

## CASE STUDY

# Faculty Attitudes Toward Teaching Improvement

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### Introduction

In the report of The Holmes Group, (1986) *Tomorrow's Teacher*, the writers stated, "Teaching must be improved, but plans for improving teaching also must be improved." Although this statement was written with teacher education in mind, it is important for all instructors in our schools and universities.

A teaching improvement program must be built into college mission statements in order to be successful. The majority of teachers in the Colleges of Agriculture in land grant universities have just grown into their professions. Few have had formal courses in educational methods and procedures. Bowman et al. (1986), stated,

Teaching is one of the most important activities of a college professor. Completing M.S. and Ph.D. degrees should make one professionally competent in his or her technical field, but this may not be adequate preparation for teaching. One is expected to acquire good teaching skills by observing the techniques of others during their academic training and then incorporating the best techniques into their own teaching styles. Yet all too often the teaching methods of college professors could be significantly improved.

A program for improving teaching on campus should begin with an appraisal of the faculty attitudes toward improvement. Mangano, (1973) stated,

The failure of change programs may lie in faculty attitudes toward education rather than in the structural mechanics of inservice programs. Faculty attitudes represent one of the greatest barriers to change, causing faculty members to hide under the protective umbrella of academic freedom, to wall themselves from change.

In many colleges good teaching is given honor, but little reward. In order for teaching to be improved, there must be a system of rewards to match those rewards for those who do quality research. This was summarized well by Stake (1972):

If instruction is poor in the College of Agriculture, it is not going to get greatly better by administering student response sheets, by offering instructional resources and, by giving students more electives, etc. The breakthrough will not come one second earlier than the day when rewards for good teaching override the rewards for doing other things, the day when selection committees choose new faculty members on the basis of the ability to teach, and the day when citizens of the state are immediate beneficiaries — not trickle-down beneficiaries of what is done in the classroom.

What does today's decreasing number of students in the College of Agriculture tell us? It is necessary to pay attention to quality teaching. Not only is it necessary to recruit students into programs, it is necessary to retain them with quality teaching and advising.

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In order to approach a study of improving teaching in the College of Agriculture, University of Idaho, a survey was developed to assess the faculty attitudes toward teaching improvement.

### Purpose of Study

The goal of this study was to determine the faculty attitudes toward teaching improvement in the College of Agriculture, University of Idaho. The specific objectives were to

- (1) determine the educational training of the College of Agriculture faculty.
- (2) assess attitudes of faculty toward improving their teaching skills.
- (3) identify types of educational training to improve teaching currently available for College of Agriculture faculty.
- (4) collect selected demographic information on the College of Agriculture faculty.

### Procedures

The teaching faculty members in the College of Agriculture, University of Idaho are the subjects of this study. The names of the teaching faculty were supplied to the investigator by the College of Agriculture Dean's Office.

A survey instrument was prepared and reviewed by the College of Agriculture Resident Instruction Advisory Committee. Several questions were taken from a questionnaire used by Bowman, et al., (1986) to conduct a survey on preparation for teaching of agronomy teachers at selected land grant universities. A total of 107 questionnaires were mailed on April 13, 1987 under a cover letter signed by the Dean. A follow-up letter and questionnaire were mailed to those not responding in two weeks.

Returned survey questionnaires were checked for completeness and coded. The data were analyzed using the Statistical Package for the Social Sciences (SPSSx, 1983).

### Findings

Ninety-three (86.9 percent) survey instruments were returned and used in the analysis of this study. The teaching faculty in the College of Agriculture had the following characteristics:

- \* Approximately 35% had 5 or less years of teaching experience.
- \* Over 65% had teaching appointments 50% or less.
- \* 36.6% indicated that they had less than a 25% teaching appointment.
- \* 60.9% began their teaching experience as a college teaching assistant.
- \* 16.3% started their teaching experience as an elementary, junior high or senior high instructor.

