DOCUMENT RESUME

ED 352 893 HE 026 093

AUTHOR Braxton, John M.; Bayer, Alan E.
TITLE How Professionalized Is College Teaching? Norms and the Ideal of Service. ASHE Annual Meeting Paper.
PUB DATE 1 Nov 92
NOTE 28p.; Paper presented at the Annual Meeting of the Association for the Study of Higher Education (Minneapolis, MN, October 28-November 1, 1992).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Behavior Standards; *College Faculty; *College Instruction; Graduate Study; Higher Education; Intellectual Disciplines; Research Universities; Social Behavior; Surveys; *Teacher Attitudes; Teacher Effectiveness; *Teaching Skills
IDENTIFIERS Professionalization of Teaching

ABSTRACT

This study examined the behavioral expectations and norms for college and university faculty particularly whether they varied with respect to the level of commitment to teaching at different institutions and in different disciplines. A cluster sampling design was used to select a random sample of the population of faculty in biology, history, mathematics and psychology at Research Universities I and Comprehensive Colleges and Universities II (Carnegie Classifications). A survey was mailed to 800 individuals of which 251 responses were eventually included in the analysis. The findings suggested a mixed picture of social control of faculty teaching role performance with respect to the welfare of the clients (students). Norms pertaining to the condition of knowledge in an academic subject matter were found to exist. However, little or no informal social control was found for teaching role performance which facilitates the learning of course content. A conclusion speculates that the graduate school socialization process may provide the explanation, as little systematic attention or concern is given to the development of pedagogic skills during the graduate training while knowledge, skills, attitudes and values of a given subject matter area are the key focus. (Contains 31 references.) (JB)

How Professionalized is College Teaching?

Norms and the Ideal of Service

John M. Braxton
Associate Professor
Department of Educational Leadership
Peabody College
Vanderbilt University
Box 514
Nashville, Tennessee 37203

Alan E. Bayer
Professor of Sociology and
Director, Center for Survey Research
Virginia Polytechnic Institute and State University
Blacksburg, Virginia 24061-0543

Paper presented at the 1992 Annual Meeting of the Association for the Study of Higher Education, October 29-November 1, 1992, Minneapolis, MN.

Texas A&M University
Department of Educational
Administration
College Station, TX 77843
(409) 845-0393

ASSOCIATION FOR THE STUDY OF HIGHER EDUCATION

This paper was presented at the annual meeting of the Association for the Study of Higher Education held at the Marriott City Center, Minneapolis, Minnesota, October 29 - November 1, 1992. This paper was reviewed by ASHE and was judged to be of high quality and of interest to others concerned with the research of higher education. It has therefore been selected to be included in the ERIC collection of ASHE conference papers.

How Professionalized is College Teaching?

Norms and the Ideal of Service

The mastery and control of a basic body of abstract knowledge and the ideal of service--the client's welfare above that of the professional--are the core generating traits of professionalism according to the functionalist perspective on professions (Goode, 1969).[1] These core traits legitimize claims made to professional status by occupational groups. Autonomy is granted by the lay public to those occupational groups which control the work of its members in the interest of their clients (Goode, 1969).

Such control of individual professional behavior is exercised through the community of the profession (Goode, 1957). Formal and informal codes of conduct serve to exercise such control, as they provide guides for professional behavior. Such social control mechanisms define appropriate and inappropriate behavior with respect to the larger community, colleagues, and clients (Goode, 1957).

As there is no formally proclaimed code of conduct in the academic profession, informal social control mechanisms are necessary to assure that professional role performance adheres to the ideal of service. As norms are prescribed and proscribed patterns of behavior (Merton, 1942, 1973), they function as mechanisms of informal social control.

Moreover, given the high degree of autonomy most college and university faculty have in teaching role performance, norms which guide such behavior in accordance with the welfare of clients are required. In the case of college teaching, the clients served are the academic discipline (Schein, 1972), students in groups (Schein, 1972) and students as individuals (Blau, 1973). For teaching role performance to serve both students in groups and individual students as clients as well as the academic discipline, norms which prescribe techniques or procedures which enhance student learning are imperative. Norms which attend to the transmission of knowledge are also essential to assure that teaching role performance tends to the welfare of the academic discipline or subject matter as a client, as well as to the welfare of students as clients.

