Journal of Economics and Behavioral Studies
Vol. 5, No. 5, pp. 268-281, May 2013 (ISSN: 2220-6140)

Role of Student Ratings of Lecturers in Enhancing teaching at Higher Education Institutions: A case study of the Durban University of Technology

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Abstract: Evaluation of the quality of programmes by students is considered an important assessment instrument in determining programme effectiveness within higher education institutions. Student ratings of lecturers are only a partial assessment of programmes, since other evaluations beyond students' perceptions are also considered important within higher education institutions. Student ratings are not only important in determining how students perceive their programmes within a highly competitive higher education landscape in South Africa, but also highlight the strengths and weaknesses of programmes which can be used as an impetus for programme enhancement, especially in view of the increasing number of students entering higher education, while government spending is steadily diminishing. The purpose of this study is to assess student ratings of teaching competencies that can be used for programme evaluation. A quantitative approach was used to analyse the various elements within specific domains in the lecturer evaluation instrument used by the Faculty of Management Sciences at the Durban University of Technology (DUT). The data reported are suggestive of the usefulness of identifying student ratings of important teaching competencies, which is considered as important in a growing student centred orientation within higher education institutions. The article offers constructive analysis of student ratings of various teaching competencies across departments in the faculty, while highlighting strategies to ensure enhanced validity of student ratings. Student ratings of lecturers provide valuable information for faculty to use in programme assessment and consequent programme enhancement. Further, student ratings of lecturers encourages a student's voice through confidential participation, thereby ensuring that the student experience is fore grounded at the learning and teaching interface.

Keywords: *Higher education, evaluation, student ratings, validity*

1. Introduction

Higher education institutions are generally committed to promoting the quality of students' total learning experience within a well supported environment. The evaluation of existing academic programmes from a subject and teaching perspective is an important component of a regulatory framework to ensure the maintenance and enhancement of the quality of learning experiences. Further, the growth in the number of higher education institutions has necessitated a focus on the provision of quality programmes within a highly competitive environment. In response, many higher education institutions have come to rely increasingly on student ratings of teaching. Even though such an evaluation instrument is criticized by many academics, it is unlikely that the use of student ratings will be abandoned, as it is seen as a key indicator in quality monitoring (Penny, 2003). Student ratings of teaching effectiveness are frequently a contentious research area. Student ratings of lecturers within higher education institutions are often viewed as a convenient choice. Another criticism is that students are basically unqualified to provide a valid evaluation of the quality of programmes, of which teaching is an important component (Nasser and Hagtvet, 2006). Despite these views, student ratings continue to be used as part of a quality assurance process to ensure the existence and implementation of procedures for securing quality. It can be argued that despite the arguments relating to the relevance or prejudice in student ratings, estimating their effects is important. The importance lies in providing a framework for proper interpretation and use of student ratings to improve programmes (Nasser and Hagtvet, 2006).The changing expectations of students requires that lecturers continuously reset their professional learning goals. This has to be underpinned by lecturers focusing on teaching competencies arising from personal characteristics, knowledge, skills and attitudes that are required for effective performance in different teaching environments. This imperative is supported by Seldin (1993 in Kulik, 2001) who reported that no other data source gets more attention in the evaluation of teaching – not classroom visits, not self reports and

not examination marks. Student ratings of lecturers still continue to be used as an evaluation instrument to assess the effectiveness of teaching.

2. Multidimensional role of the lecturer in providing quality education

The lecturer plays an important role in providing effective learning in either a teacher centred or student centred learning environment. Students value their lecturers and the quality of their learning experience is influenced by the lecturer expertise in the classroom. Teacher's views on learning and their approaches to teaching create the learning environment. Teachers, who view teaching as imparting information to students, approach their teaching in a teacher focused manner. Teachers who conceive the object of study in terms of "knowledge as given" generally adopt an approach where the teacher is a lecturer who passes on knowledge. In a student centred approach, the student actively participates in a learning process, thereby encouraging knowledge creation (Ramsden, 1992). According to Ramsden (1992), the intention of teachers matches the use of teaching strategies. Further, it can be added that there appears to be a positive relation between teachers intended objects of study and their intended approaches to teaching. Martin, Posser, Trigwell, Ramsden and Benjamin (2000 in Tigelaar, Dolmans, Wolfhagen and van der Vlenten, 2004) showed that teachers who regard learning as developing students, approach their teaching in a student focused way to help students develop. In a student centred approach, teachers conceive "knowledge as being constructive" rather than "knowledge as being given" (Tigelaar *et al*., 2004). The "constructivist" or student orientation to teaching has become important in higher education. A student centred orientation encourages the student to be an active, self regulating learner, who creates meaning from personal experiences in a meaningful way. In such an orientation, the teacher stimulates the construction of powerful knowledge, rather than merely passing on knowledge. In more student focused approach to teaching, common elements in a framework for teaching competencies in higher education include: competencies in content knowledge, didactive competencies, organic competencies and scientific competencies. Key principles of effective teaching such as interest and explanation, concern and respect for students and student learning, appropriate learning and feedback, clear goals, independence, control and active engagement and learning from students are part of the framework (Ramsden, 1992). The study uses lecturer evaluations to determine student perceptions of teaching competencies.

Lecturers need to continuously refine their teaching skills as a result of different views of what contributes to best practice. Wang, Haertel and Walberg (1993 in Beran, Violato, Kline and Frideres, 2009) identified lecturer support services to students and student and lecturer social interaction as important in facilitating student learning. Researchers have also found that effective teaching includes materials, styles and methods utilised according to the needs of students (Hansen, 1993; Nelson and Drake, 1994; Fereshteh 1996 in Beran, *et al*., 2009). According to White (2007), students expect to be provided with "goals and services," representative of appropriate guidance, support and sound pedagogical material necessary for quality education. A concern for quality in teaching facilitates a culture of learning for lecturers, where different perceptions regarding teaching effectiveness are considered. In view of the important role of the lecturer in the students learning experience, student evaluation can make the following valuable contributions (Kulik, 2001): reliable and valid measures that bring scientific accuracy to the evaluation of teaching, gives students a voice in their education, influences who teaches at higher education institutions, influence promotion and tenure decisions and provide lecturers with information that they may use when attempting to improve their own teaching.

