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The Lecturer's Evaluation Form: A Critical Response by Students and Lecturers

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This study investigates the effectiveness of using the Lecturer's Evaluation Form (LEF) to evaluate lecturers at the Academy of Language Studies (APB) in Universiti Teknologi MARA (UiTM). Questionnaires were given out to students from various faculties in UiTM as well as lecturers teaching in APB, UiTM. The questions were constructed to elicit responses to students' ability in evaluating their lecturers fairly, the effectiveness of the LEF as well as the appropriateness of the criteria stated in the LEF. In general, the lecturers and the students were of the opinion that the students were capable of evaluating the lecturers fairly and that the LEF was an appropriate means of appraising lecturers. However, some suggestions were made on modifying the LEF. The respondents suggested that for the LEF to serve as a useful instrument in determining the lecturer's performance, it needed to be modified and its manner of administration reworked.

Introduction

Entwined with effective teaching and learning is the quest for continuous improvement in pedagogical competence. One way of achieving this is to develop an effective procedure for evaluating teachers. Basically, there are two types of evaluation; summative evaluation and formative evaluation. A summative evaluation represents measurement of end results from the information collected. Its purpose is to inform and provide institutional rewards such as promotions and special privileges. A formative evaluation, on the other hand, is a measurement used to form results. Its purpose is to motivate change or improvement by providing

guidance to the growth process especially for improvement in teaching and self-development. Formative evaluation is usually used in evaluating teaching instructions.

With summative and formative evaluations in mind, various methods have been designed to evaluate the effectiveness of the teacher. Firstly, a teacher can be evaluated via **administrative rating**. This method evaluates the teacher's characteristics based on a checklist of "desirable characteristics". The teacher is appraised in several ways, such as in his ability to work with other staff members, his willingness to adhere to reasonable organizational expectancies and his behaviour at faculty meetings. Another method used to evaluate a teacher is **classroom observation**. This involves an observer observing the teacher's teaching performance during classroom hours. The concept behind this method of evaluation is to evaluate the effectiveness of the teacher's teaching ability. **Pupil test performance** is also used to evaluate a teacher's performance. It is used as an index which relates teacher's performance to students' achievement. **Student rating** is a popular evaluation method in which students are required to rate their teacher's performance based on a devised student rating form.

A teacher can also be evaluated via a **competency/knowledge test**. He is tested on his professional knowledge such as classroom instructional principles. A **professional portfolio** is used as evidence to support the teacher's development and professionalism. The professional portfolio contains evidence of the teacher's instructions such as timetable, students' attendance, lesson plans, quizzes, and descriptions of classroom projects. A teacher can also be requested to attend an **appraisal interview** whereby the teacher is interviewed and evaluated on his past performance, present achievements and future goals. The main purpose of the appraisal interview is to form an understanding between the teacher and the management on how best to achieve the purpose and objective of the establishment. A **self-evaluation** is where a teacher evaluates his own instructional ability, for example, in the form of a journal. Though this form of evaluation has been argued to be of little value and prone to biasness, it is an effective method of self-evaluation and improvement on teaching experience.

A **contract plan** is drawn up when the teacher and an evaluator make a contract to carry out certain steps that will determine a specific outcome in student performance. The teacher describes the present condition of the students based on a measured performance and then indicates the kind of evidence that will show successful completion of

the steps agreed upon. Finally, another method used to evaluate teachers is the **teaching performance test**. This method is a combination of classroom observation and testing. The teacher is evaluated on his ability to create a lesson plan and on successful teaching based on the specified objectives. Students are required to sit for tests and the teacher's performance is based on students' pre and post-test scores.

Many researchers have looked at the varied range of instruments for the purpose of improving teaching proficiency and enhancing self-development. Studies by Goldhammer (1969), Goldhammer et. al. (1980) and Acheson and Gall (1980) supported the idea that a progressive teacher evaluation system is important for the success of language teaching programmes. Rea-Dickins and Germaine (1992) emphasised the need for self-evaluation questionnaires, while Dolmans et. al. (2003) developed an instrument to provide teachers with feedback about their performance to improve their teaching. In addition, Cosh (1999) proposed two models for reflective peer observation.

Hence, it is essential to have a good instrument as a means for summative and formative evaluation so as to cultivate an environment whereby lecturers can motivate themselves and improve their teaching performance.

Background

At the Academy of Language Studies (Akademi Pengajian Bahasa – APB) in UiTM, the Lecturer's Evaluation Form (Borang Penilaian Pensyarah) is distributed to at least one class of each lecturer at the end of the year. The purpose of this evaluation form is to obtain feedback from the students regarding their lecturer's performance. The student ratings of the lecturer form part of the weightage for the lecturer's yearly appraisal.

