

Paul R. Vaughn

Introduction

The quality of instruction that a university or college provides is often measured in terms of student ratings. Since one of the major goals of educational institutions is to provide superior instruction, most institutions strive to hire and maintain teaching faculty who consistently have high student evaluations. They also often require teachers to submit student evaluations as a measure of their teaching effectiveness when applying for merit raises or promotions.

Most institutions have developed an instrument which their instructors use to obtain information concerning student evaluation of teaching performance. While it is relatively easy to determine in this manner if students feel they have obtained superior instruction, several questions still remain unanswered. Why do some teachers receive higher ratings than other teachers? What are the characteristics of teachers who receive high student ratings? Of teachers who receive low ratings? If these questions could be answered, then the institution would have some background information to assist instructors in improving their student evaluation ratings. These unanswered questions led to development of the study reported in this article.

A review of the literature on teaching effectiveness (Rosenshine and Furst, 1975) indicated that the characteristics of clarity, enthusiasm, variability, and humor were positively related to student performance. It did not seem illogical to assume that these same characteristics would be positively related to student evaluation. This assumption served as the general hypothesis which was tested in the study.

Procedure

Twelve teachers in the College of Agriculture and Home Economics at New Mexico State University were randomly selected to participate in the study. The sample was stratified in order that at least one teacher from each department in the college was selected. Two of the original twelve indicated that they did not wish to participate in the study and asked to be replaced. Two teachers from the same department were randomly selected to take their place. Only teachers who were listed as teaching classes in the college during the spring semester, 1980, were eligible for selection.

Vaughn is an Associate Professor of Agriculture and Extension Education at New Mexico State University.

Each of the 12 teachers was video taped while teaching a regular class. The teacher was allowed to select the date and the class for video taping. The only instruction teachers received was to teach a topic that was included on their course outline. Taping was done throughout the semester at the teacher's convenience. A student aide taped the entire classroom presentation.

The tapes were then reviewed by a doctoral student in the College of Education who had expertise in video-tape evaluation of teachers. Using a project-developed, semantic differential instrument, he assigned a score for each of the teachers on clarity, enthusiasm, and humor.

At the end of the semester, each teacher administered a project-developed student evaluation form which asked the student to give the teacher a score ranging from 0 to 100 based on his/her teaching performance. The student also rated the teacher in regard to variety of teaching methods that the teacher had used during the semester. This student rating was used to assign the teacher a score on variability.

Findings

Each of the four characteristics was found to be positively related to student evaluations (Table 1); that is, those teachers who scored highest on clarity, enthusiasm, humor, and variability tended to receive the highest ratings. The characteristic with the highest relationship was clarity (.75), followed by enthusiasm (.61), variability (.60), and humor (.26).

Table 1 Relationships Between Selected Teacher Characteristics and Student Evaluations

| Teacher Characteristic | Simple r |
|------------------------|----------|
| Clarity | .75 |
| Enthusiasm | .61 |
| Variability | .60 |
| Humor | .26 |

When the four characteristics were entered into a multiple regression equation (Table 2), it was found that the four variables in combination had a relationship of .99 with student evaluations. This extremely high multiple correlation means that the combination of the four variables accounted for an amazing 98 percent of the variance in the rating scores, or put another way, the four teacher characteristics explain all but 2 percent of the differences in rating scores assigned by the students. Needless to say, it is extremely rare in the social sciences to find four independent variables which account for so much of the variance in a dependent variable.

Table 2 Multiple Regression Of Student Evaluations on Selected Teacher Characteristics

| Teacher Characteristic | Multiple R | R Square | R Square Change | F |
|------------------------|------------|----------|-----------------|---------|
| Clarity | .75 | .56 | .56 | 145.98* |
| Variability | .95 | .89 | .34 | 105.62* |
| Humor | .98 | .96 | .06 | 26.10* |
| Enthusiasm | .99 | .98 | .03 | 8.07* |

R = .99, F = 79.49*

*Significant at .05 level of significance.

Conclusions

Regarding the 12 teachers who were included in the study, the following conclusions are apparent:

- (1) The teacher characteristics of clarity, enthusiasm, variability, and humor, as measured in this study, are important factors to consider by faculty members if they wish to improve their student evaluation ratings.
- (2) While the study, by no means, shows that the characteristics of clarity, enthusiasm, variability, and humor cause higher student ratings, the extremely high positive correlation between the characteristics and student ratings suggest them as likely candidates for such causation and should serve as the basis for future experimentation to determine if they are truly what causes higher student ratings.
- (3) A prediction equation can be constructed which could be utilized quite accurately to predict teachers' student ratings based on video-taped measures of their clarity, enthusiasm, humor, and student-measured evaluations of their variability in teaching methods.

Recommendations

Based on the results of this study, the researcher makes the following recommendations:

- (1) Teachers in the College of Agriculture and Home Economics who wish to improve their student ratings should look at the possibility of having their teaching performance video-taped and evaluated to determine if they rate low in enthusiasm, clarity, or humor. They should also consider having their students rate them in terms of variability of teaching methods.
- (2) Teachers who rate low in any of the four measures listed above should meet with qualified education personnel for suggestions on how to improve their ratings in clarity, enthusiasm, humor, and

variability of teaching methods. In some instances, knowledge of the low rating may be enough to stimulate improvement. Research has shown that teachers who have been told to teach with more enthusiasm do so, and their students perform better than those of teachers who have been told to teach without enthusiasm.

- (3) Additional research should be conducted to determine, in an experimental manner, those teacher characteristics which cause differences in student evaluation ratings.

References

- Rosenshine, B. and Furst, N. 1975. In *Beginning Teacher Education Study, Phase II, Final Report*. McDonald, F.J. et al. Princeton, N.J.: Educational Testing Service.



BOOK REVIEWS

A. W. Burger
Book Review Editor
Dept. of Agronomy
Univ. of Illinois

Trudy Huskamp Peterson, Editor. **Farmers, Bureaucrats, and Middlemen - Historical Perspectives on American Agriculture**. Washington, D.C., Howard University Press. 1981. 350 p. Clothbound, \$19.95.

This book is the edited proceedings of a conference held April 28-29, 1977, at the National Archives and co-sponsored by the Agricultural History Society. The conference brought together a diverse group of historians, economists, and political scientists. The content of the proceedings reflects this diversity.

The book is divided into seven chapters. Each includes two or three pages, and in some chapters a summary of the panel discussion which followed the presentation of a set of papers. The chapter topics include an overview of an American agricultural history, a description of the national archives, agricultural leadership, agricultural labor, agricultural research and development, domestic marketing, and the federal government's role in twentieth century agriculture. Following the seven chapters, a brief biographical sketch of each author and an appendix listing maps and still photographs of land use in the 1930's is included. The book also includes a variety of illustrations, photos, and other documentation that adds interest and perspective to the presentations.

The greatest contribution of this volume is the coverage of lesser known segments of American agricultural history rather than those topics that have received frequent coverage in the past. Most notable examples of these contributions are the papers by Gladys