**ASSESSMENT AND VALIDATION OF TEACHING EVALUATION RESULTS (TER) AND THE PERFORMANCE OF THE STUDENTS – A PILOT STUDY ON MITIGATING FUTURE TER**

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## ABSTRACT

Many institutions of higher learning in Malaysia are constantly striving to achieve recognition in the areas of its core academic strength in view of the nation’s agenda in achieving excellence in academia as well as an educational hub. In an environment where outcome based education is gaining its stride worldwide, a provision for holistic academic settings is expected and as such, the performance and the commitment of the lecturers are key success factor.

It was thought that the performances of the students are related to the commitment of the lecturers due to lack of research conducted in this area. Literature survey revealed that the majority of researches remained focused on the relationship of the employer and employee and the mitigating factors affecting the performance of the employee. At the institution level, the western model focuses mainly on monetary and policy matters and how such issues affect the performances of the teachers. One of the key factors in measuring the performance of a lecturer lies with the TER score reflecting the commitment of the lecturer in departing knowledge to the students. Past pilot study had indicated that the commitment of the lecturers is not significantly related to the performance of the students although the expectations on the attributes of commitment of the lecturers by the students remain uniform (M Shahir Liew and Noorainun, 2010, and Noorainun 2008). As such, there is a need to review the basic attributes of the TER to ensure that the students are actually given with the correct instrument to measure the performance of the lecturers.

The purpose of this study is to investigate the correlation between the commitments of the lecturer and the student’s academic achievement and the student’s views from the teaching evaluation result (TER). The primary objective of this study is to identify the commitment factors which may be derived from the TER of the lecturers who are teaching the subjects offered by the faculty and if the attributes of the TER are correlated to the student’s academic achievement and to determine whether the attributes of the TER can be part of the commitment factors which have an impact on the scholastic achievements of the students. A well designed instrument related to the questionnaires would be the main key in ensuring that the eventual analyses of the performance of the students can be correlated with the commitment of the lecturers with high certainty. This research tests this hypothesis through quantifying the results from the TER and the performance of the students. The results obtained are then correlated against previous study related to the commitment and performance of the students in order to appraise and detect any anomalies related to the process in quantifying the attributes of the TER. Once such findings have been established, the pilot study can then be extended to other institutions and results obtained are expected to converge to a real scenario after several cycles of analyses, both quantitatively and qualitatively.

**KEYWORDS**

Teaching evaluation results, assessment, validation, performance, commitment, correlation, quantitative, qualitative.

## 1.0 literature review

## Professional commitment is highly influential for a teacher’s success during times of change but also for systems in seeking to bring about change states by Crosswell and Elliott (2001). Teacher commitment has been identified as one of the most critical factors for the future success of education and schools (Huber, 1999). Further, teacher commitment is closely connected to teachers’ work performance and their ability to innovate and to integrate new ideas into their own practice, absenteeism, staff turnover, as well as having an important influence on students’ achievement in, and attitudes toward school (Nias, 1981). A National Comprehensive Center for Teacher Quality (2007) synthesis of research states that many studies indicate that some teachers contribute more to their students’ academic growth than other teachers and also almost no research can systematically explain the considerable variation in teachers’ skills for promoting student learning.

**2.0 PROBLEM STATEMENT AND RESEARCH OBJECTIVES**

In the past, **s**tudents rated lecturers' enthusiasm, interest, and charisma most highly, along with clear handouts and good presentation skills. in other studies, students have commonly criticized lecturers for: inaudibility, incoherence, pitching material at the wrong level, not emphasizing the key points, and poor chalkboard/whiteboard/overheads. Thus, the used of TER or re-creation of a new TER is an excellent approach by university, because university can create and implement professional development plans for lecturers, improve the current resources, and indirectly sending a message to lecturers that their professional growth is valued. One aspect of teaching which correlates with student learning is the level of planning used to drive instruction. Lesson plans are more likely to be positively related to improve student outcomes when plans are able to first, link student learning objectives with teaching activities, second, describe teaching practices to maintain students’ attention, third, align student learning objectives with the district and state standards, and accommodate students with special needs.

Crosswell and Elliott (2001) outlined six categories representing different ways in which the teachers perceive, understand and conceptualise the phenomenon related to the commitment of teacher. The six identified categories are: (i) teacher’s commitment as a ‘passion’, (ii) teacher’s commitment as an investment of time outside of contact hours with students, (iii) teacher’s commitment as a focus on the individual needs of the students, (iv) teacher’s commitment as a responsibility to impart knowledge, attitudes, values and beliefs, (v) teacher’s commitment as ‘maintaining professional, and (vi) teacher commitment as engagement with the school community.