As the evaluation of the lecturer by the students is such an important issue, the question that arises is : 'Are the students mature enough to sensibly judge their lecturers' instructional competence?' A team of four lecturers decided to research on this issue in order to obtain answers to the following research questions:

- a. Are students able to evaluate their lecturers fairly?
- b. Do they find the Lecturer's Evaluation Form (LEF) useful?

The research team also wanted lecturers' feedback on the LEF since the lecturers themselves are the 'targets' of the evaluation. Hence, lecturers were also asked for their opinion on the following main issues:

- a. Are your students able to evaluate you fairly?
- b. Do you agree with the criteria of assessment stated in the Lecturer's Evaluation Form (LEF)?

Literature Review

Reviews of related literature show that **student rating** is one of the many techniques that has been used to evaluate the instructional competence of classroom practitioners with the objective of administering career advancement (Popham, 1993) and encouraging the attainment of teaching effectiveness (Popham, 1993; Murdoch, 2000; Dolmans et al, 2003; and Centra, 2003). Popham (1993) identifies the element of students' feedback as "student ratings". When student ratings serve to inform and enable instructors to improve their teaching effectiveness, they are known as formative teacher evaluation. Murdoch (2000) suggests that the learners' feedback is one of the "five key principles" that ought to underpin an ongoing "teacher-performance review system".

It is noted that a learner-centred approach to lecturer evaluation is not without weaknesses. Murdoch's (2000) study reveals that the element of students' feedback is perceived by the majority of the 30 English Language teachers who responded to the questionnaire as "potentially threatening". Besides that, it is the least preferred method of teacher assessment for the fact that teachers have very little control over the procedure.

Two major concerns arise with respect to the quality of students' assessment of their lecturers' teaching performance. Firstly, it is obvious that no sensible classroom practitioners would consent to a biased or an unfair evaluation given by their students. This is a concern given the fact that it is plausible for intervening variables to influence the learners' judgement of their instructors' performance. Popham (1993) points out that among the variables that may contaminate the validity of student ratings are the teacher's popularity, the students' interest in the subject matter, the confidentiality of respondents' identity, the respondents' maturity level, and the fear of being given poor grades. Furthermore, Centra (2003) expresses that there is a likelihood for teachers to influence

their students' evaluation to favour them by giving higher grades and lighter course workload. Interestingly, his empirical study unfolds that "higher grades and less course work" do not have a bearing on the students' judgement of their teacher's instructional competence.

Another major concern is the validity and reliability of the instrument used to elicit the students' judgement of their teachers' performance. An empirical study conducted by Dolmans et al (2003) at the Medical School of Maastricht University suggests that the teacher evaluation instrument that they have developed which corresponds to namely "constructive, self-directed, contextual and collaborative learning, and the teacher's interpersonal behaviour" is reasonably valid and reliable in the context of small number of student responses i.e. six students per instructor. Nevertheless, it remains to be seen if the students' feedback has resulted in a change of behaviour on the instructors, an area that requires further research.

Considering the multidimensional variables that can possibly affect the state of students' assessment of their lecturers, the present researchers agree with Mahoney (2004) that effective teaching "cannot always be easily measured". However, above and beyond the interest of job preservation and career movement, the fundamental basis of formative teacher or lecturer evaluation by students is the clarion call to improve the quality of teaching and learning.

The Samples

The study comprised two samples:

- a. A total of 174 students from four faculties, the Faculty of Law, the Faculty of Administrative Science & Policy Studies, the Faculty of Hotel Management & Tourism and the Faculty of Art & Design were involved in the survey. The students ranged from diploma students taking Proficiency English Courses and English for Occupational Courses; pre-degree students taking a course in English for Academic Purposes; degree students following the Report Writing and Public Speaking courses to Post-graduate Master's degree students following a course in Academic Writing for Post Graduates. There were 83 (47.7%) male students and 91 (52.4%) female students. The majority of them (74.2%) were in the 18 – 20 age group.

- b. Thirty five lecturers from the Academy (APB) were randomly selected from the English Language Department as well as from the Department of Foreign Languages and the Bahasa Melayu Department. There were 10 male and 25 female lecturers. Most of them (45.7%) fell into the 30-40 years age category. About half (45.7%) had about 10 years of service in UiTM followed by 25.7% with 10-20 years and another 25.7% with 20-30 years of service.