Quality assurance within the Durban University of Technology (DUT): The need for quality assurance within higher education institutions in a post apartheid South Africa arises from transformation, massification of education, rise of new partnerships, and professionalization of academia, including programmes for employment needs and maintaining international standards. These reasons have necessitated the institutionalisation of quality assurance systems to demonstrate accountability by higher education institutions and their programmes. Cullen, Joyce, Hassal and Broadbent (2003) reinforce this view by arguing that accountable public sector management has ensured that issues relating to performance measurement are high on the agenda of higher education institutions, especially in the light of diminishing financial support from public sources of finance. Further, higher education institutions like the Durban University of Technology have to be concerned not only with developing the skills and abilities of its graduates, but also with determining students' feelings about their educational experience. Managing quality and safeguarding academic standards are important outcomes of the educational

process. Since students are the consumers of education, their perceptions are an important means of determining the quality of programmes. The critical evaluation of the quality of students' learning experience is a regular and progressive feature of the DUT's quality assurance policy, which aims to encourage all staff to engage in reflection on, and critical appraisal of activities within their scope of responsibility which contributes to the university maintaining and enhancing the quality of the students learning experience, while encouraging staff to take responsibility for the quality provision in their day to day academic activities. This contributes to high academic standards, while ensuring fitness for purpose and fitness of purpose (Fourie, Strydom and Stetar, 1999).

The evaluation of programmes by students is indicative of the extent to which the DUT is committed to monitoring, evaluating and tracking progress in achieving its achieving its educational objectives within the context of national imperatives to ensure fitness for and of purpose, ensuring accountability for the effective and efficient use of all available resources, empowering students through promoting their academic success, providing effective and efficient support services to enhance educational purpose and establishing an organisational culture of quality (Durban University of Technology, 2009). The use of student ratings is reflective of a robust procedure to annually monitor and review existing programmes, evaluate policy implementation and review inter-related processes that collectively involve both academic and support departments with the aim of enhancing the quality of students' learning experiences. Student ratings of lecturers and subjects as part of programme evaluation are integral for an annual quality monitoring process undertaken by departments. Students evaluate subjects and lecturers within their programmes. The Centre for Quality Promotion and Assurance (CQPA) within the DUT is responsible for the design, development and implementation of questionnaires focusing on subject and lecturer evaluation to be completed annually by students for both annual and semester programmes. Feedback of the analysis by CQPA is forwarded to the Faculty Quality Committee and relevant heads of departments and lecturers. The Faculty Quality Committee has an oversight role in monitoring that good practice is sustained and improvement plans developed in response to the outcomes of student ratings of subjects and lecturers.

Programme structure and evaluation within the Faculty of Management Sciences: There are 6 faculties at DUT: - Management Sciences, Engineering and the Built Environment, Health Sciences, Accounting and Informatics, Arts and Design, Applied Sciences. These faculties are based at different campuses and in different cities within the province of Kwazulu Natal in South Africa. Within the Faculty of Management Sciences there are 7 departments: Public Management and Economics, Marketing and Retail, Public Relations, Operations and Quality Management, Applied Law, Hospitality, and Entrepreneurial and Management. Undergraduate and post-graduate programmes are offered in all departments. All undergraduate programmes are national diplomas, with annual or semester subjects. The postgraduate programmes are Bachelor in Technology, Master in Technology and Doctorate in Technology. The study is based on student ratings of lecturers in all undergraduate programmes in all departments within the Faculty of Management Sciences. Students complete the evaluations only once an academic term for semester and annual subjects. The lecturer evaluation questionnaire has 5 domains: organisation and planning, teaching and learning, individual rapport and support; assessment, resources.

3. Method

Data was collected from students in all departments within the Faculty of Management Sciences. The sample size was 3060 of 6452 students registered within the faculty in 2010. The lecturer related variables were examined in this research.

Materials: The competency descriptions were taken from the lecturer evaluation questionnaire. The elements within each domain are as follows:

- Organisation and planning (teacher as organiser): preparation, time management, linkage between sections in the course.
- Teaching and learning (teacher as expert on content knowledge): communication, use of several teaching methodologies, shows relevance of content, uses visual aids, shows ways of improving learning, makes students want to learn more, good questioning style, provides opportunity for questioning.

- Individual rapport and support (person as teacher): approachable, enthusiastic, provides opportunities for group work, available for consultation, provides opportunities for student counselling.
- Assessment (teacher as facilitator of learning processes): provides clear guidelines for assessment, provides an assessment plan, uses several methods of assessment, provides feedback timeously, and provides useful feedback.
- Resources (teacher as a scholar / lifelong learner): provides learning materials to support learning, provides useful sources of information for references.

Each of the domains was matched to a teaching competency domain indicated in brackets, as used by Tigelaar *et al*. (2004). Using the Delphi technique, they developed a framework of teaching competencies identified by educational experts as important in student centred higher education (Tigelaar *et al*., 2004). Tigelaar *et al.* (2004) define teaching competencies as "*an integrated set of personal characteristics, knowledge, skills and attitudes that are needed for effective teaching performance*." The researchers view teaching competencies as being integrated and at the disposal for lecturers to set learning goals, while taking cognisance of different lecturer profiles and teaching approaches. The merits of the teaching competency framework developed by Tigelaar *et al.* (2004) include: adjustment to modern approaches in teaching, avoidance of too detailed and prescriptive teaching competencies, recognition that different aspects of a teacher's profile play an important role in being a good teacher, validation of the competency framework. The lecturer questionnaires use the likert- type scoring for each element in the identified domains.

4. Results and Discussion

This section presents the results and discusses the findings obtained for the questionnaire in this study. The data collected from the responses were analysed with the PASW Statistics version 18.0. The results will be presented in the form of graphs, cross tabulations and other figures.

Reliability: Reliability is computed by taking several measurements on the same subjects. A reliability coefficient of 0.70 or higher is considered as "acceptable".
The results per department are presented below.

Table 1: Reliability

	Applied Law	Entrepreneurial and Management	Hospitality	Marketing and Retail	Operations & Quality Management	Public Management & Economics	Public Relations	All Combined Departments
Organisation and Planning	0.693	0.598	0.695	0.851	0.736	0.761	0.751	0.750
Teaching and Learning	0.835	0.875	0.909	0.921	0.904	0.928	0.902	0.905
Individual Rapport and Support	0.698	0.796	0.828	0.827	0.727	0.862	0.831	0.813
Assessment	0.798	0.811	0.850	0.851	0.888	0.874	0.835	0.848
Resources	0.714	0.695	0.794	0.858	0.841	0.848	0.788	0.811
Overall	0.913	0.937	0.951	0.956	0.945	0.960	0.949	0.949

The overall reliability score of 0.949 indicates a high degree of acceptable, consistent scoring for the different aspects of this research. An analysis by department indicates that almost every category (component) had reliability scores that met the minimum acceptable value criteria.

Importance of factor analysis: Factor analysis is a statistical technique whose main goal is data reduction. A typical use of factor analysis is in survey research, where a researcher wishes to represent a number of questions with a small number of hypothetical factors. For example, as part of an institutional

survey on teaching, students may answer separate questions regarding organisation and planning. Each question, by itself, would be an inadequate measure of student attitudes toward organisation and planning by lecturers, but together they may provide a better measure of the attitude. Factor analysis can be used to establish whether the different measures do, in fact, measure the same thing. If so, they can then be combined to create a new variable, a factor score variable that contains a score for each respondent on the factor. While factors actually exist in order to perform a factor analysis, in practice the factors are usually interpreted, given names, and spoken of as real things. The rotated component matrix is given below.

