

# **2006-990: STUDENTS' ATTITUDES TOWARDS CONSTRUCTION MANAGEMENT TEACHING AND PROFESSORS**

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# **Students' Attitudes towards Construction Management Teaching and Professors**

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## **Abstract**

Student evaluation of faculty has perhaps the most important prevalent mechanism to examine the quality of teaching and effectiveness of professors. A research study was conducted in SPSU Construction Department to examine the teaching effectiveness. The spatial transferability of the faculty evaluation mechanisms, without regard to spatial socio-cultural differences, is discussed in this study based on the collected data and following a thorough literature review. It was found that the ratings of a large percentage of construction students were positively influenced when their exam grades were inflated; the entire course material was not covered during the semester; a project was not assigned to the course; and students were allowed to arrive late as well as absent from class from time to time. On the other hand, it was found that the evaluation of a large majority of students was influenced positively when lecture materials are tied to real-life problems; lectures were delivered in a clear and understandable manner; the faculty was fair in grading, punctual and efficient in the use of class times.

**Key Words:** Teaching Effectiveness, Students, Professors, Construction

## **Introduction**

Finding an appropriate mechanism to evaluate teaching and its effectiveness has always been, and continues to remain, a difficult task. In a national study that tracked the use of student evaluations of faculty in 600 colleges between 1973 and 1993, the use of student evaluation increased from 20% to 86% (Seldin, P. 1993). Student evaluation of faculty has become the most prevalent mechanism to examine the quality and effectiveness of teaching (Lindenlaub, J and Oreovics, F., 1982; Haskell, R. 1988).

The philosophy behind the student evaluation of faculty is based on the following assumptions (OIT, 1999)

- Students have the responsibility of maintaining maturity and objectivity
- Faculty have the responsibility of seriously considering student input and implementing change as appropriate

- Administration recognize that such evaluations are useful as only one measure (not all) of teaching performance

Student evaluation of faculty is generally used to (McKeachie, W. 1996):

- Determine if instructional objectives are met effectively
- Identify effective and ineffective teaching practices for the purpose of awarding tenure and promotions
- Provide the feedback necessary for the improvement of teaching effectiveness

Many researches have been conducted to find the validity of students' ratings towards the teachings. Findings of these studies provide support for a number of conclusions about student evaluations (March 1984):

- Students' judgments correlate positively with those of faculty peers, administrators, alumni and trained external observers
- Students overall ratings of course quality and teaching effectiveness positively correlates with their learning in the course
- Students' years of college experience does not have a significant effect on their assessment of teaching effectiveness.

However, despite its widespread use and research support worldwide (Griffin 2004; Goldman 1993), student evaluation of faculty is viewed by many faculties as an infringement of academic freedom such as

- Is prime-facie evidence of administrative intrusion into the classroom
- Are often used as an instrument of intimidation forcing conformity to politically correct standards
- Create pressure for a self-policed lowered teaching standards and grading leniency
- Are responsible for a considerable amount of grade discrepancy and inflation
- Are misused for promotions, salary raises or continued employment
- Have the potential for manipulating the behavior of faculty
- Contrary to their original intent of improving teaching, do not eliminate poor or below average faculty but instead increases poor teaching practices
- Illustrate a mercantile philosophy of consumerism in class rooms which erodes academic standards
- Lead to inappropriate dismissal of faculty
- Constitute a threat to academic freedom

### **Limitations of Evaluation Systems**

Students' interests and attitudes towards learning and higher education in general, are influenced by their socio-economic, cultural background and their age, maturity and experience of real life problems. Southern Polytechnic State University is a technical institution with both traditional and non traditional students. Frequently, it has been seen that students with higher than 10 years

working experience are in the construction class for their graduation. The greatest challenge for the faculties is to find the mechanism to keep the students interested in the construction discipline. Effective communication, explain real world problems, stimulating student interest, and rapport building skills on the part of faculty are believed to be essential for keeping them in the class and complete their education.

Numerous institutions of higher education around the globe use student ratings to evaluate faculty performance and effective teaching. Developing an effective faculty evaluation system based on specific goals and objectives of the institution as well as socio-economic-cultural background of the student where the institution is located, what is the purpose of that institution and so on is important instead of borrowing common evaluation tool which was developed for other specific purposes. But developing an effective faculty evaluation system is a comprehensive process incorporating both cognitive (changing ideas), and normative re-educative, which would also address changing values and attitudes for specific location (Cashin, 1996). Transferred evaluation form (without modification) may not produce intended desired results when applied in a new institution.

