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## Students perspective on lecturer characteristic for effective teaching

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### Abstract

This study was conducted to explore students' evaluation on the lecturers' characteristics that influence effective teaching at the Faculty of Science and Technology, Universiti Kebangsaan Malaysia, Bangi. The evaluations were on the lecturers' preparation, teaching styles and responsibilities. The Analytical Hierarchy Process (AHP) as a ranking method was used in this study to ensure that the main factors can be identified based on the weights. From the analysis, the main factors in AHP are arranged in decreasing order; preparation, followed by the style of teaching, and finally responsibilities. This result will help to provide guidelines to the lecturers for effective teaching.

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*Keywords:* English proficiency; driven force; language; mathematics and science

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### 1. Introduction

Education is a key agenda in any country as it plays an important role in preparing the future workforce. In 1996, the Ministry of Education (MOE) Malaysia has embarked on a written ruling to the client (customer charter). This marks the beginning of a comprehensive total quality management (TQM) in Malaysia's formal education system. Ministry of Education is also developing policies and monitoring the quality of education policy at every level of education, based on the principles of TQM. In the same year, the National Higher Education Council was established with the aim of controlling the standards of the Public Higher Education Institutions (IPTA). A system for grading the effectiveness of each department and faculty are also established.

Recently, the Ministry of Higher Education (MHE) was established to improve the services at the higher level education in the country. The Ministry is expected to develop strategies to produce graduates that are able to meet global needs and industries. Advantages of TQM in educational institutions, include:

- i) assist educational institutions to offer better services to students;
- ii) the main focus of TQM is continuous improvement, which is fundamental to fulfilling the requirements for quality education (Improved learning);
- iii) cost effective;

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- iv) defines the role, purpose and responsibility of educational institutions; and
- v) plans a comprehensive leadership training to lecturers at all levels.

One of the dimensions of quality education is emphasised in effective teaching. Many methods have been used to evaluate the effectiveness of a lecturer's teaching. Among them, the evaluation by the faculty staff, self-assessment, peer review, and students evaluation. Most universities use questionnaires answered by the students (anonymous) to evaluate the effective teaching of lecturers at the end of each semester (Adams, 1997; Blunt, 1991; Rifkin, 1995). This method became popular in 1960's and is a common practice in higher learning institutions (Simpson, 1995). This method is used to receive responses as it is a process that is simple, fast and easy process to implement, and does not require high costs. Feedback received through this questionnaire is useful in enhancing the quality of lecturer's teaching (Murray et al., 1996). It helps lecturers to review their teaching from the students' perspective, recognizing self weaknesses and plan how to improve in the future.

In addition, students' evaluation is also considered in administrative decisions for promotions (Christensen et al., 1992; Ciesielski, 1997), contracts renewal and to increase the overall teaching (instructional improvement). In some countries, such as Australia and the United States (New Port, 1996; Watchel, 1994), evaluation in teaching is compulsory to prove the existence of quality in teaching (Ramsden, 1998). According to Centra (1993), the instructor will take the initiative to improve their teaching if the four following conditions are fulfilled: the instructors receive new information on their teaching; the instructors appreciate the information they received; instructors know how to improve their teaching, and the instructors are motivated to improve their teaching. Feldman (1988) compared the faculty members and students' opinion about the characteristics of an effective lecturer. The faculty members and students agreed on nine items representing an effective lecturer, that is, knowledge about the subjects taught, well prepared and organised the course, gives a clear explanation and easy to understand, interested in teaching, sensitive and interested in students achievement, easy to meet out of class time and are willing to help, providing quality tests, fair assessment, and finally, fair to all students. In 1998, a lecturer teaching evaluation was conducted at the Faculty of Economics and Administration University of Malaya (Liaw et al, 2003). Questionnaires were distributed to students at the end of first and second semester, 1998-1999 session. Questions in first semester has seven items, while for second semester contains eight items. Both questionnaires focuses on the lecturers' teaching based on a scale from one (strongly disagree) to five (strongly agree). Mean for each item is obtained to represent the overall teaching evaluation. The result of the overall teaching evaluation is 79.2% (median 79.5%).

