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Characteristics of Effective Teachers in the Classroom Context: A Case of the Malaysian Post-Graduate Diploma in Education (PGDE) TFM Fellows

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ABSTRACT

This study seeks to establish the characteristics important for effective secondary teacher education in the 21st century. It deals with the initial and in-service education of secondary school teachers undergoing the Teach for Malaysia (TFM) programme. The study is based on the theoretical underpinning that effective teachers should display a wide range of skills and abilities that lead to creating a learning environment where all students feel comfortable and are sure that they can succeed both academically and personally. Generally, all the TFM fellows were found to have higher levels of pedagogical knowledge, pedagogical skills and affective attributes, all of which are vital for them to be effective teachers and which would subsequently ensure effective teaching and learning process in the classroom. Interestingly, the findings of this study were found to be in line with those conducted in numerous countries throughout the world and particularly in the Asian region, e.g. Saudi Arabia, Nigeria, Yemen, Iran, Korea, Thailand and Singapore. Finally, it is hoped that the findings of this study would serve as a checklist for improving the existing TFM teacher education programme, and offer a frame of reference for education policy makers and teacher educators in the world at large.

Keywords: Characteristics, Effective, Teach for Malaysia programme, Pedagogical knowledge, Pedagogical skills, Affective attributes

Introduction

This study seeks to establish the characteristics important for secondary teacher education in the 21st century. It deals with the initial and in-service education of teachers in the secondary learning contexts. It sets to offer a frame of reference for

Malaysian education policy makers and teacher educators in general, and the Teach for Malaysia (TFM) programme in specific.

The findings of this study will draw on consultation based on the experience of ninety three (93) TFM fellows who were involved in teaching various subjects in secondary schools. The findings of this study will also hopefully suggest some useful guidelines for quality assurance and enhancement. By outlining the key elements in the Malaysian secondary school education, the characteristics highlighted based on the findings of this study aim to serve as a checklist for the existing TFM teacher education programme, as well as provide insights into how to improve it in future.

The Teach For Malaysia (TFM) program is a new endeavour in Malaysia, established under the patron of the Ministry of Education. The TFM is adapted from similar programmes offered in other countries such as Teach For America, Teach First UK, Teach For India, Teach For China etc. It enlists Malaysia's most promising future leaders, in a mission to end the existing educational disparity and inequity among local educators. As such, the Teach For Malaysia fellows will serve as full-time teachers for two years in carefully selected high-need secondary schools. These fellows will commit to transform the education outcomes of the less-privileged school children, by significantly improving their commitment, achievement, and aspirations. In the long term, the Teach For Malaysia alumni will form a different class of leaders, working in various sectors to expand education opportunity for all children in Malaysia.

Literature Review

Definition of Effective Teachers

An effective teacher has been defined as “the one who conducts effective teaching which produces beneficial and purposeful student learning through the use of appropriate procedures” (Diamond; 1998 cited in National Board for Professional Teaching Standards, 2008). The National Comprehensive Center for Teacher Quality (NCCTQ) suggests extending the definition of teacher effectiveness "beyond teachers' contribution to student achievement gains to include how teachers impact classrooms, schools, and their colleagues as well as how they contribute to other important outcomes for students" (Goe, Bell, & Little, 2008).

In addition, Kyriakides, Campbell, and Christofidou (2002) point out that effective teachers need to possess adequate quantity of instruction, organize and manage the classroom environment, effectively use instructional time, structure instructional materials, give students practice and application opportunities, provide

good classroom climate, and have enough subject knowledge, knowledge of pedagogy, teaching beliefs, and teachers' self-efficacy.

Swank, Taylor, Brady, and Frieberg (1989) created a model of effectiveness that was based upon teacher actions. For them, effective meant increasing academic questions and decreasing lecture and ineffective practices, such as negative feedback and low-level questions. The authors believed that these factors become easily identifiable in the assessment of performance. Million (1987) based effectiveness on the lesson design and method of delivery. If teachers met a preset list of criteria during their evaluation, they were deemed effective. Papanastasiou (1999) stated "that no single teacher attribute or characteristic is adequate to define an effective teacher".

Brosh (1996, cited in Park & Lee, 2006) identified the characteristics of effective English foreign language teachers as perceived by high school teachers via interviews and a 20-item questionnaire on teacher characteristics. These teachers attributed the highest importance to items regarding the command of the target language and teaching comprehensibly. Witcher (2003) studied students' perceptions of characteristics of effective college teachers. The participants were 912 undergraduate and graduate students from various academic majors enrolled at a university in a mid-southern state of the United States.

