

Student Evaluation of Lecturing at the University of Papua New Guinea: A Case of the School of Medicine and Health Sciences

Boe Lahui-Ako

Abstract

This paper investigates the strengths and weaknesses of teaching and learning based on the results of the student evaluation of lecturer teaching performances, and suggests strategies lecturers could use to address weaknesses in order to enhance their teaching performances and improve the learning of the students. The analysis of the results concluded that for professional development, lecturers should engage in action research to address weaknesses identified through the evaluation process. Such active involvement could result in lecturers effecting substantive changes to their teaching practices. Since teaching takes place in an interactive system, it is important that everyone involved in this practice support each other by all means to ensure that changes in teaching are effected. Adult learning principles such as experiential learning approaches and mentoring are applied in an environment conducive to promoting effective teaching and learning and enhancing student achievements.

Introduction

With the expansion and restructuring of the University of Papua New Guinea (UPNG) since the year 2000, lecturers at the University face unprecedented problems of adjustments in the manner in which they approach teaching and learning at the University. According to Biggs (2003), problems of adjustments, such as to larger classes containing a greater spread of student ability and motivation, to under-resourcing, and to market driven courses expected by the employers, require lecturers to reflect on their own teaching performances. This is a process that is structured in action research in which possible solutions to problems related to teaching and learning are carefully monitored to gauge success. Teaching at the University can be effective if students are engaged in the use of higher-cognitive level processes in learning-related activities such as theorizing, generating new ideas, reflecting, applying and problem-solving.

The aims of this paper are two-fold. Firstly, to identify the strengths and weaknesses of teaching and learning based on the results of the student evaluation of lecturer teaching performances conducted by the staff of the Centre for Teaching, Learning and In-House Training in September 2003 at the School of Medicine and Health Sciences (SMHS), UPNG. Secondly, to suggest

strategies lecturers could use to address weaknesses in order to enhance their teaching performances and improve the learning of the students.

Materials and methods

The instrument

The 'Student Evaluation of Lecturing' questionnaire was used to collect data for this evaluation. The questionnaire contained 24 behaviors, which described teaching and learning tasks. The tasks were grouped into five categories: organization, explanation, presentation, interaction and assessment. In the questionnaire, students were asked to indicate on a Likert Scale of one to seven the extent to which the lecturer undertook each of the tasks at the time of responding. For each task (from item 1 to 19) in the organization, explanation, presentation and interaction categories, 1 represented 'all or almost all', 2 represented 'most', 3 represented 'about half' 4 represented 'only some', 5 represented 'very few or none', 6 represented 'entirely inappropriate' and 7 represented 'attended too few'.

In the assessment category, for item 20, 1 represented 'at the very first class in the course', 2 represented 'by the end of the first week', 3 represented 'by about mid-semester', 4 represented 'only fully by semester's end', 5 represented 'I do not fully understand even now', 6 represented 'entirely inappropriate' and 7 represented 'attended too few'. For items 21 to 24, 1 represented 'all of my assessment work', 2 represented 'most', 3 represented 'about half', 4 represented 'only some', 5 represented 'very few or none', 6 represented 'entirely inappropriate' and 7 represented 'attended to few'.

Procedure in the administration of the questionnaire

The questionnaire was administered to students in the different disciplines within the Divisions of Health Sciences and Nursing from the 22nd to 26th September 2003 in a schedule that was designed by the Divisional Heads of both divisions. Respondents were given 20 – 30 minutes to complete the evaluation after initial introductions on the purpose of administering the questionnaire. Students were also informed not to identify who they were on the questionnaire.

Limitations

Students enrolled in the Bachelor of Medicine and Bachelor of Surgery (MBBS) program did not participate in this evaluation as those who teach in the Problem-Based Learning approach regarded the questionnaire as not addressing the teaching and learning strategies they use.

Subjects

For this evaluation, lecturers were invited to voluntarily participate by applying through their respective Divisional Heads. A total of 27 lecturers participated

(14 males and 13 females). The students came from the different year groups enrolled in the different courses the lecturers taught. Those students who participated completed a total of 377 questionnaires.