The policy change of teaching mathematics and science from Malay to English language, which started in 2003 in schools, has given an impact to the teaching and learning process in Malaysia's Public Higher Learning Institutions, including Universiti Kebangsaan Malaysia (UKM). Consequently, the UKM administrators have directed all faculties offering Mathematics and Science courses to follow the change starting with courses taught in the first year of study. It was suggested that 30% of the courses was to be conducted in English while for courses offered in the second and third year, 50% and 70% would be conducted in English, respectively. Therefore, Noriza Majid et al. (2011) has conducted research on the readiness of lecturers from the School of Mathematical Sciences to conduct courses in English from the perception of students. This was done to see whether the students satisfied with their lecturers in conducting courses in English. Questionnaires were distributed to the first year students from the Faculty of Science and Technology and also from the Faculty of Education for the session of 2009/2010. From the results of the study, it is found that the students are generally satisfied with the teaching and learning conducted in English at the School of Mathematical Sciences.

## **2. Methodology**

Data for this study were obtained from the questionnaires developed for gathering factors that influence students' evaluation on lecturers effective teaching. The identity of the respondents were not included in the questionnaire. Students are selected as respondents because they are able to evaluate the organisation of teaching and teaching styles. Students are eligible to assess their satisfaction with teaching methods, course works given and the relevance of the content and course reference materials. They are also aware of the relationship and communication with the lecturer during lectures and outside of class time.

Ranking method using paired comparison matrix in Analytical Hierarchy Process (AHP) is applied in this study. Respondents were students from Master in Quality and Productivity and Master in Mathematics Programmes, Faculty of Science and Technology. A total of 40 questionnaires were collected. The questionnaire was divided into four parts. The first section compares the three main factors selected to assess lecturer’s effective teaching; preparation, teaching styles and responsibilities.

The criteria can be further broken down into sub criteria, sub-sub criteria, and so on, in as many levels as the problem requires. A criterion may not apply uniformly, but may have graded differences for example, a little sweetness is enjoyable but too much sweetness can be harmful. In that case the criterion is divided into sub criteria indicating different intensities of the criterion, like: little, medium, high and these intensities are prioritised through comparisons under the parent criterion, sweetness.

Figure 1 depicts the elements in the factors with their weights and the data obtained are processed using Microsoft Excel by applying the AHP method. This method was chosen because it is able to identify the factors that are emphasised in lecturer’s effective teaching by calculating the values of average weight.