Table 2: Matrix

		Component				
		1	**2**	**3**	**4**	**5**
OP2.1	Is prepared for the learning period (lecture)	.175	.202	.754	.106	.165
OP2.2	Keeps to the time allocated for the learning period	.124	.103	.722	.216	.055
OP2.3	Explains how the sections of the subject are linked together	.471	.260	.548	.115	-.002
TL3.1	Communicates clearly	.422	.200	.595	.061	.359
TL3.2	Communicates audibly so that I can hear all that is said by the lecturer	.412	.197	.549	.086	.287
TL3.3	Uses several methods of teaching to help me learn	.632	.273	.354	.097	.110
TL3.4	Explains the relevance of this subject to the work environment	.542	.158	.341	.337	-.077
TL3.5	Makes me want to learn more about the subject	.617	.285	.334	.181	.098
TL3.6	Uses a style of questioning that encourages me to respond	.691	.284	.240	.139	.123
TL3.7	Gives students the opportunity to ask questions	.607	.022	.172	.239	.378
TL3.8	Uses students' questions and answers to help everyone learn	.662	.129	.188	.242	.306
TL3.9	Shows me how to improve the way I learn	.634	.362	.097	.322	.173
TL3.10	Uses visual aids to help me learn	.599	.256	.092	.141	.283
IRS4.1	Is approachable	.314	.174	.218	.223	.699
IRS4.2	Is enthusiastic about this subject area	.309	.301	.390	.189	.450
IRS4.3	Gives me the opportunity to work as a member of a group or pair	.168	.111	.153	.758	.180
IRS4.4	Is available in consultation times outside of class	.204	.190	.144	.592	.480
IRS4.5	Tells me where to get help, for example, at student counselling	.319	.211	.045	.626	.243
A5.1	Provides clear guidelines for assessments	.168	.543	.394	.323	.099
A5.2	Provides an assessment plan with due dates	.153	.383	.320	.632	-.059
A5.3	Uses several methods of assessment	.382	.521	.139	.468	-.051
A5.4	Provides feedback within 10 working days or as set out in the learner guide	.325	.594	.127	.281	-.066
A5.5	Provides useful feedback to help me learn	.431	.581	.212	.280	.126
R6.10	Provides learning materials that help me to learn	.152	.779	.167	.050	.317
R6.20	Provides useful sources of information for reference	.219	.740	.214	.161	.192

A typical use of factor analysis is in survey research, where a researcher wishes to represent a number of questions with a small number of hypothetical factors. With reference to the table above:

- The principle component analysis was used as the extraction method, and the rotation method was Varimax with Kaiser Normalization. This is an orthogonal rotation method that minimizes the number of variables that have high loadings on each factor. It simplifies the interpretation of the factors.
- Factor analysis/loading show inter-correlations between variables.

- Items of questions that loaded similarly imply measurement along a similar factor. An examination of the content of items loading at or above 0.5 (and using the higher or highest loading in instances where items cross-loaded at greater than this value) effectively measured along the five components.

An analysis of the factor loading matrix reveals the following: The first and last categories (Organisation & Planning and Resources) loaded perfectly along a single component value. This implies that the variables (statements) that constituted these components perfectly measured what it set out to measure. The three remaining components had a finer split into 2 sub-components each. This implies that the variables that constituted these components had some level of measurement that respondents could not clearly distinguish. Hence, overlapping of components occurred. There is only a slight shift in the overlapping that occurs. The components of Assessment and Resources both loaded predominantly along the same factor, implying that especially for these two components, respondents considered them not to be separate. The following is the summary of the percentages obtained:

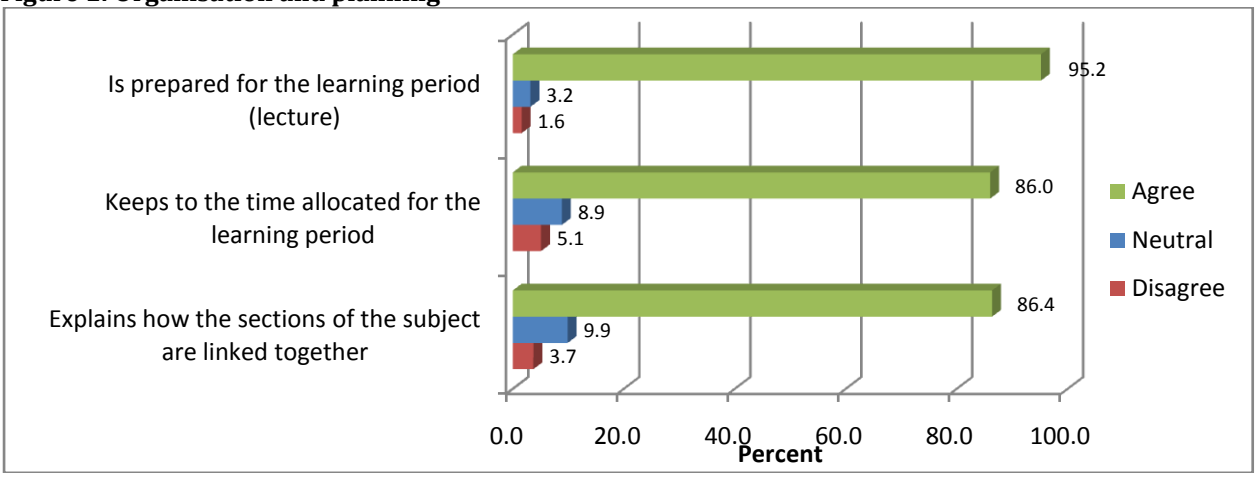
Table 3: Percentages for evaluation components