Qualities of Effective Teachers

Lowman (1997) describes two main dimensions of effective college teaching that come up in his study. According to his model, teaching effectiveness is a product of two distinct dimensions. The first is *the instructor's ability to stimulate intellectual excitement* in the classroom. Fundamental to this ability is the clarity of lectures and their emotional knowledge, organization and flexibility. The teacher has to provide students with intellectual excitement (enthusiasm, knowledge, inspiration, humor, interesting viewpoint, clarity, organization). Perhaps equally significant in terms of teacher effectiveness is *the use of psychology in the classroom*. It is related to interpersonal concern/ effective motivation such as concern, caring, availability, friendliness, accessibility, helpfulness, encouragement, and challenge.

An effective teacher is the one who promotes positive student emotions by fostering critical thinking and creativity, showing sensitivity to students' feelings about the course material, and promoting an atmosphere of respect. Collins (1990), while working with the Teacher Assessment Project established five criteria for an effective teacher: (a) is committed to students and learning, (b) knows the subject matter, (c) is responsible for managing students, (d) can think systematically about their own practice, and (e) is a member of the learning community.

Pedagogical Knowledge, Pedagogical Skills, Affective Attributes And Effective Teachers

Pedagogical Content Knowledge

Over the past 20 years, researchers have used pedagogical content knowledge to refer to a wide range of aspects of subject matter knowledge and the teaching of subject matter and have used it differently across and even within subject areas (Ball, Thames & Phelps 2008). These researchers refer pedagogical content knowledge as specialized content knowledge. Shulman (1986) and his colleagues refer to it as the study of teacher knowledge in ways that attend to the role of content in teaching. In other words, pedagogical content knowledge is an integration of teacher understanding that combines content (subject matter), pedagogy (instructional methods), and learner characteristics.

Pedagogical content knowledge includes almost everything a teacher might know in teaching a particular topic, obscuring distinctions between teacher actions, reasoning, beliefs and knowledge. Teaching requires a special kind of content knowledge. Teaching involves showing students how to solve problems, answering students' questions and checking students' work—demands an understanding of the content of the school curriculum.

Teachers do various tasks to support the learning of the students. They include interactive work of teaching lessons in classroom together with all the tasks that arise in the course such as planning the lessons, evaluating students' work, writing and grading assessments. Teachers must know the subject they teach as the pedagogical content knowledge is immensely important to teaching.

Pedagogical Knowledge

Adediwura and Tayo (2007) highlighted three headings under which a study on teachers' knowledge of subject matter can be done. These are namely: knowledge of content, pedagogical content knowledge and general pedagogical knowledge. It is a statement of fact that nobody can teach what he does not understand. It has been established that there is high correlation between what teachers know and what they teach (Wilson et al., 1987). Thus, the ability to teach effectively depends on the teachers' knowledge, and knowledge occurs in a variety of forms. Teacher effectiveness is impeded if the teacher is unfamiliar with the body of knowledge taught and that teachers' effectiveness is subject specific. The implication of this for teachers is that they must thoroughly understand the content of what they teach. The

teacher whose understanding of topic is thorough use clearer language, their discourse is more connected, and they provide better explanation than those whose background is weaker.

Pedagogical content knowledge depends on an understanding of a particular topic and how to explain it in a way that it will make sense to the students. Pedagogical content knowledge implies, an understanding of ways of representing the subject that make it comprehensive to others and an understanding of what makes the learning of specific topics easy or difficult. Adediwura and Tayo (2007) declared that where pedagogical content knowledge is lacking “teachers commonly paraphrase information in learners’ textbooks or provide abstract explanations that are not meaningful to their students”. From evidences available in literatures it is being established why teachers’ knowledge of subject matter is highly essential for effective teaching. Ehindero (1990) confirmed that a teachers’ teaching is influenced by the level of his pedagogical knowledge, as different from his subject matter knowledge. It is to be noted that pedagogical knowledge are not exactly the same thing as knowledge of subject matter, they nevertheless are, intimately linked with it, because teachers’ mastery and use of them in the classroom will indicate the depth of their knowledge of subject matter.

