J, CIAST Deputy Director)

The students usually have low acceptance level towards theory-based subjects because they are disinterested in learning the theories. It could be because the current generation tend to get bored easily. Whereas, they are willing to stay back during breaks and spend more time at workshops to gain hands-on experience and learn the practical subjects. These students are different from other academic students who need to focus on their theory examination achievement. Therefore, the teachers must have high emotional intelligence and personalise their teaching methods, especially for the theoretical subjects.

(Mrs. D, IKTBN Director)

Sometimes, the teachers are unable to control their emotions when dealing with difficult students. For example, it can be challenging for the teachers to remain calm when the students do not submit their assignments on time; and the teachers have to repeatedly ask them for it.

(Mr. R, IKTBN Teacher)

Despite the effort and focus to deliver quality teaching, the vocational teachers are confronted with the attitudinal issue of certain students, which require the teachers to exhibit high emotional intelligence in managing these students effectively.

3.4 Difficulty in attending professional courses due to limited budget allocation, rotation system, and heavy workload

There are opportunities for vocational teachers to participate in professional development programmes (courses, workshops, industrial placement etc.) to enhance their knowledge, skills, and professionalism in their fields. However, the participants revealed several challenges that hinder the vocational teachers from participating in such programmes, such as limited course places, budget allocation, rotation system among teachers to attend these programmes, and their daily commitment for other tasks. The participants' views on these are as follows:

There are not many opportunities provided by the skill agencies for vocational teachers to undergo professional skill enhancement courses. When CIAST offers attachment courses in the industry, very few teachers are able to attend it.

(Mr. J, CIAST Deputy Director)

We are always advised to attend courses to improve our skills and knowledge in the fields that we teach. Nonetheless, due to a limited budget, the teachers have to wait longer for their turn in the rotation system.

(Mr. F, IKTBN Teacher)

It is good that CIAST offers the opportunity of undergoing industrial attachments for vocational teachers. Nonetheless, the cut-off budget is a restrain to the teachers who intend to attend the courses.

(Mr. N, IKTBN Teacher)

The ever-changing technology in TVET sets forth the significant need to meet these technological development and changes among the vocational teachers. They have to continuously enhance their professionalism in terms knowledge and skills. At the same time, they should embrace the learning of new knowledge and skills in their designated fields, which can be shared with their colleagues, as well.

3.5 Difficulty in article writing task

The development of professionalism among vocational teachers involves article writing task. The vocational teachers perceive article writing a burden without any direct significance as they are more focused on their theoretical and practical teaching. In addition to being time-consuming, article writing is perceived to be more apt for those who pursue postgraduate studies and those in the management level.

Not all teachers are able to write journal articles to be published. The ordinary vocational teachers tend to focus on skills development and hands-on experience. Article writing is difficult for vocational teachers, especially for those in the support staff group.

(Mr. Z, ILP Teacher)

Even though article writing is good for the vocational teachers, it can be challenging for them to do it due to the time constraints, as it also requires a lot of reading.

(Mr. N, IKTBN Teacher)

Article writing has no direct relevance for vocational teachers because they focus more on hands-on experiences except for those who further their studies. Generally, the vocational teachers do not write articles unless they are furthering their studies. In short, the vocational teachers are not keen to write academic articles as they find it irrelevant in practical teaching.

(Dr. R, JPK Director)

Article writing task can only be performed when these vocational teachers are active researchers for the development of new products or innovative projects with commercial values. Nonetheless, the managing institutions (such as the related ministries or departments) must ensure continuous effort to motivate these vocational teachers to embrace new prospects of their job as well as produce articles for the benefit of the public.

3.6 Difficulty in adopting English language as the main teaching language

The adoption of English language as the main medium of communication in the teaching and learning process has become another issue as well as a challenge for the vocational teachers. In addition, students with low academic performance may also have poor grasp of English language in terms of reading, speaking, and writing. This issue of adopting English language should be critically addressed, as students experience difficulty in comprehending the theoretical and practical learning even in their mother tongue (Malay language). Adding to that, this also involves the development and delivery of teaching materials by these vocational teachers who are more familiar in using Malay language. Some of the views provided by the participants on this issue are presented as follows:

It is difficult to implement the use of English language for teaching and learning in all the accredited centres because students might not clearly understand what is being taught. Our concern is more about the students in the critical skill areas such as electrical, welding, and machinery. Whereas, students in the areas of computer networking and hospitality might be able to cope well with the use of English language in the classroom.