	Applied Law			Entrepreneurial and Management			Hospitality			Marketing			Operations & Quality Management			Public Management & Economics			Public Relations Management		
	Disagree	Neutral	Agree	Disagree	Neutral	Agree	Disagree	Neutral	Agree	Disagree	Neutral	Agree	Disagree	Neutral	Agree	Disagree	Neutral	Agree	Disagree	Neutral	Agree
Is prepared for the learning period (lecture)	0.0	1.3	98.7	0.2	2.2	97.1	1.6	2.4	96.0	4.7	7.8	87.5	0.6	2.3	97.1	2.1	2.6	95.3	1.5	4.1	94.4
Keeps to the time allocated for the learning period	2.1	5.4	92.5	0.3	10.7	89.1	6.3	8.1	85.6	7.4	11.8	80.8	2.8	6.2	93.8	4.7	6.6	88.3	7.8	13.3	82.9
Explains how the sections of the subject are linked together	0.5	4.7	95.1	2.2	6.9	91.0	3.2	9.3	87.5	6.2	13.6	77.2	2.9	9.1	87.8	3.9	10.9	85.2	4.2	13.8	82.1
Communicates clearly	1.0	3.4	95.6	3.5	9.2	87.3	5.4	9.6	85.0	8.4	15.0	76.6	1.6	8.4	90.0	5.6	10.0	83.4	6.1	8.2	85.7
Communicates audibly so that I can hear all that is said by the lecturer	2.4	6.3	91.3	5.9	10.7	84.3	5.5	11.9	82.6	8.7	16.8	74.5	2.7	5.4	92.0	5.9	12.7	81.4	6.6	13.6	82.8
Uses several methods of teaching to help me learn	3.4	17.0	79.6	5.5	16.0	78.5	7.7	18.8	73.5	13.5	24.3	62.2	4.6	15.6	79.8	9.2	20.6	70.2	7.4	25.1	69.5
Explains the relevance of this subject to the work environment	1.9	13.0	84.2	7.3	12.7	80.0	4.3	12.6	83.0	5.0	12.0	83.1	1.0	18.1	80.9	2.4	12.6	85.0	2.8	14.9	82.3
Makes me want to learn more about the subject	2.4	12.1	85.4	9.0	23.7	67.4	9.1	18.4	72.5	19.3	22.4	67.4	4.5	15.0	79.5	8.6	15.5	75.9	6.3	18.6	75.1
Uses a style of questioning that encourages me to respond	4.7	14.5	80.8	8.9	23.1	68.0	19.5	18.9	71.4	12.5	23.9	63.6	3.6	16.8	79.6	11.6	14.7	73.8	7.0	20.4	72.6
Gives students the opportunity to ask questions	1.1	3.6	95.3	4.9	9.7	86.3	5.3	9.2	85.6	3.0	9.5	87.2	1.6	4.8	93.4	5.2	8.8	85.0	1.7	6.0	92.4
Uses student questions and answers to help everyone learn	3.0	8.8	87.3	9.5	15.9	74.4	8.1	13.7	77.2	8.6	23.0	67.5	3.3	8.8	88.0	8.7	12.3	79.0	5.4	16.5	78.1
Shows me how to improve the way I learn	4.8	23.1	72.1	13.9	19.4	66.7	12.7	17.3	70.0	17.6	31.4	51.0	7.3	25.7	67.0	11.9	15.8	72.3	11.5	27.5	61.0
Uses visual aids to help me learn	13.7	30.1	52.2	7.8	26.2	71.6	12.7	22.0	65.3	17.5	23.4	59.1	7.1	24.3	68.7	15.8	23.2	61.0	8.3	11.8	79.9
Is approachable	0.5	3.2	96.3	5.4	11.2	83.3	19.6	13.8	76.2	7.8	10.4	81.8	0.7	5.5	93.8	13.3	15.4	71.6	8.4	12.0	79.6
Is enthusiastic about this subject area	0.8	6.5	92.6	3.9	9.2	87.8	4.9	12.4	82.7	5.0	13.6	81.4	0.0	6.4	93.6	6.3	14.4	79.3	3.5	11.0	85.5
Gives me the opportunity to work as a member of a group or pair	6.7	20.2	73.1	18.4	25.0	56.6	9.1	13.7	77.2	11.1	22.5	66.4	4.4	11.5	84.1	2.8	6.3	90.8	3.2	10.6	86.2
Is available in consultation times outside of class	6.8	12.7	80.5	17.3	26.7	56.0	14.0	17.8	68.3	11.1	21.9	67.0	8.2	23.6	68.2	12.0	12.5	75.6	5.7	21.3	72.0
Tells me where to get help, for example, at student counselling	12.2	29.1	58.7	23.9	29.9	47.1	17.6	21.5	61.0	19.6	29.5	53.0	10.5	31.9	57.6	14.1	16.0	69.9	9.3	23.5	66.8
Provides clear guidelines for assessments	2.4	8.1	89.5	3.3	9.5	88.1	3.6	7.4	88.8	6.7	17.0	76.4	2.7	7.7	89.7	3.6	7.3	89.2	3.8	15.9	81.1
Provides an assessment plan with due dates	3.5	8.7	87.7	11.6	16.1	70.3	6.9	10.5	83.2	4.9	14.1	81.0	1.7	5.7	92.7	3.1	6.9	90.0	1.5	19.8	67.7
Uses several methods of assessment	3.7	22.8	73.5	11.0	24.0	65.0	7.9	18.6	73.6	13.1	27.6	59.3	2.7	21.4	75.9	5.9	15.2	78.9	5.4	22.8	71.8
Provides feedback within 10 working days or as set out in the learner guide	6.6	20.6	68.8	11.6	18.3	70.1	8.6	17.9	73.5	21.7	31.0	47.3	3.8	12.5	83.9	8.3	16.1	75.6	14.4	31.4	54.1
Provides useful feedback to help me learn	3.9	13.1	83.1	8.7	20.5	70.8	7.8	15.5	76.7	16.4	23.2	60.4	3.2	16.2	80.6	7.2	12.4	80.4	8.8	20.2	70.9
Provides learning materials that help me to learn	3.3	12.2	84.6	5.7	13.2	82.1	7.8	12.6	79.6	20.1	26.4	53.5	3.0	9.1	87.9	9.1	12.8	77.9	7.9	22.6	69.6
Provides useful sources of information for reference	4.1	15.1	80.8	5.9	14.1	80.1	6.9	12.4	80.7	17.6	22.5	59.8	3.4	13.5	86.1	7.6	11.3	81.0	8.2	20.6	71.2

