A Study on Evaluating the Pedagogical Knowledge of School Teachers

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Abstract

Education plays an important role in a society. Each and every country around the globe has its own education system to educate their own society. In this way, Malaysia has its own education system. Here, students undergo education in different stages such as, kindergarten (pre-school), primary school (elementary), secondary school (high), and college or university. Of these, kindergarten, primary and secondary educations are in schools. School education is basic for a child. Hence, teacher role is very essential in teaching and learning process. Sultan Idris Education University is No.1 Education University which produces a lot of teachers and are been posted as teachers in various parts of the country. Thus posted teachers teach in secondary schools in Malaysia. The main objective of this study is to evaluate the pedagogy knowledge of the secondary school teachers using testing and evaluation theory. The study is limited to the Perak state teachers of Malaysia. The researcher has used the descriptive research method for this study. Questionnaire is prepared according to the essential pedagogical knowledge for the teachers based on testing and evaluation theory. The data are collected through observing the classroom teaching of the teachers. The findings of the study are described in this article.

Keywords: Education, Pedagogy, Teacher, Testing & Evaluation

1. Introduction

Education plays an important role in a society. Education process has two important aspects such as teaching and learning. Of these, learning takes place in classrooms and in other places too. Learning includes acquiring new knowledge, receiving language skills, attainment of socio-cultural values and beliefs, and obtaining wisdom of discipline. Various approaches and methods are used in learning like group discussion, individual learning, etc. Teaching mostly goes with classroom lectures because it takes place in a classroom situation. Malaysia is one of the countries in the world which has systematic and good education system. In Malaysian context, students undergo education in different stages such as, kindergarten (pre-school), primary school (elementary), secondary school (high), and college or university. Of these, kindergarten, primary and secondary educations are in schools. In schools, teachers play a vital role. Teachers provide subject knowledge and discipline to the students. The teachers in schools are with good academic record. Various Teacher training institutions and Sultan Idris Education University, which is No-1 Education University are providing teaching subject knowledge and producing school teachers. Sultan Idris Education University is the only university in Malaysia which offers B.Ed degree and produces school teachers in all the subjects.
2. Objectives of the Study

The result or achievement of a research is based upon the objectives. If the objectives are appropriately told, then the research will become a successful one. This study is based upon two objectives and they are:

- To evaluate the pedagogy knowledge in the classroom of the secondary school teachers using Testing & Evaluation theory.
- To provide suggestions to the secondary schools to improve their teaching abilities.

3. Limitation of the Study

This study is limited to Perak state of Malaysia and four secondary schools of Perak state due to the time constraint. Moreover, from the testing & evaluation theory only pedagogical knowledge is taken for this study. And the pedagogical knowledge is based upon classroom observation using appropriate questionnaire.

4. Methodology of the Study

Descriptive research method is used for this study. This method is of 3 main types such as observational method, case-study method and survey method. For this study, observational method is used. Walliman, Nicholas (2011) says, ‘Observation can take many forms’. It can be through interviews, questionnaires distribution, visual records, etc. Through observational method, data can be written down or recorded (Walliman, Nicholas, 2011).

Questionnaire was used as a research tool for this study. It plays an important role in a descriptive research while collecting data. The questionnaire contains a set of questions which were used to collect information from the respondents. The set of questions found in a questionnaire is termed as items or elements. A well-structured questionnaire was prepared using the features mentioned in the theory of testing and evaluation.

5. Theory

Testing and Evaluation theory proposed by Subbiah, Pon (2008) was used for this study. This is an assessment theory of education. Evaluation has its own long tradition in education. Generally, evaluation is done in a systematic way with education based methods, and finally recommends for an improvement or provides suggestion. In this study, evaluation will be applied in the education. Evaluation in education determines the quality of the education system which includes teaching, learning and management. Stake, R.E. & Schwandt, Thomas (2006) has defined evaluation as, to determine the quality of a program or system by formulating a judgement. All the systems in a particular field should undergo a process called evaluation. This evaluation theory was applied in this study. With this theory, the researcher identified the teacher's role in the secondary schools. There are many features in testing and evaluation and for this study only three features which are essential for a teacher was implemented. The three features are:

1. Evaluating language skills includes listening, speaking, reading and writing.
2. Proficiency Test includes teacher's readiness for a communication, language ability and eagerness towards work.
3. Pedagogy test includes pedagogy knowledge.

The items in the questionnaire were included with all the three features which are essential for a teacher in the classroom.

