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Students’ perception on lecture delivery effectiveness among the Faculty of Health Sciences lecturers

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Abstract

Lecture delivery is one of the major criteria in assessing overall lecturer’s performance apart from research and publications. The main objective of this study was to evaluate the lecture delivery effectiveness among Faculty of Health Sciences (FSK), Universiti Kebangsaan Malaysia (UKM) lecturers from the perception of students. Lecture delivery effectiveness was correlated significantly with characteristics of lecturers, attitudes of students, facilities and students’ satisfaction, but not associated with students’ grade. Different opinions were observed between undergraduates and postgraduates on lecture delivery effectiveness. More attention should be given to improve the quality of teaching in FSK.

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Keywords: Effectiveness; lecture delivery; learning methods; students’ perception

1. Introduction

An effective teaching is defined as teaching that creates an environment in which deep learning outcomes for students are made possible, where high quality student learning is promoted and where superficial approaches to learning are discouraged (Ramsden, 1992). There are several ways to get feedback on teaching been suggested which included student ratings, self-evaluation, peer observation, video recording, student interviews, alumni ratings, employer ratings, administrator ratings, teaching scholarship, teaching awards, learning outcome measures, and teaching portfolio (Berk, 2005). However, students’ ratings or students’ evaluations are the most commonly
used and also a necessary source of evidence of teaching effectiveness for both formative and summative decisions. The purpose of measuring teaching effectiveness is not only to evaluate the lecturer’s performance, but the evidence produced is important for major decisions about the future in academe and improvement of teaching quality (Berk, 2005). Therefore, this present study was conducted to evaluate the teaching performance among Faculty of Health Sciences (FSK), UKM lecturers and several related aspects of lecture delivery from the perception of students.

2. Method

The study was conducted in two stages due to the two semesters in an academic session. In the first stage, different perception between undergraduate from year 1 to year 4 (n = 127) and postgraduate (n = 18) students from Biomedical Science, Nutrition & Dietetics and Optometry Programmes towards lecture delivery effectiveness and its contributing factors were assessed. While in the second stage, 166 subjects (159 students, 7 lecturers) from Biomedical Science Programme were selected to determine the students’ understanding level and choice of other teaching methods. A self-constructed and validated structural questionnaires were distributed among subjects and each item on perception was rated based on 5-point scale (1 = strongly disagreed; 2 = disagreed; 3 = unsure; 4 = agreed; 5 = strongly agreed). The data were then pooled into agree (strongly agreed and agreed), unsure and disagree (strongly disagreed and disagreed) categories. Data obtained were analyzed using Statistical Packages for Social Sciences (SPSS) version 17.0.

3. Results

3.1 Stage 1: Students’ perception towards lecture delivery effectiveness

3.1.1 Contributing factors to lecture delivery effectiveness

Analysis of linear relationship showed a significant positive correlation between lecture delivery and characteristic of a lecturer, attitude of student, facilities and satisfaction of student (Table 1). Among four different factors being studied, lecture delivery and characteristic of lecturer (r = 0.531) gave the highest strength of association, while facilities (r = 0.193) was weakly associated with lecture delivery effectiveness. Moderate relationship was observed between lecture delivery with students’ attitude (r = 0.340) and students’ satisfaction (r = 0.346) as well.

Multiple regression analysis was conducted to test how the factors could predict the lecture delivery effectiveness by FSK lecturers. Results showed that characteristics of a lecturer, influenced the most with 28.2%, followed by satisfaction of student (12%), attitude of student (11.5%), and lastly facilities (3.7%). The overall variance explained by those four predictors was 36.5% and this mean that lecture delivery effectiveness could be predicted better from the combination of all factors rather than individual factor. However, only the lecturers’ characteristics and students’ attitude contributed significantly to the lecture delivery effectiveness, F(4, 143) = 20.135, p<0.01.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Pearson correlation coefficient, r</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture delivery effectiveness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Lecturers’ characteristics</td>
<td>0.531</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>2. Students’ attitude</td>
<td>0.340</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>3. Students’ satisfaction</td>
<td>0.346</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>4. Facilities</td>
<td>0.193</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>5. Students’ grade (GPA)</td>
<td>0.0</td>
<td>&gt;0.05</td>
</tr>
</tbody>
</table>
3.1.2 Relationship of lecture delivery effectiveness with students’ academic achievement

The outcome of lecture delivery was measured in terms of student’s academic achievement. Pearson correlation analysis (Table 1) showed that there was no relationship between lecture delivery and the Grade Point Average (GPA) obtained by students during first semester (r = 0). Therefore, it could be said that performance of students in examination was not influenced by lecture delivery effectiveness.

3.1.3 Comparison between undergraduate and postgraduate perception on lecture delivery effectiveness

Our study found that most of the postgraduate coursework students agreed (89%) that lecture delivery was effective while the rest of them were unsure (11%) about the effectiveness of lecture delivery. On the other hand, more than half of undergraduate students had agreed (58%) with the statements that lecture delivery was effective. However, 3% of undergraduate students disagreed that lecture delivery was effective while the remaining was unsure (39%) about lecture delivery (Figure 1).