Analysis of data

The analysis of data was undertaken based on the definition of what was considered satisfactory performance or unsatisfactory performance of tasks related to the teaching and learning behaviors. If it were to be considered that a satisfactory performance was made, it would be rational that these tasks were rated 1 or 2. It was not sufficient for the tasks to be rated 3, 4, 5, 6, or 7 to indicate that the tasks were performed satisfactorily. Therefore, in using the Likert Scale, ratings by respondents indicating 3, 4, 5, 6, or 7 were considered as unsatisfactory performance. The data obtained from the responses to specific tasks were analyzed for themes and patterns, which were described and illustrated with tables and graphs.

Results

In the category in relation to *organisation* of the teaching and learning activities, the lecturers were generally rated as having a satisfactory performance. Seven tasks were identified under this category. Table 1 shows the overall results of the total responses for each task from the questionnaires. The results of tasks 1, 2, 3, 4, 5, and 7 indicate that there was a marked negative difference in ratings, whereas for task 6, it indicated a slight negative difference.

Table 1. Total responses for each task under organization (N=377)

Organization Performance Task	Satisfactory		Unsatisfactory	
	No.	%	No.	%
1. The topic to be covered in each lecture and tutorial were indicated when this lecturer first began his or her lectures and tutorials for the course.	343	91.0%	34	9.0%
2. The sequential arrangement of the lectures and tutorials led to the logical development of the overall course.	309	82.0%	68	18.0%
3. During each lecture and tutorial, the lecturer described what students were expected to learn from that lecture and tutorial.	309	82.0%	68	18.0%
4. The presentation of each lecture and tutorial content enabled me to see how each section were interrelated or connected.	250	66.3%	127	33.7%
5. The topics taught in the lectures and tutorials were complemented by supporting course materials.	313	83.0%	64	17.0%

6. Supplementary reference materials (not texts) were specified during the lectures and tutorials were accessible.	190	50.4%	187	49.6%
7. Lectures and tutorials started and ended at the scheduled times.	285	75.6%	92	24.2%

In the category in relation to *explanations* given by the lecturers to the students, the lecturers were also rated as having a satisfactory performance. Four tasks were identified under this category. Table 2 shows the overall results of the total responses for each task from the questionnaires. The results of tasks 8, 9, 10, and 11 indicate that there was marked negative difference in ratings.

Table 2. Total responses for each task under *explanation* (N=377)

Explanation Performance Task	Satisfactory		Unsatisfactory	
	No.	%	No.	%
8. Explanations made use of concepts and ideas that I had previously learned, or with which I was already familiar	276	73.2%	101	26.8%
9. The lecturers drew students' attention to important aspects of the lectures and tutorials content.	279	74.0%	98	26.0%
10. The lecturer used examples, applications or analogies that prompted me to make clarifying connection or interpretations.	268	71.1%	109	28.9%
11. I became interested in learning more about and /or extending ideas presented in the lectures and tutorials.	276	73.2%	101	26.8%

In the category in relation to *presentation* of the teaching and learning activities, the lecturers were again rated as having a satisfactory performance. Five tasks were identified under this category. Table 3 shows the overall results of the total responses for each task from the questionnaires. The results of tasks 12, 13, 14, 15, and 16 indicate that there was a marked negative difference in ratings.

Table 3. Total responses for each task under *presentation* (N=377)

Presentation Performance Task	Satisfactory		Unsatisfactory	
	No.	%	No.	%
12. The lecturer's speech and pronunciation were clear.	335	88.9%	42	11.1%
13. I could understand the language and vocabulary used by the lecturer.	327	86.7%	50	13.3%
14. The lecturing pace allowed me to think about the content as it was presented	264	70.0%	113	30.0%
15. I could read or follow any visual presentations that the lecturer used.	299	79.3%	78	20.7%

16. My attention and interest was sustained during the lectures and tutorials.	266	70.6%	111	29.4%
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In the category in relation to *interaction* between the lecturers and the students, the lecturers again were rated as having a satisfactory performance. Three tasks were identified under this category. Table 4 shows the results of the total responses for each task from the questionnaires. The results of tasks 17, 18, and 19 indicate that there was a marked negative difference in ratings.

