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In most tertiary institutions determining student satisfaction and gauging the effectiveness of teaching is commonly achieved by the use of student evaluations. How reliable are these evaluations and what do they measure? How do students perceive the evaluation process and the resulting feedback?

This paper examines student evaluations from both student and academic staff perspectives. It looks firstly at the administration, analysis and interpretation of student evaluations, the tools used to obtain data, and factors that influence student responses.

Secondly, the perceptions of academic staff is sought, regarding the influence of evaluation outcomes on their teaching practices. Current literature is reviewed to provide a wider view of evaluation methodologies, particularly in the field of computing education, both in New Zealand and other countries.

Keywords

computing education, student evaluations, factors influencing teaching practices

1. INTRODUCTION

"For those who dread opening their evaluation packets, the irony is clear. Even the best teachers get bad evaluations" (Bodie, 1994).

In order to maintain their own self worth, many students, who are not doing well academically will find reasons, preferably beyond their control, to explain why they are not succeeding. (Covington, l976). The obvious target is the person delivering the course. Their opinion of the teacher, whether true or only perceived, is very real to the student. Unfortunately evaluations are sometimes used as a chance to release frustrations and get even with the teacher.

When teachers receive negative evaluations they often dismiss them by questioning the students' ability to evaluate courses accurately or alternatively blame the administration of evaluations. (Bodie, 1994). In addition, course administrators often use evaluations to satisfy requirements for tenure, promotion, and post tenure review (Gallagher, 2000; Martinson, 2000; Murkison & Stapleton, 2001).

It would be difficult to find a course administrator who, at sometime, has not had conflict with teaching staff regarding student evaluations (Murkison & Stapleton, 2001). Not only are there three separate parties, with separate opinions of the value and use of student evaluations, each party is often distrustful of the way in which others use evaluations (Sojka, Gupta, & Deeter-Schmelz, 2002). Although there is much conflicting literature, generally the consensus is that evaluations have some value and that they are here to stay (Gallagher, 2000; Hobson & Talbot, 2001; Sojka *et al.*, 2002).

This paper looks at evaluations from the perspective of these three groups. A small case study was done involving information technology students at the Eastern Institute of Technology (EIT), a medium sized polytechnic generating approximately four thousand EFTS annually. In addition some suggestions for improved use of evaluations are also made.

2. STUDENT PERSPECTIVE

Students were found to be generally concerned with how evaluations are used and whether their opinions are taken seriously. As student evaluations are generally made at the end of a course any resulting changes are not implemented until the course is offered again. Current students therefore do not experience these changes, reinforcing the idea that their comments are being ignored. (Sojka , Gupta & Deeter-Schmelz 2002). In addition, students tend
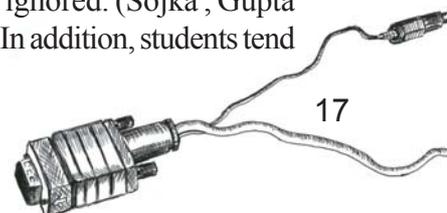
to be over surveyed. This in itself can lead to frustration and annoyance at surveys and those who administer them (Kalton, 1983). While some students see value in the evaluation process, many others view them as a waste of class time. There may well be a correlation between the number of evaluations carried out per term or semester, and the amount of consideration students give to their responses. This could be the subject of further research on our part.

At our own institute (EIT) there has been a conscious attempt made to reduce the number of evaluations. In order to allow students to see a result, a summary of evaluations results is placed in the library, and course controllers report back to students and discuss any major points of concern.

Most people will remember at least one incident in their student life when a teacher has 'rubbed them up the wrong way academically', or whose teaching practice was a direct antithesis of their learning style (Martinson, 2000). Add personality conflicts to these factors and it not surprising that students often view evaluations as a chore and may respond in an almost nonchalant manner.

3. TEACHER PERSPECTIVE

The lecture is the most common form of delivery in tertiary institutions and is usually associated with the transmission approach to learning. The teacher imparts facts which students are expected to reproduce in an examination (Centra, 1993). "Listen to me. Copy down these facts and learn them." Students generally see this mode of delivery as involving the least effort. "Just tell what I need to learn for the examination." The feedback we received was that generally teachers prefer to develop the students' organisational skills, as well as cognitive skills such as original thinking and problem-solving techniques. This requires active participation from students and may meet with resistance from the student . However, professional teachers must be strong enough to do what is in the student's interest (Martinson, 2000), rather than what they know may result in better evaluations.

The wording of evaluation forms was found to favour the transmission approach to teaching:

■ The teacher knows their topic.

■ The teacher is well prepared for class.

These questions promote teacher-centred learning. (Centra, 1993)

Evaluations generally lack questions on study and learning production or on the development of the students cognitive skills such as original thinking and problem-solving techniques. "This automatically creates unfairness" (Murkison & Stapleton, 2001). Murkison & Stapleton (2001), stated that a conscientious teacher will have expectations that students are equipped with certain levels of understanding, but also, that they will undertake independent study. A teacher will not necessarily receive recognition for this assumption and could well be ranked low as a teacher. In their investigation of the relationship between evaluation ratings and study production, they concluded that there was a strong indication of a negative relationship between rankings and study expectations of teachers of students. This could not be proven to be significant because of other unmeasured explanatory variables such as teaching styles and difficulty of subjects.

Statisticians accept that comments in questionnaires are generally only made by people with strong views on a subject. Those with neutral opinions tend not to comment (Deming, 1960; Kalton, 1983; Kish, 1995). As with students, teachers commented how they often have students to whom they cannot relate, which can result in a personality conflict . Washbum 1993, (cited Bodie, 1994) stated that from personal experience, about one in seven students are generally unsatisfied with the course. Hill 1993, (cited Bodie, 1994) thought the figure was closer to one in ten or fifteen. The following scenario is therefore possible. In a class of thirty, approximately three or four could be dissatisfied and make negative comments, while the remainder, twenty-five or six, who are satisfied with the course make few if any comments. The result is a biased evaluation of predominantly negative comments.

The length of time teachers have been teaching, and their understanding of the reasons that students make negative comments is immaterial, they hurt (Bodie, 1994). Good teachers generally want to reach every student and find rejection hard. "Arguably some of those teachers who hate evaluations may be counted among the best educators. They care so much it hurts. But they don't feel like good teachers. They feel lousy" (Bodie, 1994)