Based on the analysis of the literature, it found that pedagogical knowledge is referred to the determination of learning outcomes, planning of teaching and learning steps and activities, preparing teaching aids/lab and mastery of content among teachers. The teachers should have pedagogical knowledge to be effective teachers.

A teacher's ability to prepare effective lessons and to respond perceptively and flexibly to the multitude of difficulties that pupils encounter with mathematics is dependent on their own depth of understanding of the topics involved and their own powers of mathematical thinking, as well as their more general pedagogical skills and understandings. Even in the context of a narrow examination defined curriculum, there is always the need to prepare students for longer term examination goals as well as the immediate goal. However, the aims of a mathematical education are much wider than helping pupils to pass examinations. Subject knowledge which embraces depth of understanding, an ability to think mathematically and subject related pedagogical knowledge, as well as content knowledge at an appropriate level, is vitally important to all who teach mathematics (French, 2005).

Pedagogical Skills

To promote order and learning in the classroom every teacher should possess essential pedagogical skills. No one can teach something to someone without doing it in some particular way, and that way of teaching has significant effects on the entire

teaching and learning situation. Adediwura and Tayo (2007) posit that teaching is a process of continuous personal development and professional self-discovery alongside an emerging understanding of the teaching and learning process.

If there is an art essential to good teaching, it is that of communication. It is very important because teaching cannot occur without the use of oral or sign language communication. It implies that teachers should monitor their own speech to ensure that their presentation is as clear and logical as possible. Eggen and Kauchack (2002) highlighted four aspects of effective communication that are highly essential for learning and motivation. They are precise terminology, connected discourse, transition signals and emphasis.

Skillful teachers summarize and link ideas together at the end of his lesson. Review summaries of previous work and help students link what has been learnt to what is coming. Closure is a form of review occurring at the end of a lesson; in it topics are summarized and interpreted. There are many teaching methods as there are teachers in the world. In teaching seven steps and the required pedagogical skills may be suggested for effective teaching as follows: Preparation for instruction (Organizational skills); Motivation (Communication skills); Presentation of the learning task (Focus skill); Inducement of the trial response (Feedback skill); Correction of the trial response (Questioning skill); Fixation of response (Closure skill); and Test response (Evaluation skill). Even though the enumerated pedagogical skills are interdependent, one is as effective alone as it is when combined with others. Eggen and Kauchak (2002) claimed that the interaction and integration of those pedagogical skills are crucial to teaching and learning.

Affective Attributes

Affective attributes could be defined as a consistent tendency to react in a particular way-often positively or negatively toward any matter. Affective attributes possesses both cognitive and emotional components. Fazio and Roskes (1994), said, “affective attributes are important to educational psychology because they strongly influence social thought, the way an individual thinks about and process social information”. According to Eggen and Kauchak (2001), positive teachers’ affective attributes are fundamental to effective teaching.

A teacher must be interesting. That is the teacher must work his students into such a state of interest in what the teacher is going to teach him that every other object of attention is banished from his mind. The teacher should also fill the students with devouring curiosity to know what the next steps in connection with the subject are. Eggen and Kauchak (2001) identified a number of teachers’ affective attributes that will facilitate a caring and supportive classroom environment. They are: enthusiasm,

caring, firm, democratic practices to promote students responsibility, use time for lesson effectively, have established efficient routines, and interact freely with students and providing motivation for them.

Research findings on teachers' affective attributes (Brunning et al., 1999), established the following facts: Teachers characteristics such as personal teaching efficacy, modelling and enthusiasm, caring and high expectation promote learners' motivation. High levels of learning may occur as well as learners feeling good about themselves and the material they are learning when teachers use instructional time efficiently. Learning takes place with ease and faster under teachers that are well organized.

According to the previous studies, the affective attributes can be categorized as a teacher character, enthusiasm, self-confidence and creativity in delivering content knowledge effectively. The teachers who have all this attributes can become an effective teacher in classrooms. Based on previous studies, all the qualities and characteristics of effective teachers discussed can be converged into three main dimensions of this study i.e. pedagogical knowledge, pedagogical skills and affective attributes.

Problem statement/ Research Question/ Research Objectives/ Research Scope

Problem Statement

The Teach For Malaysia training framework is distinct from other teacher training due to its unique focus on the underprivileged students. We recognize that for students in this context, who often come from extremely challenging circumstances, simply being an effective teacher is not sufficient – our teachers need to become agents of transformation.

