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ABSTRACT: Various teacher development programs have been conducted in order to improve teachers’ competences. Yet, many of the programs fail to improve teaching quality that has been regarded as the most crucial elements for teachers. One of the reasons is the failure to address individual needs of teachers. Therefore, this paper aims to propose individually-tailored teacher development program based on difficulty level analysis of teaching skills included in the Dynamic Model of Educational Effectiveness Research. The individual teaching skills in the Dynamic Model represent eight factors of teaching quality i.e. orientation, structuring, modeling, application, questioning, creating classroom as a learning environment, assessment, and time management. These factors are developed based on previous teacher effectiveness research, which concerns teacher behavior that leads to better student outcomes. In this paper, classroom observation was conducted to 59 English teachers in DKI Jakarta and Banten to gather the data of teaching quality. The Rasch model was used to examine the difficulty level of each teaching skills. The findings revealed that teaching skills belong to orientation, CLE, modeling, and application were difficult for teachers. On the other hand, teaching skills belong to questioning, structuring, and assessment were relatively easier. These findings offer two important implications. Firstly, teacher development program should pay attention to the four difficult factors. Secondly, it is important to base TPDs on teaching skills individual teachers have mastered and those they need to improve so that TPDs meet the needs of individual teachers and hence individually-tailored teacher development programs could be promoted.

1 INTRODUCTION

Studies across different countries have consistently found that teacher is the most influential factor (e.g. Harris & Muijs, 2005; Marzano, 2007; Van der Werf, Creemers, De Jong, & Klaver, 2000). Therefore, the government in many countries including in Indonesia has prioritized various Teacher Development Programs (TPDs) to improve the quality of education. Some examples of TPD in Indonesia as the context of the study are in-service teacher training [INSET], the Islamic Schools English Language Program [ISELP], and the Madrasah Education Development Program [MEDP] (ADB, 2006; Hendayana, 2007; Jazadi, 2003).

Nevertheless, these TPDs have been considered not to be successful in improving teachers’ teaching quality. Some possible causes include large classroom size, heavy teaching loads, insufficient preparation time for the teachers, noisy classrooms due to a lack of soundproofing and equipment shortages (Hendayana, 2007; Thair & Treagust, 2003). Other reasons are the absence of links between TPDs and student outcomes and of teachers’ ownership of the programs (Nielsen, 2003). Hence, it is not surprising to see that the teaching quality of many teachers, especially in Indonesia are not yet satisfactory (Kaluge, Setiasih, & Tjahjono, 2004; Ree, Al-Samarrai, & Iskandar, S., 2012; Utomo, 2005).

Thus, it is urgent to look for better strategies not only to improve the quality of teachers but also to address the problems found in the previous teacher development programs. This paper offers the results of educational effectiveness research particularly Teacher Effectiveness Research (TER), which deals with various factors at the teacher level found to be related to better student outcome. TER could provide a relevant basis to decide what to do when we want to improve the quality of teachers.

The findings of TER have revealed that compared to other factors in teachers such as teachers’ subject knowledge and length of experience, the actions of teachers in the classroom, which are often referred to as teacher instructional roles or teachers’ teaching quality, are found to play bigger role (Creemers, 1994; Creemers & Kyriakides, 2008; Muijs & Reynolds, 2010). Furthermore, in order to contribute to the development of TER, Creemers (1994) developed a model of effective classroom, which was further developed into a dynamic model of educational effectiveness (Creemers & Kyriades,
This dynamic model has four levels, i.e. context/national policy, school, teacher/classroom, and student. The model emphasizes the importance of the classroom factors especially on the behavior of teachers in promoting learning and expects the context and school levels to provide necessary conditions for the effectiveness of the classroom level.

The classroom level consists of eight factors: 1) orientation, 2) structuring, 3) questioning, 4) teaching modeling, 5) application, 6) management of time, 7) the classroom as a learning environment (CLE), and 8) classroom assessment. ‘Orientation’ concerns the explanation of the objectives, which is expected to help the students understand the importance of their learning activities. ‘Structuring’ refers to the explanation of the distribution of the series of activities of the lesson. ‘Questioning’ entails the attempt to categorize the questions in terms of difficulty level and type (product and process) and the reaction to the students’ responses. ‘Modeling’ includes the provision of strategies of learning or the encouragement of students to develop their own. ‘Application’ relates to the immediate practice of the topics taught during the lesson. ‘Management of time’ requires the teacher to organize his/her lesson in such a way that the students’ attention spans are maximized and that they are engaged in tasks throughout the lesson. ‘CLE’ includes the following components: 1) teacher-student interaction, 2) student-student interaction, 3) students’ treatment by the teachers, 4) competition among the students, and 5) classroom disorder. Finally, effective teachers collect information on their students’ knowledge and skills to identify their learning needs.

Several studies have been conducted to test the validity of the dynamic model (Antoniou, Demetriou & Kyriakides, 2006; Antoniou, 2009). The study of Antoniou also reveals that teaching quality represented in the classroom factors of the dynamic model could be divided into five stages, ranging from easier to more difficult skills. This finding is extremely useful for the development of teacher training programs. When teachers are found to be at level one, they can focus their improvement efforts to master the skills in level two. In other words, depending on current teachers’ teaching quality, different teachers may have a different focus of improvement.

Therefore, this paper is intended to investigate the difficulty level of numerous teaching skills included in the classroom factors of the Dynamic Model. This study is expected to be a significant endeavor in designing teacher professional development programs that address individual needs of the teacher in accordance to what they have achieved and what they need to achieve. In this way, the development of individually-tailored TPDs could be promoted.