Component Analysis

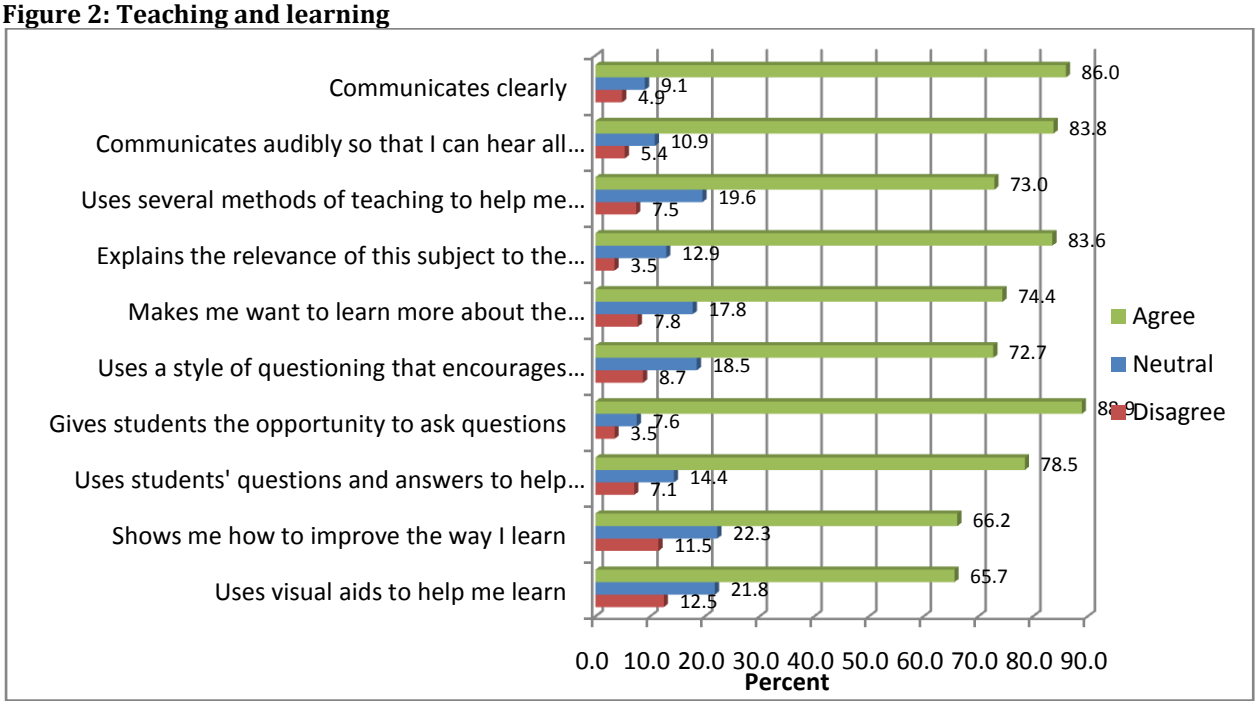
The figures below are a summary of the overall scoring patterns of the respondents.

Figure 1: Organisation and planning



There is a strong level of agreement with each of the statements in this category. Almost all of the respondents (95.2%) felt that lecturers were well prepared for the lectures. This is a positive reflection on the professionalism of the lecturers within the faculty and the fact that they prioritise their primary function as facilitators. This is important in that students generally give high ratings to lecturers from whom they learn most (Kulik, 2001). Further, studies by Cohen (1981 in Kulik, 2001) found a high correlation between ratings and achievement for items involving course organisation. Approximately 14% do not necessarily keep to the time allocated, implying that at times, lectures do finish early or later than scheduled. A similar percentage (13.6%) did not completely agree that content was sufficiently explained and linkages (to industry) shown. Since lecturers play an important role in providing effective learning in a student centred learning environment, the quality of the learning experiences of students as influenced by lecturer expertise is important.

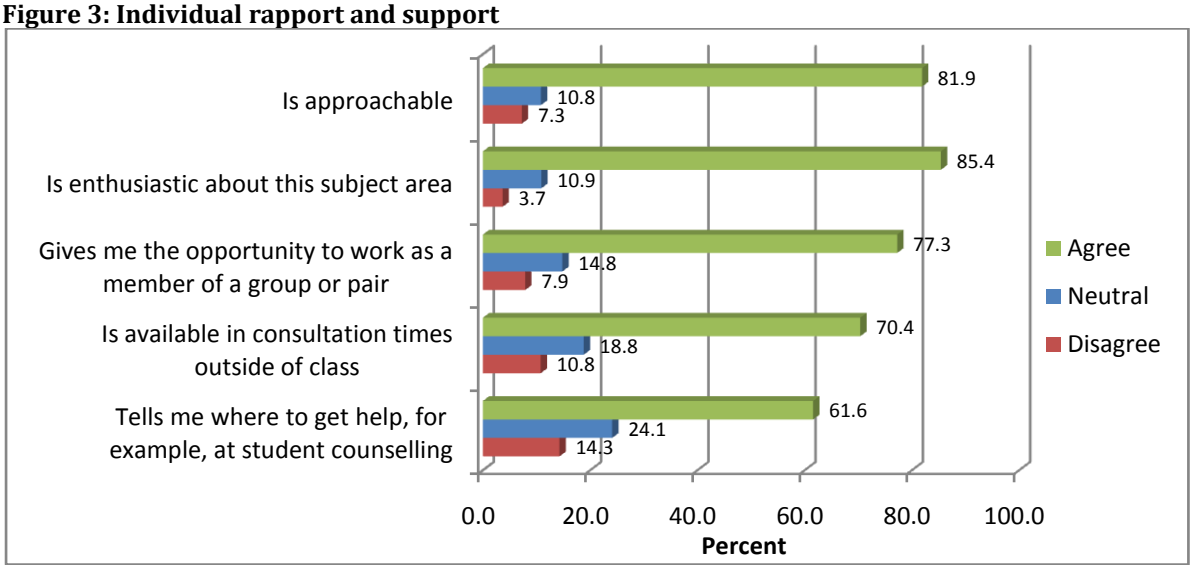
Figure 2: Teaching and learning



The overall average for this category was 77.3%. An analysis of the figure above indicates that 5 statements ranked above this average with the remaining 5 below. The above average statements related to communication and content relevance, whilst the below average statements were related to methods of teaching and teaching aids used. These elements are worthy of consideration by lecturers since the use of teaching aids can enhance learning, thereby contributing to effective teaching. Lecturers need to continuously refine their teaching skills as a result of different views of what contributes to best practice.

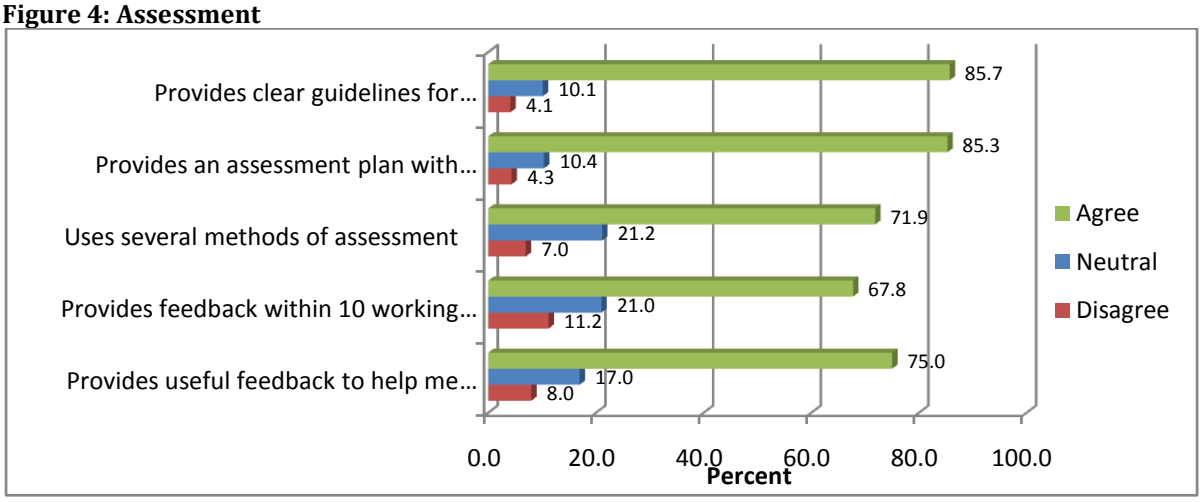
According to Ramsden (1992), the intention of teachers generally matches the use of teaching strategies. In this regard, researchers have also found that effective teaching includes materials, styles and methods utilised according to the needs of students (Hansen, 1993; Nelson and Drake, 1994; Fereshteh 1996 in Beran, *et al*., 2009). Further, White (2007) argues that students expect to be provided with "goals and services," representative of appropriate guidance, support and sound pedagogical material necessary for quality education, which is arguably an important consideration. Further, it can be added that there appears to be a positive relation between teachers intended objects of study and their intended approaches to teaching. Martin, Posser, Trigwell, Ramsden and Benjamin (2000 in Tigelaar *et al*., 2004) showed that teachers who regard learning as developing students, approach their teaching in a student focused way to help students develop, thereby conceiving "knowledge as being constructive" rather than "knowledge as being given" .