This study is an attempt to portray a more comprehensive and holistic understanding among these TFM fellows regarding the characteristics of effective English language teachers. Investigating what characteristics are considered effective is beneficial to teachers in terms of understanding what their students expect from them (Koutsoulis, 2003). Moreover, these TFM fellows' perceptions of this matter have never been assessed or studied before. With these reasons in mind, the researchers would like to discover what an “effective teacher” truly is in their opinions in order to bring about improvements as mentioned above. Knowing the students' needs and trying to be accepted by them might help create an emotionally positive and academically productive atmosphere in the classroom.

The TFM training framework is distinct from other teacher training due to its unique focus on the underprivileged students. We recognize that for students in this context, who often come from extremely challenging circumstances, simply being an effective teacher is not sufficient – our teachers need to become agents of transformation. Hence such a study as the need to be carried out to establish issues and ways of overcoming the inherent problems among the TFM fellows.

Research Objectives

This study seeks to:

- i. Establish the pedagogical knowledge inherent among the TFM fellows.
- ii. Determine the levels of pedagogical skills among the TFM fellows.
- iii. Determine the affective attributes among the TFM fellows.
- iv. Establish whether there is a significant difference in the pedagogical knowledge, pedagogical skills and affective attributes between gender and between the two cohorts.

Research Questions

This study will solicit answers to the following questions:

- i. What are the levels of pedagogical knowledge inherent among the TFM fellows?
- ii. What are the levels of pedagogical skills among the TFM fellows?
- iii. What are the levels of affective attributes among the TFM fellows?
- iv. Is there a significant difference in pedagogical knowledge, Pedagogical skills and affective attributes between the male and female fellows?
- v. Is there a significant difference in pedagogical knowledge, pedagogical skills and affective attributes between the Cohort 1 and Cohort 2 fellows?

Significance of the Study

The purpose of this study is to identify and improve the three basic dimensions among the fellows, i.e. pedagogical knowledge, pedagogical skills and affective attributes. As such, it is hoped that this study would enlighten the TFM fellows as well all those concerned with the TFM programmes within and outside Malaysia of the strengths and weaknesses of the fellows in their mastery of these dimensions. Consequently, relevant steps and measures could be taken to improve the situation.

This study also hopes to facilitate the education providers with the necessary information and data on how to improve the TFM programme in terms of its curriculum etc. The main aim of lecturers and trainers, curriculum developers and all authorities concerned in designing and developing as well implementing the curriculum is to ensure that there is an adequate balance of relevant activities and exercises that would develop and enhance the knowledge, skills as well as affective attributes among the TFM fellows.

The next significance of the study is that hopefully the students in schools will benefit indirectly when the fellows are aware of the skills that they need to master or apply in their lessons. The knowledge and skills the fellows are exposed to would hopefully spur them on to try out and use various teaching approaches, techniques as well as activities, hence making their lessons interesting and more meaningful to the students in the classroom. As such, these school children would benefit from the fellows' increased knowledge and classroom management skills.

Last but not least, it is hoped that the policy makers would come into the picture as well in contributing to the success of the TFM programme. The findings of this study would hopefully serve as a guide to the curriculum designers and developers at the highest level in designing and developing the relevant and hence, the "best" curriculum for the TFM fellows.

Scope/Limitations of the Study

As mentioned earlier, this study only focused on Cohort 1 and Cohort 2 fellows, the reason being that they were the only 2 cohorts of the Malaysian TFM programme who had completed the whole 2-year duration of the TFM training programme at the time the study was conducted.

The research instrument used in this study was based on the pre-prepared teaching practice evaluation form. As such, the focus of this study is confined to only the three domains highlighted in the evaluation form, i.e. the pedagogical knowledge, pedagogical skills and the affective attributes domains.

The last limitation of this study to be noted is that this research is focused only on the classroom practices. As such, the focus is only on the activities and practices that the TFM fellows actually employed in their daily teaching situations.

Research Methodology

Research Design

This study utilised a quantitative method of investigation. A descriptive research methodology was used for this study. The major data of the study was gathered via the evaluation form employed during the teaching practice.

Participants

The research involved the first and second cohorts of the TFM fellows who attended all the courses in the PGDE programme offered by Universiti Utara Malaysia. The focus of this research is on establishing the characteristics of effective teachers and the respondents are two groups of TFM fellows who have undergone the 16-week teaching practice in the PGDE programme. All fellows from the two cohorts were involved as the subjects in this study. All in all, there were 47 fellows in the first cohort and 46 fellows in the second cohort, making a total of 93 respondents.

