

Comparison of Professors With Teaching Associates

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Abstract

A survey of students' perceptions of the teaching ability of college professors and graduate teaching associates was conducted at a major midwestern university. Professors were rated higher than graduate teaching associates on classroom teaching skills, but graduate teaching associates were rated higher on empathy and concern for students. Recommendations for improvement of the identified weak areas of both groups of teachers are offered.

Who is the better teacher — the professor or the graduate teaching associate? During the last 3 years this question and the question of what contributes to effective teaching has concerned us.

As members of the Council of Graduate Students at Ohio State University we first became aware of the problem concerning graduate teaching associates when undergraduate students came to us complaining of difficulty in understanding foreign graduate teaching associates.

A cursory investigation into the matter revealed that students had concerns not only about graduate teaching associates but also about professors.

To determine the extent of student concern we investigated undergraduate students' perceptions of professors and graduate teaching associates.

Methodology

After a review of literature on what constitutes "good teaching" and examining student evaluations of teaching, an instrument was developed that contained 22 items believed to be related to "good teaching." Students were asked to respond to each item in one of 5 ways. The possible responses for each item were:

- Professors are much better than graduate teaching associates.
- Professors are somewhat better than graduate teaching associates.
- There is basically no difference between the two types of teachers.
- Graduate teaching associates are somewhat better than professors.
- Graduate teaching associates are much better than professors.

Values of 5 through 1 were assigned to each statement respectively. A rating above 3 indicated professors rated higher on the item, and a rating below 3 indicated graduate teaching associates rated higher on the item.

The instrument was administered to 179 students enrolled in 200-level agriculture courses at Ohio State University during the 1974-75 school year. The average age of the respondents was 20.7, and the median number of quarters completed was 5.4. There were 31 females in the sample of 179 students. According to the students their grade

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point average was 2.7 on a 4 point scale. Approximately 10 percent of the students reported that 75 percent or more of their classes had been taught by graduate teaching associates. About one-half of the students indicated that 50 percent of their classes had been conducted by graduate teaching associates. Some 40 percent of the students reported that 25 percent or fewer of their classes had been taught by graduate teaching associates. A breakdown of student characteristics is found in Table 1.

Findings

Of the 22 items students were asked to rate, professors ranked substantially higher (a rating above 3) on 9 of the items while the graduate teaching associates received high ratings (a rating below 3) on 7 items. Four items received a rating very close to 3.

Professors ranked high on items such as possessing adequate subject matter knowledge, organizing class presentations, using a variety of teaching methods and audio visuals, and teaching in an interesting manner. Behaviors the professors rated highest on could be categorized as "actual classroom teaching behaviors."

Graduate teaching associates were rated high on items such as relates to students, is willing to work individually with students, is sympathetic to student problems, teaches on the students' level, and makes an effort to know students. The teaching associates' high ratings were on factors that could be categorized as "student centered."

A complete breakdown of the ratings for each item is found in Table 2. Note that students were forced to make a choice on each item, and a rating of 3 indicated no difference between types of teachers on that item. A rating higher than 3 indicated the professor was better, and a rating below 3 indicated the teaching associate was better.

Recommendations

Results of this study have several implications for the improvement of college and university teaching.

Apparently professors should be aware of the need to relate more to students and become more student centered. We are not trying to diminish the importance of subject knowledge or the ability to teach this knowledge in a formal classroom setting, but we are trying to point out that professors need to recognize students as well as subject knowledge. If it were not for the student there would be little need for college professors. The importance of the college professor's relating to the student is probably best depicted in the following statement written by a student on his class evaluation form:

After attending a university for nearly five years, I have observed quite a few professors. The ones which I have enjoyed listening to, and reacted to in a positive way such that I am interested in the course work with sincerity are very few! Dr. X is a good teacher. His talent is great in holding the attention of the students and keeping the interest level high throughout the class. I know he has made me feel like an involved student and a person. He has taken extra time (his time) to help me with problems, some related to his class and some that are not. Dr. X is interested in his students as people and treats them like people. I have never seen him appear aloof or display a "better than anyone" type of attitude. I have a tendency to do much better in a class if I like the teacher. I know this is not a great tendency, but I find it hard to produce for a teacher who has no interest in the students. Dr. X's course will be one I will remember because he is a good teacher. I takes more than knowledge of subject matter to be a good educator.

The need for student-centered teaching is mentioned in other writings. In the March 1975 NACTA Journal Harold B. Swanson writes, "I believe 'humanism' and ability to relate to the student are essential in teaching, although I might be hard-put to defend the position with research findings."