Figure 3: Individual rapport and support



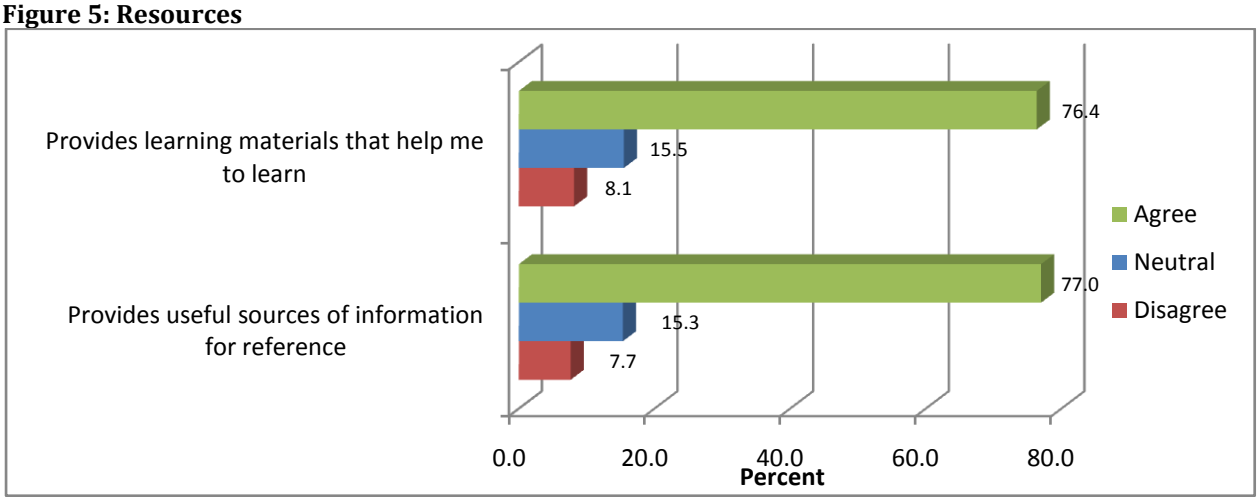
Although lecturers are enthusiastic (85.4%) and approachable (81.9%), support outside the classroom rank as the lowest. Nearly 30% did not agree that lecturers were available for consultation, and a further 40% did not receive advice from lecturers as to the various avenues of help available to students. Student's value of contact with lecturers outside lecture time is evidenced by Feldman's statement that not only is the lecturer's preparation and organisation important, but also concern with and sensitivity to class progress (1988). Lecturer availability outside the class is indicative of concern for student progress. A positive attitude for students and respect for them is one aspect of the person as teacher as an important component of the teaching competency framework of Tigelaaar *et al.* (2004). Wang, Haertel and Walberg (1993 in Beran, Violato, Kline and Frideres, 2009) identified lecturer support services to students and student and lecturer social interaction as important in facilitating student learning.

Figure 4: Assessment



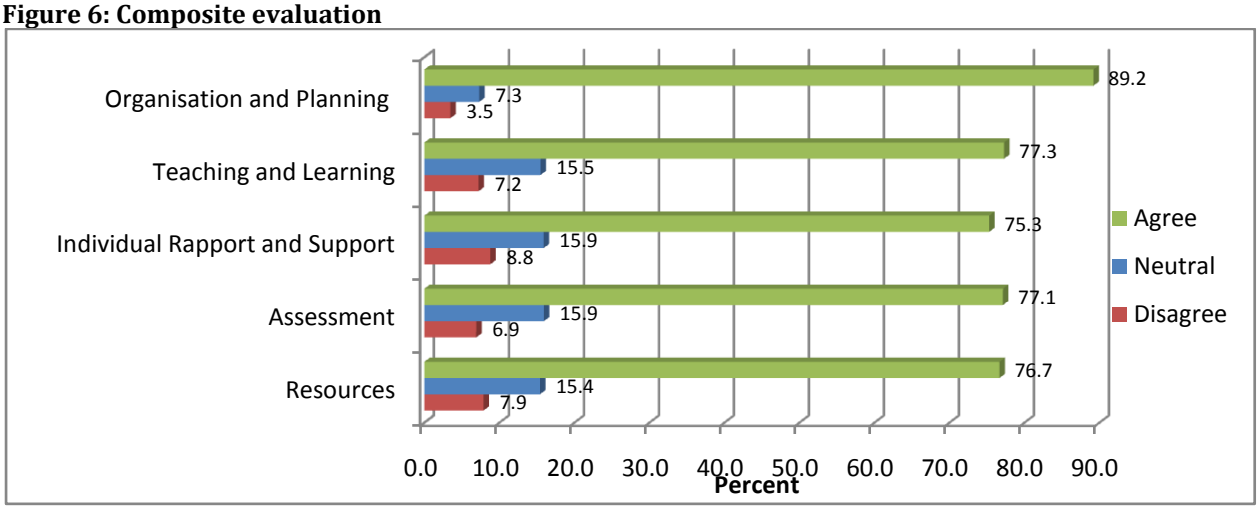
Approximately two-thirds (67.8%) of the students agreed that feedback for assessments was done within 10 working days. The implication is that a further third did not agree with this. The lecturer as a facilitator of the learning process needs to be able to assess student' results and provide feedback, if the students are considered as an integral part of the learning process. Elements like using different assessment methods and designing assessments that are appropriate for the desired learning results are in line with the constructivist approach to teaching, in which the student is seen as the active learner. Maintaining high academic standards are important outcomes of the educational process. Since students are the consumers of education, subjecting them to assessments is an important means of determining the quality of programmes (Wongssurawat, 2011). The critical assessment of the quality of students' learning experience is a regular and progressive feature of the quality assurance policy of the Durban University of Technology (DUT), which aims to encourage all staff to engage in reflection on, and critical appraisal of the performance of students. This is an important part of staff to taking responsibility for quality provision of teaching and learning in their day to day academic activities. This contributes to high academic standards, while ensuring fitness for purpose and fitness of purpose (Fourie, Strydom and Stetar, 1999).