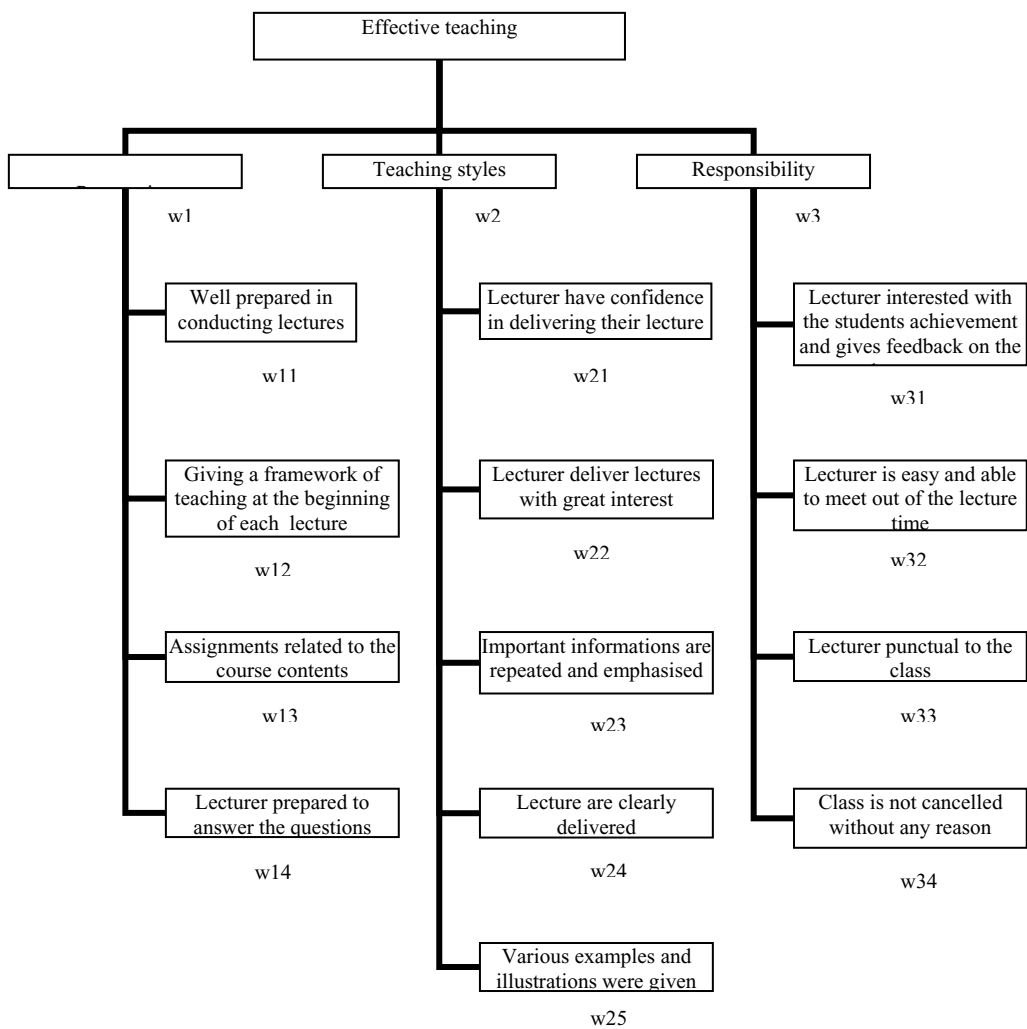


Figure 1. The hierarchy of factors and elements in effective teaching

### 3. Results and Discussions

Calculation of the average weight for all factors and elements have been carried out and listed in Table 1. From the analysis, it was found that the preparation of a lecturer was a major factor that is observed by the students in their assessment of effective teaching of their lecturers (39.76%). This was followed by the style of teaching (31.02%) and finally the element of responsibilities of a lecturer (29.21%).

Table 1. Average weight of all factors and elements

Weight	Average
w1	0.3976
w2	0.3102
w3	0.2921
w11	0.3901
w12	0.2198
w13	0.1891
w14	0.2320
w21	0.2699
w22	0.1763
w23	0.2176
w24	0.1845
w25	0.1520
w31	0.2856
w32	0.2905
w33	0.2206
w34	0.2032

For the preparation factor, the elements that affect students' evaluation on their lecturers' effective teaching, in decreasing order (highest to lowest average weight values) are;

- (i) lecturers have proper preparation for conducting lectures (39.01%);
- (ii) lecturers are prepared to answer questions (23.20%);
- (iii) lecturers give course contents and framework at the beginning of each lecture (21.98%); and
- (iv) assignments are related to the course content (18.91%).

Lecturers who have proper preparation before conducting their lectures have better evaluation assessment because they are aware of what is to be presented during their lectures and manage to achieve the objectives. Well organised and prepared lecturers will gain respect from the students. Assignments contributed less to the effective teaching from the students perspective, whereby assignments were seen as an additional work in knowledge building.

The guidelines for effective teaching in terms of preparation can be prepared based on this results. Lecturers need to be trained to provide teaching plans before the lecture. Lesson plans are to help lecturers plan and prepare the framework of the teaching, determine the objectives of the lesson, list the contents of the importance that they want to deliver, planning the allocation of time for each topic of discussion, the teaching aids that needed for teaching and learning and the references been use. This is a systematic and useful practices to ensure proper preparation in giving a lecture. The outlines of lectures can be concluded from daily lesson plans and give to the students to make them aware of the courses they attended. Lecturers should have adequate and up-to-date knowledge and control of the subjects taught for the benefit of the students. Lecturers adequate knowledge combined with proper preparation exhibits a genuine confidence in teaching.

According to the principles of TQM, a lecturer needs to build the context of teaching that can help students to achieve continuous success. Assignment is associated with students' understanding, therefore, lecturers need to be equipped with skills to produce good quality questions or course works to develop students 'understanding as well as

to raise students' interest in the subject. In addition, the assignment should be suitable with the number of subject credits. This prevent students from focusing more on course works and ignoring other courses.