The objectives of the finding will actually illuminate firstly on the nature of the lecturer in their quest for continual learning and the changes made in their teaching practice. Secondly, the imminent nature related to the restructuring of the TER, thirdly, the benefits to be derived from the TER for the students, and finally, whether the conventional method of teaching is still considered to be favorable to the students. The primary objective of this study is outline as follows:

1. To identify the commitment factors which may be derived from the TER of the lecturers who are teaching the subjects offered by the faculty and if the attributes of the TER are correlated to the student’s academic achievement.
2. To determine whether the attributes of the TER can be part of the commitment factors which have an impact on the scholastic achievements of the students.
3. To determine whether the attributes of the TER can be part of the commitment factors which have an impact on the scholastic achievements of the students.
4. To ascertain if any of the attributes in the TER is necessary or relatively used and evaluated by the students.
5. To determine whether the attributes of the TER can be part of the commitment factors which have an impact on the scholastic achievements of the students.

The limitation of the study includes the following: first, the study is concentrated on one institution; second, the study is confined to lecturers from a faculty involved with foundation programme, and; finally, this study is exploratory in nature.

## 3.0 RESEARCH METHODOLOGY

A total of seven courses are involved in this research. In addition, a total of 433 students have responded and evaluated these lecturers via the TER which is used in the analysis. Students will be tested on their academic achievement from the assessment and the final examination. The information related to the lecturers’ commitment hinges upon the teaching evaluation result (TER). The final scores from the TER are used to benchmark and to interpret the lecturers’ commitments based on different subjects. The impact derived from the analysis of the TER is used to determine the lecturers’ state of preparation and perception in classroom and beyond classroom for students to perform and to achieve academic excellence.

1. Sample and Respondent:The students come from varied demographic background such as sex, race, ethnic origin, socio-economy with different highest academic qualification such as Sijil Pelajaran Malaysia (SPM) and/or Sijil Tinggi Pelajaran Malaysia (STPM). There are seven courses used in this study. This research categorized the TER percentage from more than 85% and less than 75%.
2. Analysis of Data:Analysis is focused on the data extracted from the TER in ascertaining the commitment of the lecturers and if such commitment has an impact to the students’ academic achievement. The data was coded and analysed using SPSS ( Version 18).

**4.0 DISCUSSION OF RESULTS**

4.1 Cross Tabulation of Grades and TER

The distribution of grades with respect to the TER score is analyzed. It was found that there are more than 30% of the students who have obtained a grade of A- and better for the TER < 80%. At the same token, it was also found that there are about 10% of the students who have secured a grade of A- and better for the TER >= 80%. It was found that the the distribution of each individual course and the grades are uniform for two of the courses, a normal distribution for three of the courses, and two courses have a distribution skewed towards A- and better.

4.2 Mean Scores of Courses

The variation between the highest mean score and the lowest mean score is approximately 12 marks. Since the standard deviations of the scores for the courses are generally large, an F-test is made to test if the mean scores of at least two groups of courses are different. The result of the F-test at α = 0.05 significant level indicates that the mean score of at least two groups of the courses are significantly different.

4.3 Distribution of Grades with Lecturers

The distribution of grades attained by the students with the lecturers indicates uniformity with one lecturer, normally distributed for two lecturers, and skewed to A- and better for one lecturer. From the F-statistics, it was found that the mean score of at least two groups of lecturers are significantly different at a significant level of 0.05.

4.4 Test of Normality

The variables related to the analysis from the grades and to the TER are subject to normality check using Kolmogorov-Smirnov since the distribution obtained is found to be inconsistent. The test indicates that the variables are generally not normally distributed.

4.5 Non-Parametric Study – Spearman Correlation

In view of the variables not normally distributed, a non-parametric statistics is used to study the variables by observing the Spearman’s rho correlation. This correlation is shown in Table 1. The test statistics is testing on the relationship between total marks and TER, and on each of the questions.