Table 4. Total responses for each task under *interaction* (N=377)

Interaction Performance Task	Satisfactory		Unsatisfactory	
	No.	%	No.	%
17. The lecturer responded positively when students made comments or asked questions during lectures and tutorials.	305	80.9%	72	19.1%
18. The lecturer gave direct and focused answers to students' questions	295	78.2%	82	21.8%
19. The lecturer assisted students during the lectures and tutorials to resolve difficulties arising from the lectures and tutorials.	271	71.9%	106	28.1%

In the category in relation to *assessment* of the teaching and learning activities, the lecturers were also rated as having a satisfactory performance. Five tasks were identified under this category. Table 5 shows the overall results of the total responses for each task from the questionnaires. The results of tasks 21, 22 and 23 indicate that there was a marked negative difference in ratings whereas for tasks 20 and 24, a slight negative difference in rating was indicated.

Table 5. Total responses for each task under *assessment* (N=377)

Assessment Performance Task	Satisfactory		Unsatisfactory	
	No.	%	No.	%
20. I understood the contribution of my final grade that each assessment components would be made.	213	56.5%	164	43.5%
21. I understood what I needed to do to satisfy the requirements of each assessment component.	313	83.0%	64	17.0%
22. The assessment component matched directly with what I expected to learn from the course.	280	74.3%	97	25.7%
23. Marked assessments were returned with comments and suggested improvements.	263	69.8%	114	30.2%
24. Marked assessments were returned quickly enough for the feedback to be useful.	198	52.5%	179	47.5%

An analysis of the strengths and weaknesses indicated that there was an element of ambiguity in students' ratings in comparison to what some actually stated in the 'other comments' section of the questionnaires.

Table 6 A summary of the major strengths and weaknesses under the following themes – Teaching Methods/Approaches (Explanation, Presentation and Interaction), Curriculum Planning (Organization) and Assessment (Assessment).

1. Teaching methods or approaches: *Explanation, Presentation, Interaction*

Strengths: Most lecturers' were reported to be hardworking and committed to their profession. Most lecturers are kind, caring, supportive and very helpful to students both academically and spiritually. They display patience and oversee students' needs to learn. Their attendance at classes is punctual thus starting and finishing on time. Most lecturers demonstrate good teaching skills and subject content knowledge.

Weaknesses: Some of the lecturers need to be mindful of how to effectively pace their lessons for overall effectiveness in the delivery of their lessons. More up to date textbooks are required to enhance lecturers' delivery of subject content to students. In order to enhance student learning, some lecturers need to adopt the experiential or adult learning approaches. Lecturers need to encourage students to use their personal experiences at their workplaces to enhance their own learning. Some lecturers need to develop effective learning skills.

2. Curriculum planning, *Organization*

Strengths: The majority of the lecturers are always well prepared, organized and cover their content of the courses well. Most courses are well co-ordinated.

Weaknesses: Advance planning and preparation of lecture content is vital for effective delivery with the use of appropriate teaching aids to help students understand and maintain focus throughout the lecture period. Library resources are limited which affects students' research for assignments.

3. Assessment

Strengths: Most of the lecturers provide effective feedback by re-teaching areas of concern raised by students.

Weaknesses: Feedback on assignments must be returned to students on time.

Discussion

The results indicate that lecturers at the School of Medicine and Health Sciences, particularly those in the Division of Health Sciences and the Division of Nursing performed their duties as lecturers satisfactorily.

In comparing the results of the ratings against the strengths and weaknesses as identified by students in the 'other comments' section certain patterns developed that need discussion.

Firstly, in relation to organization of teaching and learning activities, almost 50% of the student respondents indicated that supplementary reference materials (not textbooks) specified during the lectures and tutorials were not accessible by them, however, the other 50% indicated that they were accessible! This result indicates that there are some courses within the two Divisions that are not providing supplementary reference materials to their students to enhance the presentations of the subject content following both lectures and tutorials. However, there are the other courses that provide students supplementary materials. This result indicates that some lecturers who co-ordinate courses in both the Division of Health Sciences and the Division of Nursing need to ensure that supplementary materials that students require to help them in doing further reading need to be provided as part of their responsibility towards enhancing teaching and learning at the Divisional level.