The Lecturer's Evaluation Form (LEF)

This form is an instrument used by APB to evaluate a lecturer's teaching performance. It is distributed to the students of each lecturer at the end of the academic year. The students are asked to evaluate each lecturer based on the ten criteria stated in the form. The 10 criteria listed in the Lecturer's Evaluation Form (LEF) are as follows:

- Criterion 1 : Lecturer's observance of class time.
- Criterion 2 : Lecturer's ability to teach and make the class interesting.
- Criterion 3 : Lecturer's rapport with his/her students.
- Criterion 4 : Lecturer's preparation for class.
- Criterion 5 : Lecturer's enthusiasm/interest in helping students.
- Criterion 6 : Lecturer's ability to assess students effectively.
- Criterion 7 : Lecturer's prompt return of course work.
- Criterion 8 : Lecturer's concern about students' attendance and their success in the course.
- Criterion 9 : Lecturer's encouragement for students' interaction.
- Criterion 10: Lecturer's conduct of continuous writing assessments.

For each criterion, students are asked to rate the lecturer teaching their course using a ten-point like Likert scale with descriptors ranging from 'low' (points 1-5) to 'high' (points 6-10). Students are also given the opportunity to put down any comments about their lecturer in the said form.

The Questionnaires

Since there were two samples in the study, though both looking at the same issue, it was necessary to prepare two sets of questionnaires; one for the students and the other for the lecturers.

Questionnaire on Students' Reaction to the LEF (*Questionnaire A*)

This questionnaire was divided into three sections. Section A elicited students' response to their ability to evaluate their lecturers; Section B questioned the students' own response to the criteria stated in the LEF and Section C elicited information about the students' background. *Questionnaire A* was written in Bahasa Melayu as the research team deemed that it was easier for the students to understand and answer the questionnaire in a language with which they were more familiar.

Questionnaire on Lecturers' Reaction to the LEF (*Questionnaire B*)

This questionnaire was almost a carbon copy of *Questionnaire A* with the same questions oriented to the lecturers' point of view. It had the same three sections to find out lecturers' response to their students' ability to evaluate them, their opinion about the criteria in the LEF and their teaching biodata. *Questionnaire B* was set out in two languages – English and Bahasa Malaysia (BM). Language lecturers randomly selected to answer *Questionnaire B* could choose the English or BM version of the questionnaire.

Analysis and Discussion of Results

Both sets of questionnaire were distributed to sample students and lecturers respectively at the end of the November 2003 – March 2004 semester. Data were collected and results analysed as follows:

Section A – Students' and Lecturers' Response to Students' Ability to Evaluate Their Lecturers

It was a resounding 'Yes' to the question on whether students should be asked to evaluate their lecturer's ability to teach. A total of 167 (96.0%) out of 174 students and 22 (91.4%) out of 35 lecturers responded in the positive. Furthermore, 50% of the students said that only some students were able to assess their lecturers fairly with a close 43.1% stating that all students were able to do so. In contrast, 80% of the lecturers stated that only some students were able to assess lecturers fairly and only 11.4% agreed that all students were able to do so.

When asked if the LEF was an effective way of evaluating lecturers, the majority of both students (97.1%) and lecturers (60%) said that it

was. Both groups (93.1% and 85.7% of students and lecturers respectively) also stated that lecturers should be assessed by their students. Only about 20% of the lecturers surveyed agreed that lecturers should be evaluated through observations by senior lecturers/other lecturers or through assessments of video-taped lessons. Less than 10% of the students supported these other options.

When evaluating their own lecturers' performance, 69.5% of the students were influenced by their preference/liking for their particular lecturer. However, 72.4% and 81% of the students were respectively not influenced by their dislike for or fear of their lecturers. Though most of the lecturers (82.9%) agreed that students' evaluation of a lecturer was influenced by students' liking for that particular lecturer, they stated that dislike for (68.6%) and fear of (45.7%) a lecturer were factors that influence the students' evaluation of their lecturers. Both groups of respondents did not think that the evaluations done by students would affect their continuous assessment grades (over 80% and 50% respectively) nor did they feel uncomfortable evaluating their own lecturers (students – 77.0%; lecturers – 62.9%).

The core question of whether the students' assessment is a true reflection of their lecturers' capability elicited a positive response from both the students (73.6%) and the lecturers (54.3%). Only 37.1% of the lecturers stated that the students' assessment was not a true reflection of their teaching capability.

When asked if the students felt that they had to give their lecturers high scores, 56.9% said "Yes". Students cited the following reasons for giving their lecturers high scores:

- a. The lecturer is good and therefore deserves high marks.
- b. It is fair to award the lecturer high marks since he/she can teach well.
- c. I honestly evaluate the lecturer according to his/her ability. There is no reason to give him/her low marks.