Instruments

To collect the quantitative data from the TFM fellows, a teaching practice evaluation form was used. This is a standardised form used by the School of Education and Modern Languages to evaluate all students undergoing the teaching practice. The form consists of three main dimensions i.e. pedagogical knowledge, pedagogical skills and affective attributes. The first dimension focuses on the teaching plan of the fellows, while the second focuses on the delivery of the lesson and classroom management. The third dimension focuses on teacher personality, and encompasses character, enthusiasm, self-confidence and creativity.

Results and Discussion of the Findings

Discussion of Data Analysis

Research question 1: What is the level of pedagogical knowledge among the TFM fellows?

Research question 1 solicits the level of pedagogical knowledge among the TFM fellows through nine items in three subscales. Overall, the mean for this dimension is 4.11 (s. d. = 0.428). Table 4.2 shows the means and the standard deviations. The mean for subscale learning outcomes is 4.10 (SD = 0.369), subscale steps & activities 4.10 (SD), and subscale teaching materials 4.14 (SD). The highest mean in the knowledge dimension is 4.44 for item on the mastery of contents, whereas the item on the design of teaching materials has the lowest mean of 3.77.

Table 4.1

Means for Subscales

Subscale	Mean	SD
Learning outcomes	4.10	0.369
Steps & activities	4.10	0.476
Teaching material	4.14	0.588

Research Question 2: What is the Level of Pedagogical Skills among the TFM fellows?

Besides pedagogical knowledge, pedagogical skills were also solicited from the fellows using 15 items in six subscales. The overall mean for this dimension is 4.10 (s. d. = 0.369). The means for subscales were as follows: set induction (3.95), organization of teaching - method & techniques (4.10), interaction (4.15), development & assessment (4.18), classroom management (4.30) and closing (3.79).

Research question 3: What is the level of affective attributes among the TFM fellows?

Four items representing the affective dimension solicit the personality traits pertinent to teaching profession of the fellows. The overall mean for this dimension is 4.65 (s. d. = 0.337). The lowest mean is 4.36 and the highest is 4.80. They are the overall level of the fellow's pedagogical knowledge, pedagogical skills and affective attributes.

The overall mean for the three dimensions combined is 4.17 (SD = 0.335). The means for the pedagogical knowledge, pedagogical skills and affective dimensions are 4.11, 4.10 and 4.65 respectively.

Discussion of the Findings

The data gathered shows that the overall mean for the pedagogical knowledge among the TFM fellows is 4.11 (s. d. = 0.428). Based on the table above, the fellows' pedagogical knowledge is found to be high. This could be attributed to the training provided prior to their placement in school as well as the training from the PGDE program. The conclusion that can be made is that in planning the lessons, the fellows paid attention to the four subscales under this dimension namely learning outcomes, steps and activities, and teaching materials.

For the learning outcomes subscale, the fellows ensure that they are clearly written and they are suitable and achievable. As for the second subscale, the steps and activities planned by the fellows are suitable and accurate. The lessons are well developed in line with the learning outcomes. The contents are well distributed throughout the lesson and fit/commensurate with the time frame of the class. The last subscale, teaching materials, are found to be suitable to the lessons and reflects the

fellows' mastery of the content. However, in terms of design, the teaching materials were found to only fit into the medium level of pedagogical knowledge.

The above findings of this study seem to be in line with those of a study entitled "The Qualities of the Good English Teacher as Perceived by Saudi and Yemeni College Students of English" (Al-Maqtri & Thabet, 2013). In this study, it is interesting to note that top on the list of 10 qualities of a good English teacher is not about English language proficiency but rather the pedagogical knowledge aspect.

However, the findings of Baleghizadeh and Mozaheb's (2011) study varied from those above. They concluded that using authentic materials is a good source for motivating students. Based on their observation, it was found that students were all eager to see what their teacher brings to class as teaching materials. There were also some students who like to prepare the required materials for teaching based on their own interests.

A study by Choy et al. showed that overall perceptions of beginning teachers' pedagogical knowledge in teaching increased gradually as they continued teaching. When they completed the pre-service teacher education programme, the overall average was 3.73. It increased to 3.76 at the end of the first year of teaching and further increased to 3.90 at the end of third year (Choy, et al., 2013).