## Methodology

The school of Architecture, Civil Engineering & Construction at SPSU includes three departments and has an undergraduate student enrollment of about 1100. This specific study is conducted in Construction Management program of about 350 undergraduate students. A simple, yet structured questionnaire was designed to collect information for the analysis. The developed and pre-tested/modified questionnaire contained six student-related socio-academic questions; fifteen faculty teaching and performance related questions, and a final question seeking students' opinion on the three most important characteristics of outstanding faculty. A team of graduate student assistants were trained to perform the task of person-interview survey. Out of 350 students, 133 completed questionnaires were obtained and were processed for the analysis.

## Data Analysis and Results

### *Student Traits*

The study sample included 7 freshmen, 24 sophomores, 47 junior and the rest are seniors. On the average, a sample student has been enrolled in college for 2.8 years. The mean GPA for the freshmen was 2.8, sophomore 3.1 junior 3.3 and senior 3.05. Among the respondents, 27 students were female and the rest were male. From the Table 1, it is evident that majority of the students were in the university for a shorter period of time. It can be explained because many of the students were transferred students from other institutions and/or community colleges.

**Table: 1 Total Number of Years in the University**

Years	0-1	1-2	2-3	3-4	4-5	>5
Number of Students	34	30	30	20	7	2

**Table 2: Number of Years Working Experience (any field)**

Years	0-1	1-2	2-4	4-6	>6
Number of Students	17	31	23	19	30

**Table 3: Current overall GPA**

Years	2-2.5	2.5-3.0	3.0-3.5	3.5-4.0
Number of Students	12	47	34	21

From the Table 3, it is found that out of respondent students, about 18% of students have GPA more than 3.5 and 30% students have GPA between 3 to 3.5. A significant number of students (41%) have GPA between 2.5 to 3.0.

### *Student Responses*

A category analysis was performed on the data to examine the sample students' responses to the survey questions. The seventeen teaching academic performance and behavioral questions began with the following statement. I usually evaluate a faculty very positively, if:

#### **Q1. My exams' grades are higher than I really deserve**

The five categories response option for question 1-5 are presented in Table 4. Sixty five students out of 128 students (50.8%) responded either no or not at all to the stated question. However, 28 students (21.8%) responded that their exam grades are higher than they deserve. This finding favors the view of grade inflation to some extent. It meant that probably some faculty provide a grade higher than student deserve.

#### **Q2. Course materials are not fully covered**

75 students (60% of respondents) disagreed with the stated question. No student mentioned that course materials are not fully covered. About 18% respondents thought that course materials are not covered in full. The findings support the view of that faculty who believe that the student evaluation of faculty encourages a mercantile philosophy of consumerism in academic institutions.

#### **Q3. No project is given in the course**

57 out of 127 (44.5%) students indicated that project is given in the class although it does depend on the nature and grade of class. 21 (16.5%) students did answer in the negative way probably because those classes are not suitable for project. The responses indicated that student evaluations are affected if project is given or not given in the class.

**Table 4: Distribution of responses to academic-related questions**

S#	Variable Question	Definitely	Yes	To Some Extent	No	Not at all	Total
Q1	<i>My exam grades are higher than I really deserve.</i>	5	23	35	31	34	128
Q2	<i>Course materials are not fully covered.</i>	0	23	30	37	38	128
Q3	<i>No project is given in this course.</i>	4	17	49	18	39	127
Q4	<i>Lecture materials and assignments are tied to real-life applications.</i>	58	51	10	2	2	123
Q5	<i>She/He is fair and just in grading.</i>	57	39	26	3	2	127
Q6	<i>Students are allowed to arrive late to class.</i>	7	25	40	34	18	124
Q7	<i>Students are not prohibited from talking to each other during lectures.</i>	5	23	32	38	29	127
Q8	<i>Students are allowed to miss lectures.</i>	11	28	32	36	21	128
Q9	<i>There is no strict date for returning assignments.</i>	5	15	16	47	44	127
Q10	<i>She/He accepts lower standards for class performance.</i>	0	9	21	46	52	128

**Q4. Lecture materials and assignments are tied to real-life applications**

Faculty who try to relate the lecture materials and assignments to real-life situations will certainly benefit from the positive evaluation of students. 80% of respondents mentioned that it is very important to teach materials which can be tied to real-life situations. Only 4 students responded ‘no’ or ‘not at all’ to the positive impact of real-life lecture materials and assignments.

**Q5. She/he is fair in grading.**

About 76% respondents mentioned that fair grading is important parameter to evaluate faculty. Only five students mentioned fair grading is not that important for their faculty evaluations.