![Figure 1. Percentage of undergraduate and postgraduate students’ opinion which agreed, unsure and disagreed that lectures delivered by FSK lecturer was effective](image)

3.2 Stage 2: Lecture delivery effectiveness among lecturers from Biomedical Science Programme

3.2.1 Students' understanding level

As shown in figure 2, more than half (52.4%) of the students had a good understanding of the content of lecture, followed by moderately understood (41.6%). The percentage of students with very good understanding was 4.2%. There was only 1.8% that poorly understood while none of them had a very poor understanding of the lecture.

![Figure 2. Descriptive analysis of students’ understanding of the content of lecture](image)

3.2.2 Relationship of students’ understanding with lecture content and students’ academic performance
The content of lecture had a weak correlation with level of students’ understanding \((r = 0.263, p<0.05)\) (Table 2). However, students’ understanding of a lecture did not influence students’ grade in their examination during their first semester of first year study as the statistical analysis did not show any significant relationship between these two variables \((r = 0.018, p>0.05)\).

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Spearman correlation coefficient, (r)</th>
<th>(p) value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students’ Understanding</td>
<td>The content of lecture</td>
<td>0.263</td>
</tr>
<tr>
<td></td>
<td>Students’ academic performance</td>
<td>0.018</td>
</tr>
</tbody>
</table>

3.2.3 Students’ preferences for learning methods employed

Table 3 showed the descriptive analysis of learning methods employed, where the highest mean rank was case study (3.45), followed by problem-based learning (3.43), assignment (3.36), presentation (3.17) and tutorial (3.13). The lowest mean rank was Interactive Teaching & Learning Management System (SPIN) method with mean rank of 1.47 only.

<table>
<thead>
<tr>
<th>Learning method</th>
<th>Mean rank</th>
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</thead>
<tbody>
<tr>
<td>Case Study</td>
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<tr>
<td>Problem Based Learning</td>
<td>3.43</td>
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<tr>
<td>Assignment</td>
<td>3.36</td>
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<tr>
<td>Individual/Group Presentation</td>
<td>3.17</td>
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<tr>
<td>Tutorial</td>
<td>3.13</td>
</tr>
<tr>
<td>Interactive Teaching &amp; Learning Management System (SPIN)</td>
<td>1.47</td>
</tr>
</tbody>
</table>

4. Discussion

In the present study, examination grades were not influenced by the effectiveness of lecture delivery and students’ level of understanding. This was in agreement with previous study which found that academic performance was directly affected by the students’ effort, prior performance and their approaches to learning (Diseth et al., 2010). As the primary purpose of the lecture is to provide a framework of knowledge, thus students should search for extra information on a subject matter in order to perform better in their examination. However, it is also necessary for the lecturers to pay close attention on issues related to effective teaching.

Lecturers’ characteristic and personality were found to play a significant role in effective teaching and lecturing. Delaney and colleagues (2010) had listed top nine prominent characteristics and sets of behaviours described by students as indicators of effective teaching. Those nine were respectful, knowledgeable, approachable, engaging, communicative, organized, responsive, professional and humorous. A good personality of a lecturer creates a comfortable feeling and increases confidence of students in their learning. Apart from that, learning outcomes are also affected by multiple factors that influence the teaching-learning environment which includes students’ approaches to learning, motivation, self-regulation and conceptions of learning and teaching (Biggs & Tang, 2007; Vermunt & Vermetten, 2004).

The lecture delivery was observed to be more effective at the postgraduate level than undergraduate level. The difference was most probably due to the effects of class size. Postgraduate coursework in our faculty are usually being taught in a small size of class. Small classes are sometimes more interactive, more engaging, individualized and personally involving (Ludlow, 1996) and tend to be effective because students are actively processing material
rather than passively listening and reading (McKeachie, 1990). For a larger class, the lecturers are suggested to focus on changing the role of the student from passive observer to active participant through implementation of student-centered teaching methods by encouraging students to be critical and functioning in class and by promoting lecturer-students interaction activities at all times. In this approach, lecturers are aimed at helping their students and to focus on what students are doing in the learning-teaching situation. It is different from the teacher-centered approach, where the lecturer’s focus is on transmitting information (Kember & Kwan, 2000; Postareff & Lindblom-Ylanne, 2008; Trigwell & Prosser, 1996).

A lecture is frequently a one-way process unaccompanied by discussion (McIntosh 1996). In support of the lecture method, Vella (1992) recommends the use of active learning activities including analysis of case reports, problem-solving exercises, student presentations and students group works. Furthermore, in our study, the case study method was chosen as the most effective learning method while the e-learning method known as Interactive Teaching & Learning Management System (SPIN) which was implemented in UKM about three years ago was found to be the least effective. The e-learning approach is an entirely new learning environment for students, thus requiring more time and skill to be successful (Romiszowski, 2004) and a lot of improvement in order to maximize its potential.

5. Conclusion

In general, lecture delivery in FSK, UKM was more effective at the postgraduate level than undergraduate. The lecturers were advised to plan and adopt an effective way of lecturing by creating a harmony teaching-learning environment because the effectiveness of lecture delivery was contributed by several factors from both lecturers and students.

Acknowledgements

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References