However, the lecturers disagreed (71.4%) and did not think that the students were obliged to give them high scores. Reasons cited include:

- a. Students are free to evaluate their lecturers.
- b. Most of them are able to assess their lecturers quite objectively.
- c. Students have the right to express their opinion regarding the credibility of their lecturers.

Another interesting finding is that out of 35 lecturers, 20 (57.1%) were of the opinion that students did give a false impression of them when assessing their lecturers. Out of these 20 respondents, 11 (31.4%) stated that it had resulted in students giving them low marks. The majority of the students (77%), on the contrary, said that they had never given a false picture when assessing their lectures. In fact, 63.8% of the student respondents said that the present instrument (the LEF) provided a true picture of their lecturers' capability.

There was an additional question in Section A of the questionnaire for lecturers in which lecturers were asked if their students' attendance in class affected the way they were evaluated. A majority of the respondents (77.1%) said "Yes".

Section B – Students' and Lecturers' Response to the Criteria Stated in the LEF

Once again both the students (79.9%) and the lecturers (62.9%) agreed with the criteria of assessment stated in the LEF. Those who did not agree stated that some of the criteria used were not suitable (students – 5.7%; lecturers – 22.9%). Some students found criteria 6 and 10 unsuitable while some lecturers marked out criteria 1, 6, 8 and 10 as unsuitable.

Likewise, students (82.2%) and lecturers (71.4%) agreed that lecturers should be assessed on a scale of 1 to 10. Both groups (students – 84.5% ; lecturers – 65.8%) agreed that the students understood the values of the scale. Lecturers were asked an additional question as to whether they thought their students understood all the criteria in the LEF. Only 37.1% said "Yes" whereas 45.7% said "No".

To the question as to whether other criteria should be included in the LEF, 42% of the students did not think it was necessary to do so. The sample lecturers (71.4%) however, indicated that other criteria should be added. More than half of the lecturers (54.3%) supported the following criteria:

- a. Has a strong passion for the subject being taught.
- b. Is able to communicate with his/her students at their level of understanding.
- c. Has a high enthusiasm for teaching.
- d. Continually seeks ways to improve, innovate, and be up-to-date.

Almost half of the lecturers (42.9%) selected the following as criteria that should also be included in the LEF:

- a. Shows concern and respect for students.
- b. Helps learners to become self-directed independent life-long learners.
- c. Solves classroom problems effectively.
- d. Is an inspirational role-model to students.

A closer look at some of the criteria stated in the LEF has yielded some very interesting results. Both students (83.3%) and lecturers (88.6%) rated a lecturer who makes it easy for students to understand a subject more important than a lecturer who can make a class interesting (Criterion 2). It can be seen that students clearly know what they want and that they are aware of which lecturers are the ones who can help them achieve their purpose.

Both students and lecturers (88.5% and 77.1% respectively) agreed that lecturers should have a close rapport with their students (Criterion 3). Similarly, 84.5% of the students and 82.9% of the lecturers said that lecturers should help students outside classroom/consultation hours (Criterion 5). As for Criterion 4, only 40.2% of the students said that lecturers should always use teaching aids as an indication of being prepared for class. However, lecturers disagreed that they should always use audio-visual aids when teaching (68.6%). They also stated that they did not need to prepare handouts/notes for their students most of the time (65.7%).

Finally both students (37.9%) and lecturers (45.7%) indicated that they did not like the LEF because it requires the students to make certain assumptions about their lecturers. Some students (21.3%) also said that they needed more time to know their lecturers while lecturers (31.4%) found that the evaluation was administered at the wrong time (i.e. too near the final exam).

Conclusion

The results of the survey clearly indicate that most of the students consider themselves able to assess their lecturers and likewise, the majority of the lecturers have confidence in their students' ability to evaluate their lecturers. Students are not afraid to write exactly what they feel about their lecturers and they evaluate their lecturers based on their work

commitment and personality among other traits like friendliness and fairness, etc.

Majority of the lecturers in the study find that students can assess them fairly but some have cautioned that there are other factors that may influence students' evaluation of their lecturers such as on-going test marks, lecturers' strictness in maintaining class discipline, lecturers' strictness in keeping with deadlines and lecturers' professionalism.

It can be further concluded that students are able to award their lecturers the marks they deserve. Students have indicated that they can judge their lecturers fairly and without fear or bias. After all, they are the ones at the "receiving end" and they know how well their lecturers have "performed".

Though most lecturers state that their students are free to award them whatever scores, they are aware that factors such as student attendance and the nature of the class do affect students' assessment of them. As one lecturer has succinctly worded it : "It depends on the group of students. If they don't like you, you will be severely penalized, no matter how punctual or innovative or excellent you are!"