Although teaching and research form an integrated core of activities for the academic profession (Braxton & Toombs, 1982; Parsons & Platt, 1973), and teaching is the primary activity of most college and university faculty (Baldridge, Curtis, Ecker & Riley, 1978), little is known about such norms which provide guides for appropriate and inappropriate behavior with respect to the ideal of service for clients of teaching role performance.

Violations of teaching norms which are functional to the ideal of service to students and the academic discipline as clients evoke various levels of moral indignation and outrage (Durkheim, 1934). As such reactions signal the social significance of these norms, it is postulated that the degree of

impropriety ascribed to these two sets of norms will vary as a function of the degree of emphasis placed on teaching in different types of colleges and universities and in different academic subject matter areas.

As faculty in research oriented universities may place a lower value on teaching, the social significance of teaching behaviors which are detrimental to the welfare of students as clients and the discipline as client are less for such individuals than for academics in colleges and universities where teaching is emphasized to a greater extent. Consequently, the degree of impropriety ascribed to such teaching behaviors may be greater in colleges and universities where faculty stress teaching more than they do research.

The degree of impropriety accorded such teaching norms may also vary across different academic subject matter areas or academic disciplines. Academic subject matter areas have been found to differ in the level of commitment to teaching espoused by faculty (Biglan, 1973; Creswell & Roskens, 1981). Because the level of commitment to teaching may be indexed in the social gravity bestowed various teaching norms, faculty in academic subject matter areas which place a higher degree of importance on teaching may accord a higher degree of impropriety to teaching behaviors which are detrimental to the welfare of students and the academic discipline as clients than do academics in subject matter areas which declare less commitment to teaching.

As little or no research has focused on these formulations (Braxton, 1986), the purpose of this research is to do so by addressing the following two research questions: Is a higher degree of impropriety accorded behaviors which are detrimental to the welfare of students and the academic discipline as clients by faculty in colleges and universities where teaching is emphasized to greater extent than in colleges and universities where teaching is less emphasized? Is a higher degree of impropriety accorded behaviors which are detrimental to the welfare of students and the academic discipline as clients by faculty in academic subject matter areas which espouse a high degree of commitment to teaching than in academic subject matter areas which have a lower degree of commitment to college teaching?

As norms are preferential, permissive, or proscribed patterns of behavior (Merton, 1942, 1968, 1973), the degree of impropriety faculty members ascribe to teaching behaviors which are detrimental to the welfare of students and the academic discipline as clients of teaching role performance, provides a suitable operational definition of the strength of such norms for this inquiry. Moreover, the degree of impropriety is assessed herein through the type of sanctions individuals believe should be meted out for each behavior which has been stated in the form of a violation of a possible norm. Thus, the Durkheimian principle of ascertaining norms by assessing the opinions of individuals concerning the type of sanction which might be allocated for deviance was followed in this study. Only those

behaviors for which relatively strong sanctions were believed to be fitting were defined as being a norm.

Research Methods

Sampling Design

Faculty in the academic subject matter areas of biology, history, matheratics, and psychology holding full-time academic appointments at Research Universities I and Comprehensive Colleges and Universities II categories of the Carnegie Classification of Institutions of Higher Education (1987) is the population of inference for this study.

A cluster sampling design was used to select a random sample of the population of inference of this research. The two types of institutions and the four academic subject matter areas represented are the elements in this sampling design. This design entailed the random selection of specific institutions from the two categories of the Carnegie Classification of Institutions of Higher Education (1987): Research Universities I and Comprehensive Universities and Colleges II. Each specific institution represents a cluster from which the faculty sample was drawn.