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Table 1 Spearman’s rho correlation of the variables

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| Variable | Spearman Correlation |
| TER | -0.133\* |
| Classes are well organized and well run | -0.165\* |
| Classes start and finish as scheduled | -0.157\* |
| Lecturers and tutorials are presented and well understood by students | -0.116\* |
| Courses notes are sufficient in coverage of the subject | -0.125\* |
| I have found the subject interesting | -0.81\* |
| I have found the classes stimulating | -0.098\* |
| The subject contents are relevant to my personal development and future career | -0.155\* |
| During lecture/tutorial periods there are opportunities to ask questions and discuss ideas | -0.158\* |
| There is a good amount of interactions in the classes for this subject | -0.111\* |
| I have trouble keeping up with the pace in this subject | -0.035\* |
| The teaching method has helped students to maximize their learning | -0.128\* |
| The assessment for this subject is explained to students and is considered appropriate | -0.173 |
| The assessment has been fair and reasonable | -0.212 |
| There has been sufficient feedback from the assessment | -0.180\* |
| Sufficient help has been provided for individual problems | -0.125\* |
| It has been easy to obtain assistance when necessary | -0.129\* |
| The lecturer is accessible outside the classroom | -0.195\* |
| \*\*. Correlation is significant at the 0.01 level (2-tailed). |  |

From Table 1, the variables from the TER i.e., classes are well organized and well run, classes start and finish as scheduled, courses notes are sufficient in coverage of the subject , the subject contents are relevant to my personal development and future career, during lecture/tutorial periods there are opportunities to ask questions and discuss ideas, the teaching method has helped students to maximize their learning, the assessment for this subject is explained to students and is considered appropriate, the assessment has been fair and reasonable, there has been sufficient feedback from the assessment, sufficient help has been provided for individual problems, it as been easy to obtain assistance when necessary, the lecturer is accessible outside the classroom, and the lecturer is accessible outside the classroom are significant at 0.01 level. TER variables related to lecturers and tutorials are presented clearly and well understood by students, I have found the classes stimulating, and there is a good amount of interactions in the classes for this subject are significant at 0.05 level. Further, TER variable related to; I have found the subject interesting and I have trouble keeping up with the pace in this subject are not significant. In addition to the above, all of the questions including TER have negative relationship with the total marks. However, the strongest correlation value of -0.212 which is “The assessment has been fair and reasonable” is not sizeable enough or possess weak relationship.

**5.0 CONCLUSION AND RECOMMENDATION**

The following conclusion can be made:

1. There are more than 30% of the students who have obtained a grade of A- and better for the TER < 80%. Also, there are about 10% of the students who have secured a grade of A- and better for the TER >= 80%. This indicates that a high TER score does not guarantee that the students will perform well academically.
2. The distribution of the grades based on the courses does not follow a definitive pattern or any particular statistical distribution. This indicates that the variance of the questionnaires is high.
3. There is no to reflect that the students’ academic performances are actually related to the TER scores
4. The method of Kolmogorov-Smirnov was used to obtain the existence of normality. Nevertheless, the results of the test indicated that all of the variables are generally not normally distributed even at a significant level 0.01.
5. 13 out of 17 of the questionnaires are considered to be significant questionnaires.

Due to the limitation and the unavailability of matching each student to their evaluation towards the lecturers, the results presented above is weakly conclusive. Therefore, it is recommended that future research in similar areas to incorporate the matching of students be made with the lecturers to obtain reliable and conclusive result.

The results from this study support and recognized the need of TER as one of the tools to measure lecturer’s commitment and its impact to the student’s academic achievement. Some of the questionnaires may be modified to reflect the findings made in this report presented herein. The significance of the questionnaires alone is sufficient to justify the need to continue with the TER.

**LIST OF REFERENCES**

Tengku Noorainun., (2008), “*Correlation of students academic performance and lecturers’ commitment in a Private University”*. Master thesis submitted to the Graduate Study, University Malaya.

M. S. Liew, and Tengku Noorainun, “*A Study On The Effect Of Lecturers’ Commitments In Relation With The Students’ Academic Performance Of A Private University Located In The Klang Valley*”, 11th International Business Research Conference, **Sydney** Harbour Marriott Hotel,Circular Quay,30 Pitt Street, Sydney, Australia, 2-4 December 2009.

M. S. Liew and Tengku Noorainun T.S, “*The Correlationship Between the Performance of Students and The Commitment of Faculty Members in an Institution of Higher learning - A Pilot Study*”, The 3rd Regional Conference on Engineering Education & Research in Higher Education, 7 to 9 June, Grand Margherita, Kuching, Malaysia. ISBN 978-983-9805-87-1

Crosswell, L., & Elliott, B. (2001). *Committed Teachers, Passionate Teachers: the dimension of passion associated with teacher commitment and engagement.*

Huber, M. (1999). *Co-ordination within schools; Commitment of teachers and students and student achievement.* Education Research and Evaluation, 5 (2), pp. 139-156.

National Center for Education Statistics, (1997). *Teacher professionalization and teacher commitment: A multilevel analysis.*  United States Department of Education.

Nias, J. (1981). *Commitment and motivation in primary school teachers*. Educational Review 33 (3), pp. 181-190.