(Mr. J, CIAST Director)

A survey from KBS showed that most teachers oppose the idea of teaching in English language. The reason being that even when the teaching and learning is done in Bahasa Melayu, the students do not score well; if it is done in English, the results will be worse. If this has to be implemented, then the teachers should have the knowledge and proficiency to teach in English language.

(Mr. F, IKTBN Teacher)

Not all of our teachers have high command of English language; in fact, we have been using Google to translate our notes due to the lack of English language proficiency. It is already challenging for our students to understand when we teach them in the local language, it will even more difficult for them when we adopt the English language as a medium of communication in the classroom.

(Mr E, IKTBN Teacher)

Evidently, it is a challenge for the vocational teachers to teach in English language, which are contributed by their inability to communicate and write in the language as well as the inability of the students to grasp the language during the lessons.

4. DISCUSSION

The vocational teachers in the public skills training institutions under the Ministry of Human Resources and the Ministry of Youth and Sports in Malaysia cannot be exempted from challenges.

4.1 Motivation and preference in teaching subjects

Competent vocational teachers in their designated fields are able to provide more effective guidance for their students. Accordingly, a competent teacher delivers effective performance (Arifin & Rasdi, 2017) and a knowledgeable teacher with cognitive capacities contributes to the learning achievement of students (Hamid et al., 2012; Metzler & Woessmann, 2012). Therefore, it is crucial that the vocational teachers have specific skills according to their designated fields. From the findings, it is a challenge and rather demotivating for the teachers to take on new skills subjects. Moreover, the assigned new subjects may not be of the teachers' designated fields and potentially unfamiliar to these teachers, which requires them to learn the subject content all over. Muhammad Arifin (2015) added that the relationship between job motivation and job satisfaction are significantly positive among the teachers. Therefore, there is a need to assign the subjects within the designated fields—that these vocational teachers have mastered—to these teachers accordingly. Furthermore, a teacher who is assigned to a new field has to undergo appropriate training, which may cause disinterest in teaching. Undeniably, the vocational teachers must have adequate practice and industrial experiences in the designated fields in order to acquire expertise and skills. Hence, the vocational teachers should be provided with adequate opportunities to attend relevant courses and industrial attachment training programmes in improving their knowledge and skills, which eventually motivate them—especially among those who embrace new challenges and have the willingness to learn.

4.2 Academic background and industrial experiences of vocational teachers

Most vocational teachers are either polytechnic or university engineering graduates. These graduates may encounter challenges in their early stage of their career as vocational teachers. In addition, compared to experienced teachers, the novice teachers demonstrate less efficiency and require more time in planning and may encounter problems in their attempt to be responsive towards the students' learning (Borko & Livingston, 1989). Therefore, these novice teachers require continuous training (such as pedagogy course) and commitment to master effective teaching methods. Meanwhile, as for those vocational

teachers without industrial experiences, they need to obtain the Malaysian Skills Certificate through the accreditation of prior achievement in order to enhance their knowledge and skills. In this case, vocational teachers with industrial experiences have an added advantage (Abebe, 2010) since they have the specific technological knowledge as well as the skills to provide hands-on teaching, while sharing real industrial experiences with the students.

4.3 Importance of emotional intelligence among vocational teachers

The positive personality competence of a vocational teacher positively motivates the students to learn (Kheruniah, 2013). These vocational teachers must have a positive attitude to successfully deliver effective teaching and learning. Teachers with emotional intelligence do not consider students with weak learning capability or disruptive behaviour as burden. They are able to lead the teaching and learning process successfully, which eventually produce positive learning outcomes among the students (Vesely et al., 2013). As asserted by Md. Nawi et al. (2015), teachers with emotional intelligence compensate their emotion with quality work performance; also with that attitude leads the workers effectiveness in their professionalisme (Boyatzis, 2008). After all, students with low academic performance are not necessarily unsuccessful in life. The tenacity of vocational educators to impart the knowledge and skills to their students itself is noble, as educating these TVET students requires the teachers to possess emotional intelligence, including patience. Without these attributes, the vocational teachers are likely to be impatient, irritable, and put less concern on the students' learning achievement.