From the population of 70 institutions classified as Research I Universities, 11 universities were randomly selected, and 25 institutions were randomly drawn from the population of 171 Comprehensive Universities and Colleges II. To construct the faculty sample, the specific names of faculty were derived from the most recent university and college catalogues or bulletins of

the randomly chosen colleges and universities. All faculty holding the rank of assistant professor or higher and listed under one of the four academic departments represented in this research were eligible for selection.

Eight lists of faculty were formed, one list for each academic subject matter and institutional type combination. From these eight lists, a random sample of 800 faculty was drawn. This sample was comprised of 200 faculty from each of the two types of colleges and universities included in this study.

During April 1989, The "College Teaching Behaviors Inventory" designed and constructed by Braxton, Bayer and Finkelstein (in press) was mailed to this sample of 799 faculty.[2] This inventory is composed of 126 specific teaching behaviors which were derived from literature on ethics in college teaching (Baumgarten, 1982; Robertson & Grant, 1982; Schurr, 1982; Scriven, 1982; and Wilson, 1982), analogies to the four norms of science identified by Merton (1942, 1973), and from the suggestions of a panel of 23 experts on college teaching.[3]

After an initial mailing, a postcard reminder and a second mailing of the survey form to nonrespondents, a total of 356 individuals responded with completed survey forms. Thus, a response rate of 44.5 percent was realized. Although 356 completed survey instruments were gathered, this sample size was reduced to 251 by the application of four criteria for inclusion in the data analysis. These four criteria were: The individual holds a full-time academic appointment, the individual is tenured

or holds a tenure-track appointment, the individual holds the academic rank of assistant professor or higher, and the absence of missing data on the independent and dependent variables used in this inquiry.

One-Way Analyses of variance were conducted to ascertain the representativeness of the obtained sample.[4] As neither of the two Analyses of Variance were statistically significant, no bias on either of the two dependent variables of this study is suggested. This method for determining a sample's representativeness is consistent with procedures outlined by Goode and Hatt (1952), Leslie (1972), and Nielson, Moos and Lee (1978).

Research Design

Two dependent and two independent variables comprised the research design for this inquiry. The two independent variables were institutional emphasis on teaching and disciplinary commitment to teaching. Institutional emphasis on teaching was constructed using the two types of colleges and universities represented in this inquiry. Although Research I Universities (RUI) and Comprehensive Universities and Colleges II (CUCII) are not polar opposites, these two types of institutions do differ on the degree of emphasis placed on teaching and research. Teaching is more heavily emphasized in Comprehensive Universities and Colleges II, whereas research receives greater emphasis at Research Universities I.

Disciplinary commitment to teaching was developed by combining biology and mathematics to depict a lower commitment to teaching, whereas psychology and history were aggregated to represent a higher commitment to teaching. The construction of this variable is consistent with research on the Biglan model for the classification of academic subject matter areas which suggests that individual academic disciplines differ on the amount of time spent on teaching and on the preference or amount of importance attached to teaching (Creswell & Roskens, 1981).

Moreover, the model generated by Biglan (1973) assorts academic subject matter areas into eight categories using three dimensions: pure-applied, hard-soft, and life-nonlife. The following four categories of Biglan's model are presented herein: Hard-life (biology), hard-nonlife (mathematics), soft-life (psychology), and soft-nonlife (history). In this study, only pure subject matter areas are represented. Research on the Biglan model (Creswell & Roskens, 1981) indicates that a greater commitment to teaching is held by faculty in soft academic subject matter areas than in academic areas classified as hard.

The two dependent variables were Facilitation of Learning and Cognitive Rationality. As these two patterns of behavior are essential to the welfare of both the academic discipline and students as clients, they function as a set instrumental to the transmission of knowledge. Facilitaton of Learning was composed of six specific teaching behaviors which are, as worded in the College Teaching Behaviors Inventory, detrimental to student

learning. These behaviors pertain to techniques or procedures which detract from the ability of students to learn the content of a course. For teaching role performance to serve the learning needs of students as clients and the welfare of the academic discipline through the accurate transmission of the knowledge base of an academic field, the norm of Facilitation of Learning, is needed to guide the teaching role performance of faculty.