Secondly, student respondents indicated a significant negative difference (90% out of 100%) in satisfactory performance by lecturers in conducting routine teaching activities such as ensuring that the topic to be covered in each lesson are indicated in the beginning of the class. Lecturers also provided motivation so that students showed more interest in learning the subject content. In addition, lecturers extended ideas presented in lectures in tutorials that followed. These are teaching and learning activities that lecturers automatically do to enhance teaching and learning in the classroom.

Thirdly, in relation to Assessment, more than 40% of the student respondents indicated that they did not understand how each assessment component contributed to their final grade. Moreover, just less than 50% indicated that their marked assignments were not returned quickly enough for the feedback to be useful. These results indicate that lecturers need to be more mindful of the fact that for most tertiary students the very existence of assessment can be a factor, which motivates them to work harder at their studies. Work which is assessed, and particularly work which counts towards a final grade, often is undertaken more seriously and diligently than work which is not assessed. Negative consequences of such understanding of the importance of assessment as a positive motivational force could lead students to neglect some tasks and use poor learning strategies for others because they feel overloaded with assessed work. For some students it may even cause more extreme forms of anxiety, which seriously threaten their academic careers and mental health. Second, it can prevent or discourage students from pursuing aspects of their courses, which really interest them, thus dulling their enthusiasm for further learning in the subject.

In relation to the late return of marked assignments, lecturers need to be made aware that active approaches to learning are more effective than more passive approaches (such as uncritical reading and rereading of course materials), resulting in greater learning and improved retention for a given expenditure of

time. Lecturers need to use assessments to help stimulate and consolidate student learning as well as enhance learning by structuring the study efforts of the students. Research has shown that if learning and retention is to be improved, study time must be divided into several sessions over an extended period of time, rather than concentrated into one or two longer sessions (especially the period before a final exam!) that is the current practice experienced by most of the students.

Fourthly, a weakness that was frequently stated in the 'other comments' section of the questionnaires, especially by students attending courses taught by the Division of Nursing, was that they wanted to be treated as adults rather than children. Adult learners are not empty vessels that need to be filled with information by lecturers. They are adults coming with personal and professional experiences that need to be recognized by the lecturers and used effectively in the teaching and learning processes.

Finally, one of the aspects of effective teaching that was pointed out as lacking in some lecturers was the effective pacing of lessons. Lecturers were found by students to be either too fast or too slow in the delivery of their lesson contents. It indicates that the planning and preparation of lessons by some lecturers need to be effectively executed prior to the teaching of the courses. There were instances that lecturers were found to be coming into classes unprepared with appropriate teaching aids whereby delaying the progress of the presentation of the lessons. This according to students was not acceptable at the tertiary level.

These findings indicate the importance of lecturers to adopt and adapt effective teaching strategies to enhance their teaching performances in order to contribute positively towards students' learning in the classrooms.

One such strategy is the adoption of 'action research' in their practice. Studies conducted by Zuber-Skerritt (1991) conclude that action research offers a positive constructive solution to the problems teachers encounter in their practice. Action research, according to Killen & Killen (1991) could also provide a framework and methodology for self and peer appraisal, evaluation, improvement and development in a supportive and formative environment on a voluntary basis. Zuber-Skerritt adds that if action research is conducted properly, teaching and learning practices could be improved. It can also enhance the participants' understanding of the teaching and learning practices leading towards greater job satisfaction.

Effective teaching, according to Kember and Kelly (1993) and Killen (1996), means becoming a reflective practitioner. Biggs (2003) points out that a systematic reflective practice is what action research are about. He explains that it requires the lecturer to define the problem; implement and monitor change, and fine-tune. For a lecturer to develop his/her teaching skills, he/she is required to adopt reflective teaching strategies. This means that the more he/she is given exposure to apply new approaches or skills in teaching and learning, he/she is likely to bring about long-lasting changes in his/her classroom practices. However, Biggs warns that if action research is to be

conducted effectively, the lecturer need to teach in a way that he/she can personally sustain and justify his/her strengths and weaknesses in his/her practices. Moreover, since teaching takes place in an interactive system, in an institution with a particular mission statement, with colleagues, in a department or division that has a particular climate and philosophy, everybody who is involved, need to actively participate and support the cause. More importantly, if the environment in which the lecturer works and teaches in is not conducive to accepting these changes in practice, then those changes will never take place.

