

THE EFFECTS OF LECTURERS' LEADERSHIP ON PRE-SERVICE TEACHERS' (PST) PERCEPTION OF MATHEMATICS AS AN ELECTIVE SUBJECT

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Abstract—This research was conducted to identify the effects of lecturers' leadership towards on Pre-Service Teachers' (PST) perception on Mathematics as an elective subject. The respondents for this research were seven Pre-Service Teachers (PST) who chose Mathematics as their elective subject. The researchers used quantitative method by using questionnaires as an instrument for this research. Collected data were analysed using the SPSS V21.0. The result of questionnaires showed that the Pre-Service Teachers (PST) had a high perception (mean=4.57) that their lecturers had delivered clearly content knowledge. In conclusion, the lecturers' leadership played an important role in influencing the Pre-Service Teachers (PST) perception of Mathematics as an elective subject.

Keywords—perception, leadership, Mathematics

1. INTRODUCTION

Indeed, the experience of learning Mathematics is usually different from other subjects. If students have an enjoyable learning mathematics experience at school, consequently the subject will be more easily to be mastered and specific skills will be developed. This statement was also supported by Azizi et al. [1] in his study entitled "Emotional Intelligence Relationship with Academic Achievement." This study has

shown that there are 77.5 percent of the respondents who have achieved average emotions compared with only 22.5 percent of high emotion towards mathematics. However positive attitude is still shown by them in the learning of mathematics. They found a correlation between students' attitudes towards learning in the classroom has an important role not only as an object of teaching but also has the effect of learning itself. In other words, students' attitude is an important factor for assessing student achievement.

Based on the experience of teaching mathematics, students' attitude and responses are varied depending on leadership of a lecturer. Lecturers' leadership in conducting teaching and learning will affect teachers in their elective subjects. According to Amir Hassan Dawi [2], leadership is a complex activity in various forms of interaction between lecturer and teacher. Leadership is a process of influencing individuals or groups to achieve the objectives that have been set. Lecturer's leadership is also a process of improvement for the arrangement and the smoothness of teaching and learning process. Lecturer's leadership is important to manage the process of education global changes.

Attitudes reflect our personality. That is what we often hear when talking about attitude. Is the above statement true? Can attitude be shown through behaviour? The attitude of a person, object or idea can affect an individual's behaviour. Affective component includes individual positive and negative emotions towards something which is how a person's feelings against him. Behavioural component consists of inclination or intended to act on specific behaviours associated with our attitudes. While the component of cognition refers to beliefs and thoughts held by a person against an object. These three components are interconnected in this manner and then function in the formation and stabilization of individual perceptions. Attitude will shape the student's perception.

Perception is something internal and difficult to understand. It is in inner self and not all attitudes can be expressed explicitly in the reality of life. That attitude often leaves people wondering and looking. Through perception, humans can learn a variety of new skills to enhance self-esteem. That is the real attitude that should be in every human being. Many studies have been done to look at the factors that affect the learning and achievement of students in schools. Among the factors that can be detected, and noteworthy is closely linked to the students' attitude or perception of a subject being studied.

II. METHODOLOGY

This study is to see the effect lecturers' leadership towards on Pre-Service Teachers' (PST) perception on Mathematics as an elective subject. The attitudes will be viewed from the aspect of commitment to the elective of Mathematics students' involvement, feelings of emotional aspects in which students either 'favourable' or 'not favourable' towards mathematics and visionary aspects of the students' initiative is or is not against mathematics. These three aspects are then linked with their mathematics achievement for getting answers to the relationship between the variables concerned. This study finally obtained to see the effect of lecturers' leadership towards on Pre-Service Teachers' (PST) perception on Mathematics as an elective subject.

This study is a survey, where questionnaires are used to find out students' perception of some aspects of their learning process. These aspects will be seen in terms of interest and perception of Pre-Service Teachers (PST) towards Mathematics as an elective option.

