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Students' Rating: Is it a Measure of an Effective Teaching or Best Gauge of Learning?

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Abstract

This paper discusses the issue of how students' rating could reflect on the effectiveness of teaching or gauge students' learning. Student ratings of instruction are not the best gauge of learning. To boost student ratings we have created an evidence of their learning. Ratings of overall teaching effectiveness are moderately correlated with independent measures of student learning and achievement. At one time, it was considered contentious to administer student rating forms. Now such forms have become commonplace because it makes sense to survey students to find out what they think about their experiences in the class over the term. Also new suggestions that reflect on students' learning and creative thinking were proposed here and consequently students rating form has been updated.

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1. Introduction

Student ratings remain a debate in the teaching world including faculty, students, administrators, and researchers [1]. Although students rating can provide helpful and valid feedback, they unfortunately are not an entirely accurate measure of instruction. As students do not take much time out to really think about teaching, and may even not take this form of questions seriously by making comments about the teacher. Therefore student ratings are not really the ideal method to evaluate student learning. Hence student ratings could be boosted by creating evidence of their learning. One guiding principle for this paper is that feedback on teaching is helpful for any faculty member. Feedback from students, colleagues, and other sources lets faculty know how a class went and where changes might be needed or attempted. Also feedback is integral in letting concerned parties know the progress of a class, areas of strength, weaknesses and those that need improvement. This doesn't just apply to instructors whose performance is shaky or weak, in fact even the best teachers can benefit from student feedback. There is always place to improve and getting information from students can prove very helpful. However many seem to be against relying entirely on student feedback to evaluate teaching methods and effectiveness, said Linda B. Nilson [2].

In fact these ratings are very good for measuring customer satisfaction, no doubt about that, but really, under the best of circumstances, there's only a mild correlation between student learning and an instructor's rating.

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The Students' Evaluation of Educational Quality (SEEQ) feedback, with its proven reliability and validity, provides a useful platform for beginning faculty development efforts [3]. SEEQ are increasingly being used in universities throughout the world to assess effective teaching for purposes of improving teaching, and quality assurance exercises. Many universities around the world are now using some forms of students' questionnaire feedback. It has proven to be a reliable, and a good foundation for developing faculty. It is also being used to assess teaching quality. Some universities design their own questionnaires. In this paper the proposed questionnaire will be named as Students' Evaluation of Teaching Effectiveness (SETE) as the focus here is mainly on the teaching effectiveness and its impact on the students' learning.

Many seem to believe that faculty who is good in research must be good in teaching, and according to a large meta-analysis [4] this is not the case as teaching and research productivity are not linked. University lecturers are expected to be good teachers and good researchers, but receive little teacher training. Hence, it is not surprising that many lecturers lack confidence about their teaching effectiveness and do not know how to use SETE feedback to improve their teaching effectiveness. Relying on students rating only will not be effective. Rather constant monitoring of teaching is required. Faculty and students need to realize that as useful and as effective as student ratings maybe there are also difficulties in the SETE data. This paper explores how to evaluate more effectively the student's evaluations of teaching. Also this paper will explore surveys which have gathered feedback from both graduate and undergraduate students regarding the impact of learning, teaching methods, and students creative thinking on their ratings. The surveys will show how best to design a student questionnaire which will obtain the best possible feedback from students. The paper will provide a background on the history of research regarding student ratings, and also strategies for the best way to use the feedback to better teaching techniques.

Finally, a version of the students' rating form that is capable of measuring teaching effectiveness and students' learning response to assessment environments, independent learning, and critical thinking will be developed. Also a rating form will be composed which measures the effectiveness of teaching and the students' response to environments where they are assessed.

2. Background History

At one time, it was considered controversial to administer student rating forms. Now such forms have become conventional because it makes sense to survey students to find out what they think about their experiences in the class over the term [6]. Student rating forms have become an integral part of the teaching process. It is now seen as important to survey students to obtain feedback regarding their student experience in class. Research has supported this and concludes that questionnaires are a reliable method.