Cognitive Rationality was also comprised of six specific teaching behaviors which, as worded in the College Teaching Behaviors Inventory, are detrimental to the transmission of knowledge of an academic discipline or field of study. Such behaviors as not preparing or revising lectures which reflect advancements in knowledge, and not reading scholarly literature for the purpose of integrating new information into one's courses are harmful to the transmission of disciplinary knowledge. Such behaviors lead to the communication of obsolete material to students which, in turn, adversely affects the knowledge base of an academic field of study. Moroever, student learning is also adversely affected as they learn material which is outdated. The remaining four behaviors can also affect the content of an academic subject matter area transmitted to students are as follows: insisting that students take one particular perspective on course content, not making explicit to students professional biases or assumptions, frequently introducing opinion on religious, political or social issues clearly outside the realm of the course topics, and not including the pertinent scholarly

contributions of women and minorities in the content of courses. Such behaviors lead to a biased transmission of academic subject matter area content to students. Stated in prescriptive terms this pattern of behaviors can be labeled Cognitive Rationality, as the behaviors subsumed under this behavioral pattern affect the condition of knowledge in an academic field. The notion of the condition of knowledge stems from Parsons and Platt's (1968) formulations surrounding the value pattern of cognitive rationality. They state:

> The reference is the concern for the state of knowledge, hence, the term cognitive. The rationality consists of its codification in terms of the logical categories and propositions and in the validity of knowledge; i.e., empirical validity (pp.I-12-13).

These two composite measures were computed by summing the values of the specific behaviors and then by taking the mean value of these summations. The specific teaching behaviors for each of these composite variables are displayed in Table 1. The two composite variables appear to be reliable, as the Cronbach Alpha estimates for these two variables are .81 for Facilitation of Learning and .73 for Cognitive Rationality.

As previously indicated, these specific teaching behaviors were negatively worded so as to cast each behavior in the form of a violation of possibly preferred conduct. This approach is consistent with the general principle advanced by Durkheim (1934)

that norms are best known or recognized by individuals when violated.

Individuals were asked to indicate their opinion on each specific behavior as they might ideally apply to a faculty member teaching a lower division college course in their field of about 40 enrolled students regardless of whether the individual teaches such a course himself. To indicate their reactions to each behavior, the following response categories were provided: (1) appropriate behavior, should be encouraged, (2) discretionary behavior, neither particularly appropriate nor inappropriate, (3) mildly inappropriate, generally to be ignored, (4) inappropriate behavior, to be handled informally by colleagues or administrators suggesting change or improvement, and (5) very inappropriate behavior, requiring formal administrative intervention. Through these reactions, the types of sanctions individuals believe should be appropriated for deviance are assessed. A mean value of 3.5 or higher on the above sanctioning scale was used to discern a pattern of behaviors as having normative properties.

Data Analysis Design

Analysis of Variance was used to address the question of whether faculty in different types of colleges and universities and in different academic subject matter areas vary in the level of impropriety they ascribe to Facilitation of Learning and Cognitive Rationality. The two factors of the analyses of variance were institutional emphasis on teaching and disciplinary

commitment to teaching.[5] The disciplinary commitment to teaching factor was composed of two levels--higher (psychology and history) and lower (biology and mathematics), and the institutional emphasis on teaching factor was comprised of two levels--higher (Comprehensive Universities and College II) and lower (Research Universities I). All the statistical tests employing analyses of variance were conducted at the .025 level of statistical significance. [6]

Findings

Table 2 displays summary statistics from the two 2X2 Analyses of Variance performed. Prior to conducting each of the analyses of variance, tests for the homogeneity of the variances of the two dependent variables were made. These tests indicated homogeneous variances.