The second important factor, teaching style shows the importance elements in decreasing order as follows:

- (i) lecturers have confidence in delivering lectures (26.99%)
- (ii) important information are repeated and emphasised (21.76%)
- (iii) Lecture are clearly delivered (18.45%)
- (iv) Lecturer deliver lectures with great interest (17.63%)
- (v) Various examples and illustrations were given (15.20%)

The study found that students are concerned with lecturers confidence in delivering lectures. Lecturers who are confident shows that they know what they deliver. This gives trust and confidence to the students to receive the lectures. In other words, the confidence of lecturers in delivering lectures strengthens their credibility as a dynamic educator. Clearly delivered lectures is moderately important, but it cannot be denied that students in the front line and at the back of lecture halls have to listen and record important facts and figures. If the lecturer spoke in a low tone, students will get tired and the lectures will not be beneficial.

Elements of teaching style factors with the lowest weight is the use of various examples and illustrations. This is because in the masters level, students are only interested to learn and understand what is necessary and they are capable of carrying out the reference samples and illustrations out of lecture time. If the lecturer's teaching and explanation is effective, the students will understand even if one example is given. Lecturers should be given a training because in education, teaching style is emphasised. Moreover, the student's character is different and effective learning is closely related to the methods of teaching (Wankowski, 1970).

Effective teaching style also depends on the use of teaching aids. Use of teaching aids in addition to the delivery of lecture content orally by the lecturer. It also provides an opportunity for students to gain knowledge through the use of various senses. Use of teaching aids to facilitate the students understand the lesson. Therefore, lecturers need to take time to determine appropriate teaching aids are used, easily available, and easy to use. Among the most common teaching tool used is the over head projector (OHP), a computer and LCD, models, television and video.

Under the responsibility of the factors, the elements involved, from high-value low weight, is

- (i) lecturers easily found outside of class time (29.05%)
- (ii) lecturers interested in student achievement and giving feedback on student progress (28.56%)
- (iii) lecturers came in a timely manner (22.06%)
- (iv) lecturers did not cancel classes without reason (20.32%)

Lecturers easily found out of lecture time has the highest weight value because it is important for a student to have lecturers who are always available. Students who have questions or need assistance in learning will usually meet the lecturers out of lecture time.

Regarding the element of lecturer not cancelling the lectures for no reason, it is less important because lectures can be replaced and graduate level curriculum is more flexible. The factor of responsibility is more focused on the lecturer's personality. Lecturers should be aware of their responsibilities as educators and role model. Motivational seminars and workshops can be held to equip lecturers with a responsible attitude in order to help the intellectual development in the students. Besides, the attitude of responsibility of the lecturer shows that the lecturer respect his/her role as an educator, respects students and serious in their job.

#### 4. Conclusion

The study was conducted to give an overview of the factors that influenced the student evaluation on the effectiveness of the lecturer in teaching. From this study, factors that contributed to the effective teaching are the preparation of lecturers, teaching styles and the responsibilities. Preparation of the lecturers are the factors that were given priority by the students. In overall, preparation refers to the preparation and organization of the lecturers to conduct lectures and courses. It covers the planning framework of regular lectures, teaching and learning objectives, providing materials of exercises and assignments that relevant to the courses, provides time for question and answer session as well as feedback on the students' achievement.

The second factor is a style of teaching. These include self-confidence when handling lectures, voice control and body gestures, the use of effective teaching tools, and deliver teaching with a creative and interactive teaching methods. All these element are important in influencing students to be interested learning in the classroom. The style of teaching should be fun, creative, interactive, and can assist learning and development of the student's mind. The use of technology such as computers and information technology can also be applied in teaching and learning process.

The last factor is in terms of responsibility of the lecturers. Responsibility as an educator should always exist and be practiced by the lecturers. This includes the characters of the lecturers in terms of timeliness and evaluation. Lecturers should be responsible and care about their student's achievements and be fair in making assessment, and gives a constructive feedback to the students. This includes great interest and involvement of the students in teaching and learning process, provide timetable for consultation with students out of class time and respect the students.

Evaluation by students should be used by lecturers to improve teaching so that it will be more effective. Lecturers should not feel awkward or disappointed when the assessment of their teaching is unsatisfactory but received with an open mind so that they can reflect and think ways to enhance their teaching style. On the other hand, lecturers provided with an excellent assessment should strive to maintain, and improve their teaching continuously.

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