Ratings of overall teaching effectiveness are reasonably associated with independent measures of student learning and achievement [7], [8], and [10]. There is a clear correlation between independent measures of students learning and effectiveness of teachings. Students who are taught by teachers who have been given a high rating are likely to achieve better grades, and can utilize the course material effectively.

An instructor's rating for a given course tend to be relatively consistent over successive years [8] -[10]. Rating of the instructor is usually constant for each course, it does not change much. The instructor usually gets similar feedback over the years. Also student's rating is not affected by any other factors related to the student such as his/her age, year of study, intelligence, or GPA (grade point average).

Researchers are reporting the following relationships [10], [11]:

- Students tend to rate courses in their major fields and elective courses higher than required courses outside their majors.

- Faculty tends to receive more positive ratings than graduate student instructors.
- The gender of a student has little effect on ratings. The gender of an instructor, however, may have an impact. Though some studies report no relationship between a professor's gender and student ratings, others show that adhering to a gender-appropriate teaching style may be rewarded by higher evaluations.
- Ratings can be influenced by class size (very small classes tend to receive higher ratings), by discipline (humanities instructors tend to receive higher ratings than engineering instructors), and by type (discussion courses tend to receive higher ratings than lecture courses).
- Students' expectations affect their ratings: students who expect a course or teacher to be good generally find their expectations confirmed.

3. Development of SETE

Student rating forms, also called student end-of-course questionnaires or student evaluation forms are traditionally administered at the end of each term to solicit student evaluations of a course. Typically such end-of-course information is used by managements to make comments and suggestions regarding the instructors' teaching experience and the course delivery [12].

The proposal of Students' Evaluation of Teaching Effectiveness (SETE) is developed based on the Students' Evaluation of Educational Quality (SEEQ) that was developed by Herbert Marsh [3]. Marsh and others have used SEEQ data to explore the many issues that have characterized the past decades of student ratings research: reliability, validity, and stability of results; sources of bias in the responses; the utility of ratings in administrative decisions (summative evaluation); and the usefulness of the ratings for improving teaching (formative evaluation). Over the course of these studies, as in any academic field, debates and disagreements have surfaced concerning SEEQ. Some understanding of the development of SEEQ and these subsequent debates is needed for the most reasoned and effective use of student rating's feedback.

The development of SEEQ begins with the question, "What is effective teaching?" Marsh and his colleagues [3], [4], and [10] found considerable agreement in the idea that effective teaching is comprised of a definable set of independent elements. These elements include specific behaviors, such as "expressive speaking" or "highlights important points," and the general characteristics perceived by students from these behaviors, such as "instructor was dynamic and energetic" or "lecture facilitated note taking." These elements are independent of one another in the sense that a student's judgment of a professor's organizational skills might differ greatly from that student's judgment of the professor's rapport with students. Marsh began by trying to identify the various attributes or factors of good teaching and to define specific questions about those factors.

Many general factors emerged from extensive statistical studies of how students rated the importance of items for evaluating teaching and how professors rated item's usefulness as a feedback. These are Learning/Value, Enthusiasm, Organization, Group Interaction, Individual Rapport, Breadth, Exams, Assignments, and Workload [13]. But surely teaching is too complex to be summarized by these variables. Also there are some attributes that do not appear in SEEQ, as different groups may emphasize different attributes (e.g., students might emphasize a professor's helpfulness, while professors might place more emphasis on encouraging self-guidance. The areas, and even specific elements, of agreement among SETE and other studies suggest a strong consensus across the various constituent groups in higher education as to the major variables describing effective teaching.