However, studies do support Swanson's contention. An extensive review of research on teaching behavior as it relates to teaching effectiveness was conducted by Rosenshine and Furst.² They found nine

TABLE 1 SELECTED CHARACTERISTICS OF STUDENTS

Major	No.	Age	No.	Quarters Completed	No.	GTA Status	No.
Ag. Educ	44	18	15	1-3	40	75% or More TA's	18
An. Sc.	36	19	32	4-6	59	About 50% TA's	84
*Dual Major	32	20	51	7-9	47	25% of less TA's	77
Horticulture	16	21	43	10-12	26	Total	179
Agronomy	13	22	15	Over 12	7		
Ag. Econ.	12	Over 23	23	$\bar{X} = 6.11$			
Nat. Res.	11	$\bar{X} = 20.72$		Med. - 5.42			
Other Ag.	11						
Outside Ag.	4						
	179						

* Students can major in Agriculture Education and Animal Science, Horticulture, Agricultural Economics, Agronomy, or Dairy Science.

variables that were correlated with student achievement. One of these variables was termed "teacher indirectness." This term includes such specific teaching behavior as use of student ideas and positive acknowledgement of students. Such teaching behavior is student centered.

College professors need to make a continuous effort to become more student centered. This effort coupled with their subject matter expertise would help to improve college teaching.

TABLE 2 STUDENT PERCEPTIONS OF PROFESSORS AND GRADUATE TEACHING ASSOCIATES (N = 179)

Item	Mean rating	Standard deviation
1. Has well organized class presentations.	3.83	.799
2. Uses a variety of teaching methods during class presentations.	3.51	.964
3. Possesses an adequate knowledge of the subject matter being taught.	4.08	.787
4. Maintains classroom atmosphere conducive to learning.	3.30	.910
5. Motivates students to learn.	3.28	.997
6. Carefully evaluates students' work.	2.99	1.036
7. Encourages student participation.	2.90	1.028
8. Teaches class in an interesting manner.	3.34	.924
9. Has adequate office hours for consultations.	3.05	1.075
10. Is willing to work individually with students.	2.60	.966
11. Relates to students.	2.50	.942
12. Instruction and assignments are realistic.	3.01	.777
13. Grades fairly.	3.08	.794
14. Displays behavior expected of a professional educator.	3.71	.753
15. Is sympathetic and understanding of student problems.	2.72	.933
16. Teaches on the level of the student.	2.68	.984
17. Makes an effort to know the students personally.	2.57	.946
18. Is concerned with improving his/her teaching performance.	2.78	.943
19. Is receptive of student ideas.	2.75	.904
20. Uses a variety of audio-visual aids.	3.52	.832
21. Lets students know explicitly what is expected and required of them.	3.46	.884
22. Requires an appropriate amount of assignments for the credit hour of the course.	3.10	.873

Switching to the other side of the coin, this study has implications for graduate teaching associates. It appears they must focus on improvement of their subject knowledge and classroom skills. Graduate students are often hired to teach courses because they have ability in a subject matter field such as horticulture or animal science. However, they may not have had any systematic instruction in the art and science of teaching. Graduate teaching associates should be encouraged to improve their teaching skills. This could be accomplished in several ways.

One method to improve teaching associates' skills is to identify those professors in the college who are "master teachers" and seek their permission to have the graduate teaching associates observe some of their classes. After the class the graduate teaching associates could confer with the professor to discuss why he taught as he did. Much can be learned from observing a master teacher.

A seminar or course for graduate teaching associates on effective college teaching is another method which can be used to improve teaching associates' teaching skills. In many colleges of agriculture the Department of Agricultural Education can offer just such a course. At Ohio State University, Dr. L. H. Newcomb teaches a graduate course in agricultural education that is designed to improve the pedagogical skills of graduate teaching associates. As a follow-up of classroom instruction, Dr. Newcomb observes his students as they teach their own classes and counsels with them on how to improve their teaching. This course has received many favorable comments.

Conclusion

Together college professors and graduate teaching associates appear to possess the optimum in student-centered classroom teaching techniques; but separately, weaknesses can be identified in each group. The improvement of college teaching requires attention to these weaknesses. Professors should not hide behind their "knowledge expertise" and forget about their students. Conversely, graduate teaching associates should not hide behind their "student rapport" and make no attempt to improve their teaching skills. Each group needs to make a conscientious effort to learn from the other to become better teachers.

References

1. Harold B. Swanson, "Do You Really Qualify As A Professional College Teacher?" *NACTA JOURNAL*, Vol. XIX, No. 1, March 1975, p. 31.
2. Robert M.W. Travers, Ed., *Second Handbook of Research on Teaching* (Chicago: Rand McNally & Company, 1970.) Barak Rosenshine and Horma Furst, "The Use of Direct Observation to Study Teaching."