6. Data Collection

Observational method was used for observing the secondary schools teachers' classroom teaching style. Four teachers who are posted in Perak state were selected for observation whom previously did their Bachelor of Education degree in Sultan Idris Education University. Their schools are
located in the places such as Sg. Siput, Hutan Melintang, Bagan Serai and Chemor of Perak state, Malaysia. The names of the schools and teachers have been withheld to protect identities. These schools are having high results in their secondary education. The teachers of these schools were observed in their classrooms by observational method. Through observing them in their classrooms, the researcher and co-researchers evaluated the teachers' pedagogy knowledge according to the testing and evaluation theory in-order to fulfill the objectives of this study. The prepared questionnaire was used to collect data in the classroom. It was already mentioned by Allwright, D. and Bailey, K.M. (1991) about the classroom condition as, what and how learners learn, what teachers actually do, what kind of events take place should be researched.

7. Analysis

The analysis of the data depends upon the type of the study (Kumar, Ranjit, 2011). This study is based upon the descriptive method of research. Data were collected from the classrooms of the teachers by observational method using a prompt questionnaire based on the evaluation theory. Primary data gathered using questionnaire is raw and it's difficult to understand easily. Hence, there is a need to analyze the data systematically. The collected data were analyzed using Microsoft Excel, MS Office software. Graphs are prepared using this software.

8. Findings & Discussions

Based on the two objectives of this study such as, to evaluate the pedagogy knowledge in the classroom of the secondary school teachers using Testing & Evaluation theory and to provide suggestions to the secondary schools to improve their teaching abilities, data have been collected from the four teachers from Perak State of Malaysia. The findings of the study are given here in detail:

Questionnaire consists of a total of 20 items. Of these, three types of items were framed such as, yes or no, tick the correct one and explanation. There are 14 yes or no question items, 3 tick the correct answer and 3 explanation question items. All the answers collected through the questionnaire were analysed and the details are given below:

8.1 Yes or No questions

8.1.1 Item-1: Was the teacher active in the class?

When the classroom teaching was observed, the researcher and the co-researchers found that the all the teachers selected for the study were active in the class. Lowman (1984) says that the teacher who is active attempts to involve students in the learning process more effectively. According to the data collected through the observational method from all the teachers, the result is YES for item-1. The following figure shows the exact picture of the item-1.
8.1.2 Item-2: Was the teacher interactive in the class?

All the teachers are interactive in the class. The result of item-2 is YES. The figure shown below shows the result of item-2.

8.1.3 Item-3: Was the teacher using any teaching aids in the class?

Except one teacher, all the teachers used teaching aid in the classroom during their teaching. The result of item-3 is partially YES and NO. The figure shown below displays the result of item-3.

8.1.4 Item-4: Did the teacher use white board while teaching?

All the teachers except one used white board while teaching in the classroom. The result of item-4 is of both YES and NO. The following figure shows the result of item-4.
8.1.5 Item-5: Did the teacher provide freedom to think among the students in the class?

When item-5 was observed in the class, all the teachers provided freedom for the students to think. The result of item-5 is YES. The figure given below shows the result of item-5.

![Item-5 Graph]

8.1.6 Item-6: Did the teacher advice the students to learn further?

Item-6 has mixed response from the classroom observers. Two teachers advised the students to learn further and the remaining teachers didn’t advise while teaching in their classroom. The result of item-6 is of both YES and NO. The following figure shows the result of item-6.

![Item-6 Graph]

8.1.7 Item-7: Did the teacher use any technique to teach new points in the class?

Two teachers used a technique to teach new points and the remaining teachers didn’t use technique while teaching in their classroom. The result of item-7 is mixed of both YES and NO. The figure given below shows the result of item-7.

![Item-7 Graph]
8.1.8 Item-8: Did the teacher ask questions to the students?

All the teachers asked questions to the students in the classroom. The result of item-8 is YES. The figure given below shows the result of item-8.

8.1.9 Item-9: Did the teacher provide opportunity to the students to speak/answer?

For item-9, all the teachers provided opportunity to the students to speak/answer in the classroom. The result of item-9 is YES. The following figure shows the result of item-9.

8.1.10 Item-10: Did the teacher listen to the speech/answer of the student?

All the teachers listened to the answer of the students while teaching in the classroom. Item-10 has the result YES. The following figure shows the result of item-10.
8.1.11  **Item-11: Did the teacher agree with the student?**

For item-11, all the teachers agreed with the students in the classroom. The result of item-11 is YES. The figure given below shows the result of item-11.