The distribution of the sample students’ responses to another five performance-related questions are given in Table 2. The main heading for the question was again: I usually evaluate a faculty very positively, if

**Q6. Students are allowed to arrive late to class**

A large number of students (41%) don’t like to allow students to enter in the class because late entrance may destruct their attention to the materials. On the other hand, 25% of respondents were surely in favor of some flexibility in their class arrival time because of some external reasons such as traffic jam, delay in work and so on. It can be due to the nature of students because they are working and campus because Southern Polytechnic State University is situated in the urban area.

### **Q7. Students are not prohibited from talking to each other during lectures**

A clear majority of students (53%) were against the idea of students talking to each other during the lecture time. About 22% of respondents would like to have some flexibility to talk each other if they can not understand the lecture materials. The acceptance of this inappropriate class freedom would negatively affect students' evaluation of faculty.

### **Q8. Students are allowed to miss lectures**

About a quarter of the respondents were in favor of such a class freedom. However, majority of the respondents (45%) oppose such an allowance by faculty and would not consider this as a positive academic performance related factor in their faculty evaluations.

### **Q9. She/he is flexible for submitting assignments**

Again, a large percentage (72%) of respondents don't like the faculty who are flexible in submitting assignment without any valid reasons like sick. It is reflected because some students can take undue advantages by submitting their assignments later.

### **Q10. She/he accepts lower standard for class performance**

An examination of the survey data revealed that 77% of respondents were certainly against the idea of a faculty accepting lower standards for the class performance. About 7% respondents, however, would evaluate a faculty positively if faculty accepted a lower standard for the class performance.

### **Q11. She/he provides ample office hours**

Providing of a generous quantity of office hours ranks very high at Southern Polytechnic State University, and perhaps in other higher institutions in the USA. About 76% respondents indicated their desires for out-of-class discussions and guidance in problem solving and assignments. Only less than 9% respondents stated that their evaluation of faculty will not be positively affected when faculty provided ample office hours.

### **Q12. Lectures are delivered in a clear understandable manner**

It is very important to deliver the class materials in a clear way so that students can understand the materials easily. The responses of the study also strongly supported this point. More than 93% of the students in the sample pointed to the very positive impact of clear and understandable lectures on their evaluation of faculty.

### **Q13. She/he is punctual and efficient in the use of lecture time**

Efficiency in the use of lecture time and punctuality has important affect on faculty evaluation. Faculty who are punctual and use lecture time efficiently always get positive feedback from the students. More than 96% of respondents affirm this point.

**Table 5: Distribution of responses to behavior-related questions**

S#	Variable Question	Definitely	Yes	To Some Extent	No	Not at all	Total
Q11	<i>She/He provides ample office hours.</i>	36	58	20	9	2	125
Q12	<i>Lectures are delivered in clear and understandable manner.</i>	79	41	5	2	1	128
Q13	<i>She/He is punctual and efficient in the use of lecture time.</i>	79	45	3	1	0	128
Q14	<i>She/He has positive, friendly &amp; gentle attitudes.</i>	76	46	4	2	0	128
Q15	<i>She/He shows sympathy understanding of student's problems.</i>	65	46	13	3	1	128

**Q14. She/he has a positive, friendly and gentle attitude**

Positive, friendly and gentle attitude also play a key role for positive faculty evaluations. More than 95% of the sample agreed with this view.

**Q15. She/he shows sympathy and understanding of students' problems**

Friendly and sympathetic attitudes towards others (specially to the students) have traditionally been a major part of the academic environment. About 86% would like to have their faculty to be sympathetic to them.

**Conclusions**

Like many other institutions of higher education, student evaluation is routinely performed at the end of semester in the Construction Department of Southern Polytechnic State University.

Findings of the study have indicated that the teaching performance evaluation of faculty by a large percentage of students was positively influenced when

- The entire course material was not covered during the semester
- A project was not assigned
- Late arrivals to class were permitted
- Students were allowed to talk each other during lectures
- Their absence from lectures was accepted
- The faculty was willing to lower the performance standard of the class

It was also found that the faculty and teaching evaluation of a large majority of students was influenced positively when a faculty:

- Tied the lecture material to real-life problems
- Was fair and just in grading
- Delivered lectures in a clear and understandable manner
- Was efficient in the use of class times

- Showed sympathy for and understanding of, students' personal problems.

The analysis also indicated that students' evaluation of faculty was not significantly affected by their year of experience in the field and by the number of years spent in the college. Students' GPA, however, affected their evaluations of faculty and teaching significantly. Students with higher GPAs were usually against the freedom to miss the classes, and the lowering of class performance standards. Those students strongly favored the provision of a course project, ample office hours, real-life applications of lecture materials and the faculty's fairness in grading. The opposite was found to be true for students with poor academic performances.

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