Facilitation of Learning

Faculty in institutions which place a high degree of emphasis on teaching ($x=2.75$) bestow a somewhat higher level of impropriety to behaviors which are detrimental to learning than do faculty in institutions where teaching is less heavily emphasized ($x=2.44$). In contrast, a higher degree of imprudence is accorded such behaviors by faculty in academic disciplines where less commitment to teaching is espoused ($x=2.74$) than in those disciplines which have a higher level of commitment to college teaching ($x=2.50$).[6] Despite this pattern of differences,

none of the levels of impropriety associated with these behaviors meet the definition (3.50) of a norm used in this study.

Cognitive Rationality

Similar levels of impropriety are accorded behaviors which are harmful to the transmission of academic subject matter by faculty regardless of the emphasis placed on teaching by both their institutions and academic disciplines. Unlike the pattern of behaviors related to learning of course content, these behaviors (aggregate mean=3.57) do meet the criterion of a norm applied herein.

Discussion and Conclusions

This study is restricted to faculty in only four disciplines, selected to be representative of several dimensions in the Biglan [6] classification system as well as to portray differences in the level of commitment to college teaching. Additionally, this study is restricted to faculty in only two types of higher education institutions. Furthermore, the response context provided is the classroom setting involving lower division undergraduate students in a moderate size course. Different reactions to violations of the Ideal of Service pertaining to both students and the academic discipline as clients might be engendered in other types of teaching contexts and in different institutional settings. For example, different level of impropriety might be registered in large, lower-division courses. In both liberal arts colleges and two-year colleges,

strong normative proscriptions for actions which violate the norm "Facilitation of Learning" might be discerned. Future research should address these possibilities. The following conclusions derived from this study's findings are offered within the context of these limitations.

The findings suggest a mixed picture of social control of faculty teaching role performance with respect to the welfare of the clients of undergraduate college teaching. Norms which attend to the condition of knowledge in an academic subject matter area are in place. In contrast, little or no informal social control is evidenced for teaching role performance which facilitates the learning of course content.

The thrust of the graduate school socialization process provides an explanation for this pattern of findings. As little or systematic attention is given to the development of pedagogic skills during the graduate school socialization process (Jencks & Reisman, 1986; Liebert & Bayer, 1975), faculty do not place a high value on the use of techniques and methods which enhance student learning of course content. Consequently, norms which proscribe or prescribe teaching behaviors which attend to the learning of the subject matter of a course are not present. In contrast, the graduate school socialization process is focused on the development of knowledge, skills, attitudes and values of a given subject matter area. Thus, norms which attend to the

transmission of knowledge of an academic discipline or field of study are extant.

Is college teaching a profession? Using Goode's (1969) core generating traits of a profession, college teaching does possess an abstract body of knowledge and skill. This body of knowledge and skill is fundamental to the transmission of knowledge associated with academic subject matter areas. Moreover, there is some evidence that informal social control mechanisms attending to the condition of the knowledge base of the academic discipline are present. Thus, at first blush, an ideal of service to both the academic discipline and students as clients appears to be characteristic of college teaching. However, without norms which facilitate student learning of course content, the functionality of the norm of Cognitive Rationality is limited to some degree. Without a norm which ordains that student learning be assisted, a current and unbiased knowledge base of a subject matter can not be fully grasped by students. Consequently, Cognitive Rationality and Facilitation of Learning need to function as a normative set for the ideal of service to the clients of college teaching to be fully realized. Given these formulations, college teaching appears to be a quasi-profession. College teaching is firmly rooted in an abstract body of knowledge and skill, but only partially displays the ideal of service which is fundamental to appellation as profession according to Goode's generating traits.

However, this study focused on the measurement of individual faculty reactions to various behaviors. As personal controls are only one element necessary for effective informal social control, the above formulations regarding the extent to which college teaching is professionalized are best regarded as heuristic. Before we can conclude that Cognitive Rationality, and perhaps Facilitation of Learning are mechanisms of informal social control which attend to the welfare of the clients of college teaching, some additional fundamental questions need to be addressed. Do personal controls induce individual faculty conformity to Facilitation of Learning and Cognitive Rationality. Do such sources of social control as the college or university of appointment, the academic discipline, and the academic department induce conformity to these two prescriptions for behavior? Are these prescriptions for behavior internalized through the graduate school socialization process? Are sanctions meted out for deviancy from these prescribed behavioral patterns? Research should address these fundamental questions.