The results showed that the beginning teachers' pedagogical knowledge in teaching increased significantly in all three teaching related factors from the end of the teacher education programme to the end of their third year of teaching (Choy, et al., 2013).

The second research question, which addresses the pedagogical skills dimension, involves the following six subscales: set induction, organization of teaching (method & techniques), interaction, development & assessment, classroom management, and closing. Four subscales were found to be in the high levels in the pedagogical skills while two was in the medium level.

For the first subscale organization of teaching, the methods and techniques utilised by the fellows in the lessons were found to be suitable and effective. There were also variety of methods and techniques used throughout the lessons. Regarding the second subscale, interaction, three subscales belonged to the high level while the other three were in the medium level. Fellows were found to use proper language, encouraged high students' participation and possess good voice control during their classes. For the third subscale, i. e. the development of the lesson and assessment, the fellows were found to practice good organization of contents and effective monitoring of students' understanding. For classroom management, which is the fourth subscale, the fellows were found to practice good class control and made good class arrangement to suit the respective lessons.

It should be noted that for the first and last subscale, i.e. set induction and closing, the fellows demonstrated only mediocre level. This is quite unexpected because the fellows were exposed to the theories and underwent numerous practical sessions during their Microteaching course. For set induction, the fellows failed to employ suitable and interesting techniques of introducing the lessons to the students. As for the closure, both the cognitive closing and social closing recorded medium levels.

In the study by Al-Maqtri and Thabet (2013), a majority of the respondents agreed that one of the qualities of a good teacher is having a vast amount of knowledge about various teaching methods and techniques. These may include problem solving activities, information-gap exercises, games, songs, jazz chants etc. Similarly, Baleghizadeh and Mozaheb (2011) concluded in their study that the teacher should use various methods and teaching techniques for maximum student participation in class. Among them are pair work or small group activities, role play etc. Their findings seem to be in line with those of this study, i.e. the methods and teaching techniques are important elements of an effective lesson.

The beginning teachers in Choy et al.'s study (2013) showed an increase in the overall skills in teaching during the first three years of their service. Their average score in skills was at 3.53 at the end of the preservice teacher education programme. Then, it gradually increased to 3.65 and 3.84 at the end of first year and third year of teaching respectively.

The affective dimension focuses on the character of the fellows. Overall, the findings of all the four character traits namely personality, enthusiasm, self-confidence and creativity recorded high mean scores; thus, placing them in the high level.

A research by Miller (1987) produced findings almost similar to this study. It was found that most of the students expressed his/her wish for a teacher who has positive personality, particularly encouraging and patient, and one who will not give up on them. Some of them believed that when the teacher is positive and continuously encouraging students' participation, then the students will apply themselves more diligently. Meanwhile, a few of the respondents expressed their preference for a teacher who is creative. They feel that teaching should be more than just opening a textbook/workbook, doing exercises and following an outline written by someone else. A good teacher should be creative and engage the students' minds by employing a myriad of techniques which would allow the students to use the skills acquired in previous lessons.

In Al-Maqtri and Thabet's study (2013), it was found that most of the Yemeni students were very conscious about the teacher personality and behavior. Amongst the

socio-affective traits the students stressed on was punctuality, patience, relaxed, good tempered, encouraging and respectful. Meanwhile, the Saudi students focused more on the teachers' personality rather than proficiency in the English language. Among the traits they look for are patience, honesty, fairness, impartial, caring, loving and helpful.

Conclusion

The chapter has presented all the findings based on the five research questions of the study. Overall the levels of pedagogical knowledge, pedagogical skills and affective attributes were found to be generally high among the fellows.

All in all, it could be concluded that the study shows that pedagogical knowledge, pedagogical skills and affective attributes play an importance role in producing an effective teacher in the classroom. So, all the TFM fellows should have higher levels of pedagogical knowledge, pedagogical skills and affective attributes to be effective 21st century teachers, which can consequently ensure effective teaching and learning process in the classroom.

Besides that, the findings of this study also indicate that the TFM fellows should be exposed to new strategies or ways to improve their pedagogical knowledge, pedagogical skills and affective attributes. This is because an increase in the pedagogical knowledge, pedagogical skills and affective attributes can help the Ministry of Education to make sure that all the teachers in schools become effective teachers.

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