![Item-11](image)

8.1.12  **Item-12: Did the teacher provide any innovative ideas in the classroom?**

Only one teacher provided innovative ideas and the remaining teachers didn’t provide any innovative ideas in the classroom while teaching. The result of item-12 is mixed of both YES and NO. The figure given below shows the result of item-12.

![Item-12](image)

8.1.13  **Item-13: Did the teacher complete the portions (daily lesson) on time?**

All the teachers except one completed the daily lesson in the classroom. The result of item-13 is mixed of YES and NO. The following figure shows the result of item-13.

![Item-13](image)
8.1.14 Item-14: Did the teacher give a clue about the topic for the next class?

No teachers gave a clue about the topic for the next class when observed them while teaching in the classroom. The result of item-14 is NO. The following figure shows the result of item-14.

![Item-14](image_url)

8.2 Tick the correct one

A total of three questions were asked to tick according to the teacher’s pedagogical knowledge and language skills during the classroom observation. The questions have 3 optional answers and the classroom observers (researcher and the co-researchers) were asked to tick the correct answer. These questions are the continuation of the Yes or No questions.

**Item-1**: If YES, for what purpose? To write topic / to explain / to draw diagram/others.

Item-1 is the continuation of the Yes or No question mentioned in item-4 (8.1) for using whiteboard while teaching. During the classroom observation, three teachers used whiteboard for different purposes such as, ‘to write topic’, ‘to explain’ and ‘to draw diagram’.

**Item-2**: If YES, what technique? Story telling/Moral/Song/Poem/others.

This item is the continuation of the item-7 in Yes or No question, for using any technique to teach new points in the classroom. Two teachers used technique to teach new points in the class and they are ‘moral’ and ‘role play’.

**Item-3**: If YES, when did he/she ask? In the beginning/in-between/end of the class.

Item-3 is also the continuation of the Yes or No question mentioned in item-8 for asking questions to the students while teaching. All the teachers asked questions ‘in-between’ of their classroom teaching.

8.3 Explanation questions

There are 3 items based on the explanation in which the researcher and co-researchers have to explain or write in the questionnaire. These explanation questions are based on the Yes or No questions mentioned in 8.1. The details are given here.

**Item-1**: If YES. What is the teaching aid used?

Item-1 is based on the Yes or No question mentioned in item-3 about the usage of teaching aids in the classroom. Three teachers used teaching aids in the classroom such as ‘laptop’, ‘smartphone’ and ‘textbook’ while teaching.

**Item-2**: If NO, what explanation did the teacher provide?

This item is based on the Yes or No question mentioned in item-11 as ‘Did the teacher agree with the student?’ Since all the teachers agreed with the students replies, no explanations were provided by the classroom observers.

**Item-3**: Comments about the teaching.

Over all comments were given in this item. Only one classroom teaching observer (researcher) commented as, ‘The teacher should smile in the class.’
9. Suggestions

There are some suggestions provided by the researcher to improve their classroom teaching.

- Teachers should use whiteboard in the classroom to draw diagrams and teach the poetry.
- Teachers must use whiteboard while teaching pronunciation of alphabets and vocabularies.
- Teacher can start the class with a small story or incident or a quote in order to attract the students and also to keep them attentive in the classroom.
- Teachers should provide opportunity for the students to ask questions and clear their doubts.
- Teachers should use new techniques in their teaching to attract the students.

10. Conclusion

Teachers play a vital role in producing knowledgeable and disciplined students to the society. This study is based upon the secondary school teachers in Perak state. Data were collected from the teachers who were the former students of Sultan Idris Education University, Malaysia. Moreover, a questionnaire was set according to the testing and evaluation theory. Through the data analysis, the study reveals that the teachers produced from Sultan Idris Education University, Malaysia has good pedagogical knowledge and sufficient language skills. The researcher didn’t find any issues in communicating the ideas of the teachers to the students in the classroom. Moreover, the study reveals that, the teachers have more essential qualities mentioned in the testing and evaluation theory to be a good teacher in schools. Through observation in the classroom, the interaction between students and teacher were found and it created a healthy atmosphere among them and also created enthusiasm. And some students were quiet even when questions were asked and this may be common among school students, but special care can be taken in order to improve their communicative skills. If more studies in depth are done, the teachers will be boosted with knowledge and the students will be benefited out of it.

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References