As most academics have a high degree of autonomy in teaching role performance, a knowledge and an understanding of the informal social control mechanisms which guide teaching role performance in the best interests of the clients of teaching is necessary and is of fundamental significance to the improvement of undergraduate education. If undergraduate education is to improve, the ideal of service needs to be fully developed.

Notes

[1]Functionalist and power theories are two broad categories of theories on professions discerned by Abbott (1988). Abbott states that power theories of Johnson (1972), Freidson (1970a, 1970b), Berlant (1975) and Larson (1977) seriously question the functionalist view that professions are self-regulating and worthy of trust by clients and larger society. Taken together these power theories suggest that professions are concerned with dominance, autonomy, and monopoly rather than the ideal of service.

[2]Because of a clerical error, one individual was deleted from the sample of 800 individuals. Thus, the final sample was comprised of 799 individuals.

[3]We are indebted to Carla Howry of the American Sociological Association and to members of the ASA Project on Teaching for this assistance.

[4]Three groups of respondents comprised the three levels of the factor comprising these one-way analyses of variance, and this study's dependent variables were also the dependent variables of these two analyses. These three groups were respondents to the initial survey mailing, respondents after a postcard reminder sent to nonrespondents, and individuals who responded to the second mailing of the survey instrument.

[5]The least-squares or regression approach to ANOVA was used because of unequal cell sizes in each of the analyses of variance conducted.

6. This relatively conservative level of statistical significance was chosen to reduce the probability of committing Type I errors. As cluster sampling was utilized in this study, an increase in the probability of committing Type I errors above the level of statistical significance selected is possible. Kish (1957) states that the mean of a sample derived from cluster sampling is an unbiased estimator of the population mean, but that the variance of the population may be underestimated because of the homogeneity of the elements of the clusters selected. Consequently, the .025 level of statistical significance was selected.

[7]Following the statistically significant F-tests for both Institutional Emphasis on Teaching and Disciplinary Commitment to Teaching, pair-wise mean comparisons were conducted using the LSD method. These tests indicated that the difference between the two means for both independent variables were statistically significant at the .025 level.

References

Abbott, A. (1988) The System of Professions. Chicago: University of Chicago Press.

Baldridge, J.V., Curtis, D.V., Ecker, G. and Riley, G.L. (1978) Policy Making and Effective Leadership. San Francisco, CA: Jossey-Bass.

Baumgarten, E. (1982) "Ethics in the Academic Profession: A Socratic View." In Ethics and the Academic Profession, edited by David D. Dill, The Journal of Higher Education, 53:282-295.

Berlant, J.L. (1975) Profession and Monopoly. Berkeley, CA: University of California Press.

Biglan, A. (1973). "Relationships between Subject Matter Area Characteristics and Output of University Departments." Journal of Applied Psychology, 57:204-213.

Blau, P. (1973). Organization of Academic Work. New York: Wiley.

Braxton, J. and Toombs, W. (1982) "Faculty Uses of Doctoral Training; Consideration of a Technique for the Differentiation of Scholarly Effort from Research Activity." Research in Higher Education, 16:265-282.

Braxton, J. (1986) "The Normative Structure of Science: Social Control in the Academic Profession." In Higher Education: Handbook of Theory and Research, Vol. II., edited by John C. Smart, pp. 309-357, New York: Agathon Press.

Creswell, J. and Roskens, R. (1981) "The Biglan Studies of Differences among Academic Areas." The Review of Higher Education, 4:1-16.

Durkheim, E. (1934). The Elementary Forms of Religious Life. London: Allen and Unwin (Original work published in 1912).

Freidson, E. (1970a). Profession of Medicine. New York: Dodd Mead.

Freidson, E. (1970b) Professional Dominance. Chicago: Aldine.