2 RESEARCH METHODS

This research used a quantitative approach, in which a structured observation instrument was used to gather teachers’ teaching quality. 59 (44% M, 56% F) English teachers of Islamic Junior High Schools from DKI Jakarta (45%) and Banten (55%) voluntarily participated in the study. The focus was on the teaching of reading comprehension. The observation instrument represented the eight classroom factors of the dynamic model and consisted of 52 teaching skills. In this study, time management and CLE were combined since both concern maximum engagement of students. It was modified from original high inference observation instrument of the dynamic model and arranged in 1–5 Likert Scale. Five trained observers conducted the observation and the inter-rater reliability was good (Generalized Kappa = .72). In answering the research questions, the Rasch model (Andrich, 1988) was used to analyze the data to identify the difficulty level of each observed activity.

3 RESULTS AND DISCUSSION

The findings presented in this papers focus on the difficulty level of the teaching skills included in the classroom factors of the Dynamic Model as described in Figure 1.

The left side of Figure 1 shows teachers, whereas the right side represents teaching skills in the research instruments according to the classroom factors of the Dynamic Model. Zero (0) of the left side indicates the average score, which for the case of teachers (symbolized by X) means that those who are below zero are those who do not perform well while for the case of teaching skills, those
which are below zero are those which are very easy to be performed.

In other words, Figure 1 provides important information that the higher the position on the left side, the better the teaching quality of teachers is and vice versa. Regarding the teaching skill on the right side, the higher the position, the more difficult the teaching skill is. Furthermore, the teacher graph on the left side clearly illustrates that many respondents or teachers are below 0 representing the average, while the item graph on the right side illustrates that there are many items above 0. The findings mean that the teaching quality of the participants was low whereas many of the teaching skills were difficult for the participants since many of them did not perform the required skills.

These findings are not surprising since previous studies reveal similar results. As previously mentioned, Kaluge et al., (2004) find that Indonesian teachers, in general, are not yet able to deliver effective and joyful teaching and learning processes. In general, the dominant characteristic of Indonesian classrooms is a whole-class style of teaching where individual learners’ needs are not sufficiently addressed and students’ ideas, opinions and conceptions about their world are not fully recognized (Utomo, 2005). Furthermore, the current certification program launched by the Indonesian government has not yet improved the teaching quality and the student outcome (Ree, Al-Samarrai, & Iskandar, S., 2012). In 2012, the results of the teacher competence test showed that the national average score of teachers teaching at various levels of schooling was approximately 40–60 (out of 100) (Suharto, 2012). To add more, many teachers are also found to take a safer approach to teaching the test to prepare the national exam (Hendayana, 2007).

Furthermore, the next interesting question is which factors are easier and which ones are more difficult. As described in Figure 1, among the factors, application, CLE, modeling, and orientation are more difficult factors because many of the items in these factors were located above 0. Orientation focuses on teachers’ effort to explain the importance of learning certain topics and skills by connecting the lesson with daily life and/or the previous lesson. Knowing the importance of the materials presented, students are expected to be more motivated considering that what they learn is related to themselves and beneficial to their lives. Unfortunately, many items in this factor were above 0, which happened because teachers did not connect students’ learning and students’ daily lives. This finding supports Utomo (2005), who observes that most teachers only cover one topic in their lessons and no links are made to previous lessons, daily life situations or other subject domains.

Likewise, modeling, which is the provision of learning strategies and for the context of reading should happen during reading activities, was also a difficult factor. This finding is not surprising either since an old study conducted by Cooper (1986) reported that the emphasis in reading comprehension class was much more on before reading and after reading, but not during reading. Modeling concerns teachers’ effort to provide learning strategies to enable students to do exercises provided by teachers in the classroom and to learn on their own outside the classroom. Furthermore, modeling is also expected to facilitate students to be self-regulated learners who are ready to learn both inside and outside the class, with and without teacher assistance. Unfortunately, as seen in Figure 1, more modeling items were above logit 0 which means that modeling is not an easy factor to implement by teachers.

The next two difficult factors were application and CLE. Most teachers provided exercises for students in the application stage, but were limited to answering questions provided in the textbooks. Concerning CLE, no grouping and collaboration were introduced, which are in line with the study of Utomo (2005), which reveals that the dominant teaching style is whole-class style.

The remaining three factors, i.e. structuring, questioning, and assessment was considerably easier for teachers since many of the items were below logit 0. These findings indicate that the items were easy as many participants practiced the skills. With respect to structuring, most teachers explicitly explained the topic to the students, yet they did not explain the series of activities during the lesson nor the link among different activities. Concerning questioning, a lot of teachers have engaged their students in the teaching-learning process by posing questions. Through these questions, teachers also ensured whether students understood the materials. However, the questions were limited to product questions while critical questions were not sufficiently raised. For the case of reading, product questions refer to those which answers are explicitly found in the text whereas process questions require students to think beyond the printed information in the text. Finally, questioning was the only technique used to make sure if students understood the materials.

4 CONCLUSIONS

In summary, this study aimed at investigating the difficulty level of numerous teaching skills included in the classroom factors of the Dynamic Model, the findings of which are expected to serve a basis to design individually-tailored teacher development
program. Using the Rasch model, the study shows that many teaching skills included in the classroom factor of the Dynamic Model were difficult for teachers since there were more items above logit 0. Consequently, the teaching quality of participating teachers was low. Furthermore, concerning the factors, the analysis yields that among the factors, orientation, modeling, application, and CLE were more difficult factors whereas structuring, questioning, and assessment were considerably easier. The findings of this study imply three important aspects. Firstly, it should be noted that that in general teachers have difficulties in four factors and therefore further studies should perform further analysis to investigate if the teaching skills could be divided into different stages by incorporating cluster analysis.

REFERENCES