Guided by the results of the survey among Pre-Service Teachers (PST), in second semester of 2015 (June 2015 Intake), only seven students chose Mathematics as an elective subject. They consisted of one male and six female students from three different options of PSV, PKP / PKB and RBT. Distribution of students is shown in Table 1;

TABLE 1

Optional	Respondent	Gender	No. of Students
PSV	Respondent 5 (R5) – PSV	Female	2
	Respondent 6 (R6) – PSV	Female	
PKP/PKB	Respondent 1 (R1) - PKP	Female	3
	Respondent 2 (R2) – PKP	Female	
	Respondent 7 (R7) – PKB	Male	
RBT	Respondent 3 (R3) – RBT	Female	2
	Respondent 4 (R4) – RBT	Female	
Total of Pre-Service Teachers (PST)			7

III. PROBLEM STATEMENT

Mathematics is often attributed as one of the subjects that is difficult to some students who are not particularly interested in learning mathematics. However the process of teaching and learning of mathematics by teachers often change the perception of students towards the subject. The same goes for the perception of the students at the Institute of Teacher Education, especially in IPG Kampus Tun Hussein Onn towards Mathematics an elective subject. Therefore, this study was carried out to investigate whether the lecturers' leadership affects the Pre-Service Teachers' (PST) perception on Mathematics as an elective subject.

IV. OBJECTIVES OF THE STUDY

The objectives of the study to be undertaken are:

1. Knowing the students' perceptions of Mathematics.
2. Knowing whether lecturer's leadership affect students' perception on Mathematics as an elective subject.

V. SIGNIFICANCE OF RESEARCH

This study aims to determine whether the lecturers' leadership affect students' perception on Mathematics as an elective subjects among Pre-Service Teachers (PST) students' in IPGKTHO. The result of the study is expected to set as a guideline for students in IPGKTHO pertaining to matters or aspects of Mathematics lecturers' leadership that interest them in choosing elective subject of Mathematics. It can be used as a guide before they go through the actual process of teaching and learning in the classroom.

VI. LIMITATION OF RESEARCH

The study only involved seven respondents. It is due to an open offer of elective subjects introduced to Pre-Service Teachers (PST) in Bachelor of Education (PISMP) June 2015 Intake.

VII. DEFINITION OF TERMS

Attitude is a very broad term and there are many definitions, but this study refers to the notion of attitude by

Katz [3]. He said that attitude is something that can affect an individual in the value of the symbol objects or what is liked or not. The resulting attitude of feeling, or belief or thought someone against a psychological object. In this study, attitude refers to the assessment of student attitudes towards Mathematics as an elective subject selected in their PISMP programme.

Perception refers to the observation, imagination or supposition, or because there is a perception in response to something or someone's objects. Perception is subjective. Perception depends on the ability and personal conditions. Usually the perception of an individual to interpret something is different from others. In this study, the perception refers to the process in which students create the impression, the impression or interpretation of an elective subject lecturer based on their leadership style. Perception of Pre-Service Teachers (PST) can be seen through the translation of attitudes, opinions, and behaviours or attitudes of students towards mathematics elective subject.

Leadership often refers to leaders' behaviour. Leaders usually give effect to the ones who were led his followers. [4] also saw leadership as a set of skills that teachers besides teaching and influence extended beyond the classroom. Within the scope of this study, the leader is the Mathematics' lecturers. Therefore this study wanted to know the impact of lecturers' leadership towards Pre-Service Teachers' (PST) perception on Mathematics as an elective subject.

VIII. RESEARCH FINDINGS

Pre-Service Teachers' (PST) perception on Mathematics lecturers' leadership in teaching and learning process is measured using the range of interpretation of the score. A total of 20 items were used and given to Pre-Service Teachers' (PST) to identify the perception of Pre-Service Teachers' (PST) on the leadership of their Mathematics' lecturers in the teaching and learning process. Table 2 displays the highest perception among students in general with the mean value 4.11.

Data showed that the respondents agree with almost all items submitted with the overall mean score, which was high (mean = 4.11). Item 3 showed the highest mean score (mean = 4.57), where Pre-Service Teachers' (PST) agree stating Mathematics' lecturers delivers content in an orderly manner. A total of four Pre-Service Teachers (PST), 57.0 % stated strongly agree, while three of them (43.0 %) who agreed on the statement.