4. SETE Proposed form

In this section an updated SETE form is developed which is based on the form that has been developed as in [13]. The updated form examines students' knowledge on the impact of their independent learning, creative thinking, and instructor's teaching effectiveness of their rating. The proposed form, shown in Table I, has nine categories: Learning,

Enthusiasm, Organization, group Interaction, Individual Rapport, Breadth, Examinations, Assignments, and an Overall category. Students' Evaluation of Teaching Effectiveness is a paper or electronic questionnaire, which requires a written or selected response answer to a series of questions in order to evaluate the instruction of a given course. They are a means to produce useful feedback which the instructor and the school can use to improve their quality of instruction. The process of (i) gathering information about the impact of learning and of teaching practice on student learning, (ii) analyzing and interpreting this information, and (iii) responding to and acting on the results, is valuable for several reasons [14]. They are beneficial because instructors can review how others interpret their teaching methods, thereby improving their instruction. The information can be also used by administrators, along with other input, to make formative recommendations (e.g., identify areas where a faculty member needs to improve) [15]. Typically, these evaluations are combined with peer evaluations, chair evaluations, and results of student's test scores to create an overall picture of teaching performance. Questioning skills are essential to good teaching. Teachers often use questions to ensure that students are attentive and engaged, and to assess students' understanding. What is important to note is that in addition to the intent of the question, the question itself matters.

5. Conclusion

The efficiency of student rating of teaching effectiveness is debatable; however what we can conclude is that it has its benefits. Obtaining student feedback on their learning process, critical thinking, and independent learning means that instructors can monitor their teaching process, and improve upon any areas that need improving or help further explore techniques to increase student learning. Saying this however it should not be a sole measure of the level of teaching. Despite that students' rating is not the best gauge of learning and it should not be considered as the sole measure of effective teaching, the developed form shown in Table I of the students' evaluation of teaching effectiveness (SETE) gives evidence of students' learning and is a mean by which we can obtain information regarding the extent of students learning, and the effectiveness of the particular teaching methods of their thought process and independent learning.

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TABLE I. THE DEVELOPED FORM OF STUDENTS' EVALUATION OF TEACHING EFFECTIVENESS

College:

Department:

Course:

Please tick one box only against each statement.		sa	a	n	d	sd	n/a
LEARNING							
1	I benefited a great deal from the course content and understood the subject material of this course						
2	I have found the course intellectually challenging and stimulating						
3	My interest in the subject has increased as a consequence of this course						
4	I believe I have attained the learning outcomes of the course						
5	The laboratory work/assignments helped me attain the learning outcomes of the course						
6	The course notes and text book helped me attain the learning outcomes.						
ENTHUSIASM							
7	Instructor spoke clearly and was enthusiastic about teaching the course						
8	Instructor's style of presentation held my interest during class						
9	Instructor encouraged questions in the class						
10	Instructor support critical thinking and independent learning						
11	Instructor explained and helped in solving the tutorial questions.						
12	Instructor asks questions that tap higher level thinking						
13	Instructor recognized which students did not understand and reviewed as needed						
ORGANIZATION							
14	Instructor gave lectures which facilitated taking notes						
15	Instructor's explanations were clear						
16	Instructor's materials were well prepared and carefully explained						
17	Instructor was available for help during his/her office hours						
18	Instructors started and ended their lectures / tutorial on time						
GROUP INTERACTION							
19	Students were encouraged to participate in class discussions						
20	Students were encouraged to share their ideas and knowledge with others						
21	Students encouraged to work in groups						
INDIVIDUAL RAPPORT							
22	Instructor handled student discipline fairly						
23	Instructor sufficiently available to students during office hours or after class						
24	Instructor had a sincere interest in individual students						
25	Instructor appeared to be genuinely concerned about students and their success in class						
BREADTH							
26	Instructor covered all the course syllabus in the time available						
27	Instructor discussed all the objectives and learning outcomes and what expected from students at the start of the course						
28	Instructor adequately discussed current developments in the field						
EXAMINATIONS							
29	Examinations papers were clearly written and tested course content as stressed by the instructor						
30	Methods of evaluating student work were fair and appropriate						
31	Feedback on examinations / tests was timely and valuable						
ASSIGNMENTS							
32	Assignments, quizzes, and homework were adequate and contributed to appreciation and understanding of subjects						
33	Types of assignments were formative and further enhanced the learning outcomes of the course						
OVERALL							
34	As an overall rating, I would say I am very satisfied with the instructor						
35	As an overall rating, I would say I am very satisfied with the outcomes of this course						

sa → strongly agree

a → agree

n → neutral

d → disagree

sd → strongly disagree

n/a → not applicable