With regard to the LEF as an instrument for appraising lecturers, both the students and lecturers feel that it is an effective means for evaluating the performance of lecturers. However, this could be due to the fact that the LEF has been the sole instrument of measurement used in APB thus far. As such, having only being exposed to one instrument, the students and lecturers do not have any other instrument to make comparison with and therefore conclude that what they have is the best.

Despite stating that the LEF is an effective instrument, both groups have found certain criteria unsuitable. The lecturers have indicated that other criteria should also be included in the LEF. This calls for an in-depth study of the said form so that the present criteria can be redefined or restated more clearly and the suggested criteria added.

If at all the LEF is to serve as a useful instrument in determining lecturer's performance level up the career ladder, then it needs to be modified and its manner of administration be reworked. The additional suggested criteria should be incorporated into the LEF and the administration of the instrument should be carefully timed. It should, for example, not be given out towards the end of the semester when students and lecturers are involved with assessments.

For the modified LEF to be useful to both students and lecturers, first and foremost, it should serve as an instrument for formative purposes,

i.e., to help lecturers improve their teaching performance. At present, the LEF is mainly used in APB for summative purposes. Steps should be taken to enable lecturers to evaluate their own teaching ability for the purpose of improving classroom teaching and self development. Lecturers should try out various methods of evaluation for formative purposes because “formative teacher evaluation promotes discovery and self-education” (Popham: p. 316). Only then should the LEF be used by the management to make summative decisions, i.e. for the purpose of salary increments or promotions in the lecturer’s yearly appraisal.

Finally, the research team is happy to note that the majority of the students in the study are confident enough to evaluate their lecturers and that the majority of the lecturers in the study are comfortable with students evaluating their performance. Both students and lecturers have found the LEF useful albeit with suggestions for improvement. Indeed, lecturer appraisal by the students is practical and should be used to empower and motivate lecturers for better instructional performance.

Bibliography

- Acheson, K. A. and D. M. Gall (1980). *Techniques in the Clinical Supervision of Teachers*. New York: Longman.
- Bridges, E. M. (1992). *The Incompetent Teacher: Managerial Responses*. London: Falmer Press.
- Centra, J.A. (2003). Will Teachers Receive Higher Student Evaluations By Giving Higher Grades and Less Course Work? *Research in Higher Education*, vol. 44 pp. 495-514.
- Cosh, J. (1999). Peer Observation: A Reflective Model. *ELT Journal*, vol. 53 pp. 22-27.
- Dolmans, D.H.J.M., H.A.P. Wolfhagen, A.J.J.A. Scherpbier and C.P.M. Van Der Zleuten (2003). Development of an Instrument to Evaluate the Effectiveness of Teachers in Guiding Small Groups. *Higher Education*, vol. 46 pp. 431-446.
- Goldhammer, R. (1969). *Clinical Supervision: Special Methods for the Supervision of Teachers*. New York: Holt, Rinehart and Winston.

Goldhammer, R., R. Anderson, and R. Krajewski (1980). *Clinical Supervision: Special Methods for the Supervision of Teachers*. New York: Holt, Rinehart and Winston.

Lawrence, C.E., Vachon, M.K., Leake-Donald, O. and Leake, Brenda H. (1998). *The Marginal Teachers: A Step-by-step Guide to Fair Procedures for Identification and Dismissal*. California: Corwin Press, Inc.

Mahoney, J. (2004). Timeless Tactics for Quality Teaching. *The Education Digest*, vol. 69 pp. 4-10.

Manning, R.C. (1998). *The Teacher Evaluation Handbook: Step-by-step Techniques and Form for Improving Instruction*. New Jersey: Prentice-Hall.

Millman, J., Darling-Hammond. L. (1990). *The New Handbook of Teacher Evaluation*. London: Sage Publications, Inc.

Montgomery, D., Hadfield, N. (1989). *Practical Teacher Appraisal*. Kogan.

Murdoch, G. (2000). Introducing a Teacher Supportive Evaluation System. *ELT Journal*, vol. 59 pp. 54-64.

Popham, W.J. (1993). *Educational Evaluation*. USA: Allyn and Bacon.

Rea-Dickins, P. and K. Germaine. (1992). *Evaluation*. Oxford: Oxford University Press.

West, M., Bollington, R. (1990). *Teacher Appraisal: A Practical Guide for Schools*. London: David Fulton Publisher.

Wrangg, E.C., Wiheley, F.J., Wrangg, C.M. and Haynes, G.S. (1996). *Teacher Appraisal Observed*. London: Routledge.

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