While item 5 and 9 show the second highest mean score (mean = 4.43), which is connected with, study groups during lectures makes it easy for me to understand the content of the lesson and Mathematics lecturer managed to improve the learning environment in the classroom. A total of four Pre-Service Teachers (PST), 57.0 % agree that selecting the item and a total of three of them (43.0 %) opted not agree to this statement.

Overall, the Pre-Service Teachers (PST) agreed that the leadership of lecturers affect Pre-Service Teachers' (PST) perception and their interest in choosing mathematics as an

elective subject and thus improve their performance in their studies.

Item 8 also showed the fourth highest mean score (mean = 4.29), in which a total of two Pre-Service Teachers (PST), 28.5 % have chosen the item 'highly agree' that the learning process as they allow Pre-Service Teachers' (PST) to remember more easily. While five of them (71.5 %) have chosen the items of 'agreed' to this statement.

Lowest mean score was obtained from item 14 (mean = 3.43), in which a total of three Pre-Service Teachers (PST), only (43.0 %) who chose item 'agree', four Pre-Service Teachers' (57.0 %) chose item 'simply agree' to a statement of do not think so burdened by selecting Mathematics as elective option in PISMP. This finding clearly shows that the Pre-Service Teachers (PST) do not feel burdened to choose Mathematics as an elective subject.

Total Items : N= 20, Avarage Mean = 4.11 (High)

In conclusion, from the analysis of a questionnaire on perception of the Pre-Service Teachers' (PST) on the leadership of lecturers affect the interests and achievements of the Pre-Service Teachers' (PST) in their learning process appears to be at a high level.

IX. DISCUSSIONS

Based on the findings that have been analysed, it shows that lecturer's leadership has influenced the Pre-Service Teachers' (PST) perception on Mathematics as an elective subject. In the context of the educational process and also it is a process or activity that seeks to develop physical, intellectual, social, emotional, and can add individual skills, abilities, knowledge and experience to the advancement of life (BPG, 2003).

It has been identified that most of the lecturer's leadership is combined leadership, which are democratic and laissez-faire. According [5], leadership has three styles that is autocratic style, democratic and leisser-faire because each leadership has their own characters. The findings show that lecturer's task are well manage and well done in effective learning. [6]

In addition, education has a very important role in nation building efforts. Quality education is an effort to develop the next generation of the new millennium. We need to ensure that the 21st century learning is in line with the objectives in the National Education Philosophy. Educational leadership the country needs a strategic effort to achieve high quality standards in addressing the challenges of the 21st century. [7]

The findings also showed that teachers who choose Mathematics as an elective subject can be creative and innovative elements apply not only in the classroom but also be applied in their daily lives. This was also supported by a study made by [8], has proved that teachers must combine their skills in visual, auditory and kinesthetic, to achieve optimal learning. According to him, the more activities are carried out in the teaching and learning process, the higher the percentage of memory and understanding of the students.

X. CONCLUSION

Thus, the practice of lecturer's leadership in the teaching and learning process should no longer focused on just providing information. What to do now is to provide a more challenging task and require more students to think and to create a task-centric mindset element higher order thinking skills and achieve the learning outcomes. Students can apply what they have learn in class to show the effectiveness of learning and their willingness to study Mathematics as an electives subject.

Educational leadership, especially through the Transformation of Education Phase is expected to make up the first class human capital. The Pre-Service Teachers (PST) who choose elective of Mathematics must be able to use the knowledge as to be more proactive, creative, innovative and skilled to address global environment variable.

Current developments now require MOE focus on efforts to enhance the quality of teachers and enhance the leadership capabilities in ensuring the effectiveness of the teaching and learning process. The lecturers should improve the quality of the teaching and learning to do more hands-on activities and provide on-going guidance in every course offered in an elective subject of Mathematics.

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In conclusion, the lecturers are the most knowledgeable and well-trained people. They not only need to be skilled in their respective fields but also be able to use the technology, creatively and innovatively and able to face the current challenges. Lecturers who are effective need to impart knowledge, teach and inculcate noble values in students' daily life. Knowledge presented could be used as guidance and as an example and role model to their students.

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