Figure 5: Resources



A little more than three-quarter (77%) of the students were in agreement with the materials and information provided. In a student centred approach, access to resources is an imperative, since knowledge is not given. In facilitating learning opportunities beyond lectures, lecturers need to explore the availability of a plethora of learning materials and to which reference needs to be made.

Figure 6: Composite evaluation



The greatest strength of the lecturers was in organisation and planning with nearly 90% of the students agreeing with this. On average, a little more than three quarters (77%) of respondents scored favourably in the remaining categories, with about 16% having a neutral view and the remaining respondents

disagreeing. This is interesting as the core function of the institution is teaching and learning, and students recognise the work being done by the lecturers, especially for organisation and planning. The greatest strength of the lecturers was in organisation and planning with nearly 90% of the students agreeing with this. On average, a little more than three quarters (77%) of respondents scored favourably in the remaining categories, with about 16% having a neutral view and the remaining respondents disagreeing. This reflects on the core function of the institution, which is teaching and learning, not being compromised, with students recognising the work being done by the lecturers, especially for organisation and planning. This is an important consideration, as argued by Lofti and Moradi (2012) that both the student's knowledge and the professor's knowledge are influential on the student's operation. However, it is important for DUT to consider domains like individual rapport and support; and resources as priority areas since it is important to reduce the quality gap in student perceptions through concerted efforts by relevant role-players (Bahadori, Sadeghifar, Nejati, Harnouzadeh and Hakimzadeh, 2011).

Hypothesis Testing: The traditional approach to reporting a result requires a statement of statistical significance. A p-value is generated from a test statistic**.** A significant result is indicated with "$p < 0.05$". These values are highlighted in yellow. The Chi square test was performed to determine whether there was a statistically significant relationship between the variables (rows vs columns). The null hypothesis states that there is no association between the two. The alternate hypothesis indicates that there is an association.

Table 4: Hypothesis testing and results are presented in the table below

	Department
	Significance
Is prepared for the learning period (lecture)	.000
Keeps to the time allocated for the learning period	.000
Explains how the sections of the subject are linked together	.000
Communicates clearly	.000
Communicates audibly so that I can hear all that is said by the lecturer	.000
Uses several methods of teaching to help me learn	.000
Explains the relevance of this subject to the work environment	.011
Makes me want to learn more about the subject	.000
Uses a style of questioning that encourages me to respond	.000
Gives students the opportunity to ask questions	.000
Uses students' questions and answers to help everyone learn	.000
Shows me how to improve the way I learn	.000
Uses visual aids to help me learn	.000
Is approachable	.000
Is enthusiastic about this subject area	.000
Gives me the opportunity to work as a member of a group or pair	.000
Is available in consultation times outside of class	.000
Tells me where to get help, for example, at student counselling	.000
Provides clear guidelines for assessments	.000
Provides an assessment plan with due dates	.000
Uses several methods of assessment	.000
Provides feedback within 10 working days or as set out in the learner guide	.000
Provides useful feedback to help me learn	.000
Provides learning materials that help me to learn	.000
Provides useful sources of information for reference	.000

It is noted that all of the p-values are less than 0.05. That means, that the respondents from the different departments did not score similarly and that differences in values are significant. An analysis of the frequency tables indicates the percentage scoring by department. The empirical study highlighted the impact of the lecturers' competencies on the ratings by students. It has been argued that factors contributing to high teaching quality are related to particular teaching and learning styles. Elton (1998 in Hill, Lomas and MacGregor, 2003) believes that high quality teaching is synonymous with excellence in higher education. However, the notion of quality in higher education has to be viewed from multi-dimensional evaluations.

Limitations of student ratings: Having acknowledged the importance of student evaluations, it is equally important to recognise that teaching evaluation forms also have shortcomings. Since there are no lists of characteristics that represent effective teaching across contexts and courses, institutions generally design one standard form, which may emphasise some examples of qualities, skills and actions that research has identified to be important for effective teaching, which may threaten validity (Penny, 2003). Weimer (1997) criticized student evaluation feedback for being irresponsive to the needs of teachers and the complexities of teaching practice in higher education. In view of the needs of lecturers being different across different contexts and the needs of lecturers changing, Penny (2003) argues that research fails to address the impact of these in relation to the use of student evaluations. Feldman's (1983) findings showed that the overall rating of lecturers were negatively associated with age and years of experience. Since interactions to improve practice focus on increasing knowledge on teaching tips, there is little focus on examining the belief and values of lecturers about teaching and learning in higher education. Feldman (1983) argues that feedback to lecturers should also engage them in becoming aware of their beliefs and values as well as practices and strategies that work in different contexts. Ramsden (1992) further argues that student evaluations do not consider students' conceptions of learning which can range from 'surface' learning to 'deep' and active learning. Student evaluations are influenced by students own perceptions of good teaching. According to Penny (2003), if a student's underlying belief and approach to learning is supported by the perception that learning is absorbing information, then this perception creates an expectation from the student which then influences the evaluation of teaching effectiveness. While accepting that students can make good judgements about teaching styles, it cannot be assumed that they always make objective judgements. Neither is students given orientation in how to evaluate teaching or even how to assess their own learning experience.

A study by Kember and Wong (2000) provides support that students with a 'surface' or passive tendency toward learning may unfairly judge lecturers who adopt teaching strategies that support student-centred learning. Yet, the same evaluation form is used to judge teaching effectiveness, irrespective whether the teaching style is lecturer-centred or student centred. Keng and Wong (2000) further allude to activities that lecturers may engage in to influence student evaluations. Tactics like hosting student parties, inculcating a belief in students that all will be tremendous successful before the completion of evaluations and spoon-feeding students with information about the examination are used by lecturers, not to increase learning but to be rewarded with high ratings (Keng and Wong, 2000). These tactics are counter-productive to the purpose underpinning lecturer evaluations. Baldwin and Blattner (2003), by referring to numerous studies, argue that factors like the time of day of the class lecture, students' levels of ability, the level of programme being taught and the students' interest in the subject matter prior to enrolling in the class can potentially affect a lecturers rating. In addition, researches have also identified gender and gender-related issues having a biased influence on rating. In a study by Baldwin and Blattner (2003), perceived fairness of the lecturer, the amount and difficulty of work required in the programmes, perceived leniency and size of the class were cited as possible influences on lecturer ratings. Emery, Kramer and Tian (2003) quoted studies by Abrami (1982), Feldman (1986) and Cashun (1984) which found that a lecturers' personality had a substantial impact on student ratings. While these studies reveal the impact of instructor expressiveness on students rating teaching competence, research has also shown that there is a minor positive correlation between affection for the lecturer and student learning (Emery *et al*., 2003). Emery *et al*. (2003) criticized student rating for the following reasons: focuses on short-term measureable results, while ignoring long term behaviours which are difficult to measure; process is detection-oriented rather than prevention oriented; lack of observational accuracy from administrators and failure to distinguish between factors that are beyond the lecturers control and factors that are system determined. In addition, the authors question whether students, who are continuously criticized for lacking skills, can responsibly evaluate lecturers.