Adopting and implementing adult learning principles in teaching would be another strategy that lecturers could adopt to enhance student learning. The use of experiential learning, a learning approach suited to adult learning, which uses the learners' experiences in the workplace to reinforce learning would be one of the facilitation strategies that could be adopted by the lecturers. Bittel (1989) argue that most adults are self-directed learners. In adult teaching and learning situations, the self-directed learner assumes an increasing share of the responsibility for learning, because of the fact that he or she brings to learning situations valuable experiences as well as habits and biases, which need revision. The learner learns because there is a need or interest followed by purposeful activity to achieve a specific goal. Stanfield (1997) supports this notion by pointing out that as humans, we tend to learn best when we need to know something.

Lecturers could use this approach to teach knowledge, skills and attitudes that relate to the subject content that they are teaching. Learners reflect on their previous experiences and relate their experiences to the new information that is presented, thereby interpreting the new information and making decisions in how the new information may change the knowledge, skills or attitudes they had previously. The lecturer could use this knowledge of the learners to establish the known and lead to teaching the unknown, thereby making the learning process become more meaningful for the learners.

Another adult learning strategy that could also be used by lecturers is mentoring. Mentoring according to Cohen (1995) refers to the one-to-one relationship that evolves through reasonably distinct developmental phases between the mentor and the mentee (the adult learner) (whether it be a student or an employee). Cohen points out that mentors can make a difference primarily because their competent mentoring behaviors enable them to transmit the essential quality of trust. This quality is a characteristic of adult educators who are perceived as truly committed to the development of adult learners, regardless of their gender, age, or ethnicity, or whether the mentors and mentees are officially labelled as instructors and students or managers and employees. Cohen adds that mentors who are viewed as credible persons can thus more effectively interact with adult learners for the purpose of enhancing their intellectual and affective (emotional) development.

Mentoring if conducted effectively could encourage collaborative participation in the educational experience and allow mutual reflection about the process and

results of learning. In the process of mentoring, the mentor therefore must assume responsibility for promoting a transactional process of learning, which involves active involvement with a mentee as a collaborative partner in learning. This nurturing attitude of the mentor towards the mentee could result in the mentor enhancing the personal, educational and career growth of the mentee.

In conclusion, it is very important that the three major conclusions be addressed:

For staff and professional development purposes, lecturers need to be encouraged by the school and central administration of the University with assistance provided by the Centre for Teaching, Learning & In-House Training to engage in action research to address weaknesses identified through the teaching evaluation process. Such active involvement in action research and with active encouragement from the authorities could result in lecturers effecting substantive changes to their teaching practices.

Since teaching takes place in an interactive system, it is important that everyone involved in this practice support each other by all means to ensure that changes in teaching are effected in an environment conducive to promoting teaching and learning. Effective collaborative participation in the educational experience and the encouragement of mutual reflection about the process and results of learning could enhance student achievements.

The effective application of adult learning principles such as experiential learning approaches and mentoring in an environment conducive to promoting effective teaching and learning could also enhance student achievements. As self-directed learners, adult learners are in a better position to take full responsibility of their own learning and intrinsically motivate them to perform well in their studies.

This paper calls on the University of Papua New Guinea's Central and School administrators to seriously consider the three major conclusions, by establishing an environment within the University that is conducive to promoting both teaching and learning. The Centre for Teaching, Learning & In-House Training should be utilized by the administrators by encouraging and nominating lecturers to attend in-house training courses to improve or enhance their teaching performances. Staff teaching appraisals should also be viewed positively as a tool aimed at improving lecturers' teaching performance.

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Author

Mr Boe Lahui-Ako is the founding Director of the Centre for Teaching, Learning & In-House Training at the University of Papua New Guinea. He has previously taught as a Lecturer in Educational Administration at the University of Goroka. His specialization is in the field of Instructional Leadership in Schools. Email: lahuib@upng.ac.pg