4.4 Development of professionalism among vocational teachers

Vocational teachers in the public skills training institutions require continuous training in order to enhance their knowledge and skills in the specific fields. Knowledge and skills enhancement through relevant courses is a continuous effort towards producing quality teachers (OECD, 2005; Clarke & Hollingsworth, 2002). Accordingly, teachers who have been trained in the development of professionalism display more positive attitude (Avramidis & Kalyva, 2007) and enhanced efficiency in their job performance (Lee et al., 2007; Darling et al., 2009). Thus, it is imperative that teachers are provided with opportunities to attend relevant courses, mentor-mentee programmes, seminars, and industrial attachment programmes, locally or abroad, which can serve to develop their professionalism (Kelemen, 2012). The public skills training institutions should be impartial in their management to allow more vocational teachers to attend such courses and gain exposure to the most recent technology. Moreover, these institutions need to have specific plans, including adequate budget allocation, to ensure the continuous development of professionalism among the vocational teachers. Alternately, vocational teachers should have the initiative to practice self-learning in enhancing their professional knowledge and skills. Self-learning and reflection are strategies to enhance professionalism among teachers (Minott, 2010) to be knowledgeable and skilful teachers. For instance, they can undertake self-learning through manuals and hands-on practice with the equipment and machines that are available in their institutions.

4.5 Article writing task

The article writing task is common among the TVET educators in community colleges, polytechnics, and universities, but it remains rather uncommon among the vocational teachers in the DSD accredited centres. Nonetheless, vocational teachers demonstrate unpreparedness to include article writing in their heavy workload, as they are more focused on teaching. It was also assumed that the article writing task should be for those who sign up for postgraduate studies (Master's degree and Doctor of Philosophy). Teachers encounter two simultaneous challenges, which are the challenge of being a practitioner and the challenge of practicing as a teacher and a researcher (Mills, 2003). The time constraint is another factor that challenges these teachers to conduct research (Vincent, 2000; Woolhouse, 2005). Additionally, teachers have both heavy and uncondusive workload, which limit any reflection time or systematic

research (Dadds, 2002; Woolhouse, 2005). Moreover, the unsupportive management, and lack of materials are some of the factors that challenge the innovative efforts among the vocational teachers. Nevertheless, the encouragement and support for the vocational teachers to take on article writing task in producing scientific writing are significant and benefit the institutions, especially on the teaching and learning process, product innovations, and the issues pertaining to the TVET implementation in the public skills training institutions.

4.6 Teaching in English language

Vocational teachers in the public skills training institutions demonstrate their unpreparedness in using English language to conduct their teaching. From their perspective, the lessons should be conducted in Malay language to ensure effective teaching and learning process in the public skills training institutions. Moreover, most students in the technical colleges are less proficient in English language (Mastura et al., 2015) and perform poorly in their mastery of the second language. Adding to that, pursuing a TVET course is a new learning experience for these students. Thus, the use of the mother tongue, instead of English language, assists the comprehension and learning of these students. Pourfeiz (2015) related students' personality to their interest in learning English. If a student is unable to understand English language, the student may experience difficulty to comprehend the subject content and eventually lose interest in the field of study. Additionally, the student may feel uneasy to communicate and write in English language (Hismanoglu, 2013; Suleimenova, 2013), resulting in stress as they learn the second language (Young, 1991). As the teachers are required to assist the students in comprehending the subject content, these teachers must be proficient in delivering the lessons in English language. Conclusively, related policymakers should consider various aspects before adopting the English language as the main communication medium in the public skill training institutions. Besides that, they must take into account the ability of these students in comprehending the lessons in English language as well as the competency of these teachers in delivering effective teaching in English language.

5 CONCLUSION

Competent vocational teachers motivate the production of marketable future workforce in Malaysia. After all, the vocational teachers in various training institutions across countries have assisted in producing skilled workforce in meeting the industrial requirements. The existence of skilful workforce is the result of professional vocational teachers who are competent and positive-minded. Vocational teachers need to demonstrate positive attitude in the teaching and learning process, including dedication, determination, discipline, and ethics as well as the knowledge and skills in the respective fields. Vocational teachers in Malaysia encounter several challenges that should be critically addressed, such as their disinterest in teaching new subjects that they have not mastered, the lack of industrial experiences, the need of emotional control, the article writing task, and the adoption of English language in teaching and learning process. These vocational teachers in the public skills training institutions encounter these challenges in real practice, which should not be overlooked by the significant stakeholders, particularly the relevant ministries and departments.

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