Goode, W.J., and Hatt, P.K. (1952). Methods of Social Research. New York: McGraw-Hill.

Goode, W. J. (1957) "Community within a Community." American Sociological Review. 22:194-200.

Goode, W.J. (1969) "The Theoretical Limits of Professionalization." In The Semi-Professions and Their Organization, edited by A. Etzioni, pp.263-313, New York: The Free Press.

Jencks, C. and Reisman, D. (1968) The Academic Revolution. Garden City, NY: Doubleday.

Johnson, T.J. (1972) Professions and Power. London: MacMillan.

Kish, L. (1957) "Confidence Intervals for Clustered Samples." American Sociological Review, 22:154-165.

Larson, M.S. (1977) The Rise of Professionalism. Berkeley: University of California Press.

Leslie, L.L. (1972) "Are Response Rates Essential to Valid Surveys?" Social Science Research, I:323-334.

Liebert, R.J. and Bayer, A.E. (1975) "Goals in Teaching Undergraduates:Professional Reproduction and Client-Centeredness." The American Sociologist, 10:195-205.

Merton, R.K. (1942) "Science and Technology in a Democratic Order." Journal of Legal and Political Sociology, 1:115-126.

Merton, R.K. (1968) Social Theory and Social Structure. New York: The Free Press.

Merton, R.K. (1973) The Sociology of Science: Theoretical and Empirical Investigations. Chicago: University of Chicago Press.

Parsons, T. and Platt, G.M. (1973) The American University. Cambridge: Harvard University Press.

Robertson, E. and Grant, G. (1982) "Teaching and Ethics: An Epilogue." In Ethics and the Academic Profession, edited by David D. Dill, Journal of Higher Education, 53:345-357.

Schein, E.H. (1972) Professional Education: Some New Directions. New York: McGraw Hill.

Schurr, G.M. (1982) "Toward a Code of Ethics for Academics." In Ethics and the Academic Profession, edited by David D. Dill, Journal of Higher Education, 53:318-334.

Scriven, M. (1982) "Professional Ethics." In Ethics and the Academic Profession, edited by David D. Dill, Journal of Higher Education, 53:307-317.

Wilson, E.K. (1982) "Power, Pretense, and Piggybacking: Some Ethical Issues in Teaching." In Ethics and The Academic

Profession, edited by David D. Dill, Journal of Higher Education, 53:268-281.

Table 1
Specific Behavioral Indicators of
Cognitive Rationality and Facilitation of Learning

Cognitive Rationality

* New lectures or revised lectures which reflect advancements in the field are not prepared.
* Scholarly literature is not read for the purpose of integrating new information into one's courses.
* The instructor insists that students take one particular perspective on course content.
* The instructor's professional biases or assumptions are not explicitly made known to students.
* The instructor frequently introduces opinions on religious, political, or social issues clearly outside the realm of the course topics.
* The instructor does not include pertinent scholarly contributions of women and minorities in the content of the course.

Cronbach Alpha=.73

Facilitation of Learning

* Class sessions are begun without an opportunity for students to ask questions.
* The topics or objectives to be covered for the day are not announced at the beginning of the class.
* Class does not begin with a review of the last class session.
* The instructor does not end the class discussion by summarizing material covered during the class.
* Connections between the course and other courses are not made clear by the instructor.
* The relationship of the course content to the overall departmental curriculum is not indicated.

Cronbach Alpha=.81

Table 2
Means and Standard Deviations for
Cognitive Rationality and Facilitate Learning

Variables	Mean	Std.
Cognitive Rationality	3.54	0.62
Facilitate Learning	2.65	0.58

Table 3

F-Ratios for Sources of Variance in the 2X2 Analyses of Variance of Cogntivie Rationality and Facilitation of Learning

Variables	Overall	Instit. Emp.	Discip. Emp.	Interaction
Cognitive Rationality	2.41	4.28	0.05	3.33
Facilitate Learning	13.83*	22.60*	12.20*	3.80

* p.<.001