Way forward: Research agenda continue to focus on the debate pertaining to the validity and reliability of student ratings in higher education. However, there is sufficient support for the use of student ratings for teaching improvement purposes. While numerous studies highlighted those student ratings are not ideal measures of effective teaching, these are useful indicators that such ratings are more reliable and valid than most other indicators of teaching quality (Penny, 2003). As it is unlikely that the use of student's ratings of lecturers will dissipate within higher education institutions, it is important that key role-players educate themselves about the uses and limitations of student ratings. It is imperative that student ratings should not become measures of activity rather an accurate reflection of the quality of educational provision to students. It is reliable to use multiple sources to provide evidence of effective teaching. Baldwin and Blattner (2003) have suggested the use of a number of strategies to measure teaching effectiveness like teaching portfolios and peer evaluation. They argue that student ratings do not provide evidence in all areas pertinent to teaching effectiveness like relevance of course content and objectives. In this regard, Penny (2003) argues for a set of standards which identify the components of rating instruments which need to be reviewed as situations change. This would help in recognising important characteristics of effective teaching, which will also take into account different teaching methods, contexts and academic areas, thereby increasing the validity of the rating instrument. By having a diverse range of standards, there are greater criteria against which to rate lecturers, thereby enhancing the "fit for purpose" approach. The "one size fits all" which characterises standardised rating forms should be reconsidered in favour of departments or faculties adding questions which are specific to the teaching strategies used in the classroom and course objectives which may not surface in the standardised form. Baldwin and Blattner (2003) also suggest the use of specifically designed rating forms which are administered in addition to the standardized form. While this form may lack the validity of an institutionally normed instrument, the lecturer may elicit specific information related to the course. In this regard, Emery *et al*. (2003) suggest a flexible system, whereby each department should describe and give examples of how the institution's rating system is applicable to the characteristics and circumstances of the department.

Instead of administering the student rating forms only once during the course, teaching can be rated at different intervals. These periodic ratings allow lecturers to take corrective action in problem areas identified before the course period is over. Corrective measures can be discussed with students and ratings can be used as a platform for deeper probing with the entire class or a focus group. McKeachie (1997) highlights the importance of considering contextual factors that influence ratings. McKeachie (1997) argues that a lecturer's teaching method, content and knowledge may have no relation to students being dissatisfied with the mode of delivery like taking online classes. It is therefore, important to take note of the circumstances or situations that impact on ratings. Therefore, student's beliefs and approach to learning which underpins their perceptions of good teaching must be considered. Students can be subjected to influences that can have a negative effect on ratings. Baldwin and Blattner (2003) stress the role of education on issues relating to student ratings. Consideration of different perceptions regarding the bias in student ratings is crucial as an alternative to the "one size fits all" approach. In this regard, Emery *et al*. (2003) indicate that biasing factors like class, student and lecturer characteristics must be properly controlled to reduce the amount of bias from such influential variables. For example, by orienting students on the purpose of student ratings, students may have a better understanding of the impact of completing ratings that provide a good measure of validity. Nasser and Hagtvet (2006) allude to the need for quantifying the effect of various variables on student ratings which provides a platform for identifying a realistic weight for each variable, thereby making comparability of student ratings more feasible. In addition, Nasser and Hagtvet (2006) indicate that by determining the cause and size of the effects of variables on student ratings can contribute toward improving instruction, control potential sources of bias and provide a framework for proper interpretation and use of student ratings. Penny (2003) further stresses the need for users of student rating data to have the knowledge, skills and information to make informed decisions. This is supported by McKeachie (1997) who believes that without the ability of users to make sophisticated decisions based on appropriate interpretation, the nature of the instrument and possible bias are not likely to make significant differences. Therefore, the validity is not only affected by students, but also by users of data who do not have adequate knowledge and skills on evaluation practices.

Since student ratings generally focus on how satisfied students are, the focus ignores how much the students learn. Emery *et al*. (2003) suggest that an achievement orientation in the rating forms will help to increase the validity of these ratings, since cognisance is taken of the weakness in students not being

knowledge enough to make accurate judgements. This limitation can be addressed by focusing on outcomes in rating teaching effectiveness. Outcomes that address ways of thinking about teaching and learning that emphasise student responsibility and activity in learning rather than what the lecturers are doing would be indicative of what students have learnt, thereby reflecting on teaching effectiveness. The use of institutional norms or facility norms to compare the teaching effectiveness of lecturers can be criticised since specific standards of teaching are not used as rating instruments for different courses. Emery *et al*. (2003) advocate comparison between similar causes rather than against institutional or faculty norms. Effective performance cannot be measured as a "once off exercise". Baldwin and Blattner (2003) suggest the administration of student ratings more than once for a course to gain timeouts feedback to identify potential problems. Periodic ratings allow the lecturer to keep track of problem areas and make timeouts adjustments. This contributes to improved teaching during the course, rather than to use the ratings to improve teaching for subsequent courses. It is therefore imperative for higher education institutions to embrace total quality that oriented towards using multiple sources of quality monitoring that focuses on best practice and continuous improvement of quality.

5. Conclusion

The formative aspects of a programme evaluation instrument should not be ignored. If improvement teaching as assessed by students is important and to be used for ongoing summative purposes, then it is important that student ratings be used as part of a process of overall evaluation of programmes. Since teaching is one of the major components in students' learning experiences, it is important that their perceptions of lecturers are considered in enhancing education within higher education institutions. Students perceptions can "add value" for higher education institutions that are committed to meet the needs of students, employers and government. Even though much research continues to be centred on proving that student ratings are biased, their use is growing with the object of improving the quality of teaching and student learning. Despite studies showing that student ratings are not the best measures of effective teaching, it can be suggested it should not be used as the only source of information in evaluating teaching effectiveness. When student ratings are used for multiple purposes, then multiple sources of information must be elicited. It is imperative that every contributing influence on teaching effectiveness is considered, so that potential problems areas can be adequately responded to.

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