- Nearly 70% indicated that no prior teaching experience or educational training was required when they were hired for their current position.
- 55.9% have not taken a formal course in education (formal = structured course at the university level).

One respondent reinforced the fact that no prior teaching experience or educational training was required when hiring new faculty members by writing, "Really, not once since I've been here have we ever questioned a prospective faculty member about their teaching ability, only how many papers they have published, or if they are capable of bringing in outside funds. We really don't recruit teachers do we?"

College of Agriculture faculty perceptions of courses and assistance that could be included in faculty development programs are summarized in Table 1.

**Table 1. College of Agriculture Faculty Perceptions of Courses and Assistance that Should be Included in a Faculty Development Program.**

Question	Percent	N
What, if any, courses in education do you see as beneficial to a faculty member?		
Strategies for Teaching (Methods)	79.0	
Electronic Media (Audio-visual aids)	56.8	
Curriculum Development and Evaluation	55.6	
Theory of Learning	28.4	
Educational Psychology	21.0	
Adult Education	12.3	
Other	4.9	
I could use assistance in improving my teaching in the following areas:		
using a variety of classroom teaching methods	56.5	69
developing exams	53.6	69
developing visual aids	52.2	69
assessing student grades	40.6	69
using class discussion	39.1	69
maintaining classroom interest	39.1	69
utilizing the chalkboard effectively	27.5	69
developing lesson plans	24.6	69
other	7.0	71

Three courses in education were perceived as beneficial by 50 percent or more of the respondents. The courses were "Strategies for Teaching" — methods (79%), "Electronic Media" — audio/visual aids (56.8%), and "Curriculum Development and Evaluation" (55.6%). When the respondents were asked about the kind of assistance they would use to improve teaching, the highest responses were classroom teaching methods, developing exams, developing visual aids, and assessing student grades. It was noted that the assistance desired would likely be part of the courses identified as being beneficial.

There was strong opposition to a certification process for university professors. Over 82% indicated

they would not favor a certification process.

Sixty-six (77.6%) of the respondents felt their teaching was effective, but needs improvement based on evaluation by students. Eighty-one percent believed student evaluations to be effective. Almost 85 percent indicated they had improved their teaching as a result of student evaluations. This would suggest that the climate should be relatively receptive to improvement programs in teaching. Student evaluations received a positive appraisal.

In a study at Indiana State University Northwest, Mannan and Traicoff (1976) asked students to rate attributes of the ideal university professor. University of Idaho College of Agriculture faculty perceived these attributes similarly to student groups of the Indiana study. Table 2 compares the rankings.

**Table 2. Rankings by Sophomore, Method, Graduate Students and the College of Agriculture Faculty on the Following Attributes Describing The Ideal University Professor**

Statement	Student Groups			Ag Faculty
	Sophomores N=113	Methods N=86	Graduates N=79	Perceptions N=92
Has the ability to explain clearly	1	2	3	1
Has the subject matter of the course well organized.	2	1	1	2
Likes college-age youth and is interested in them as individuals.	4	4	4	3
Encourages independent thinking, not memorized knowledge.	1	3	2	4
Has an adequate and well-modulated voice.	5	5	6	5
Is scholarly and participates actively in research.	6	6	5	6

a Sophomore students taking introductory courses  
b Junior and senior students in methods courses  
c Practicing elementary and secondary teachers  
d College of Agriculture, University of Idaho Teaching Faculty  
e Rankings

Table 3 summarizes the percentage of respondents who have participated or would like to participate in selected teaching improvement activities. It is interesting to note that the respondents would like to increase their utilization of Ag Communications in the development of visuals (71.6%), peer classroom observations (63.4%), and video-tape review of teaching (60.0%). These three activities might be provided for the faculty in addition to the first three noted in Table 3.

**Table 3. Percentage of Respondents Who Have or Would Like to Participate in the Following Teaching Improvement Activities.**

Activity	Have Done This		Would Like To Do This	
	Yes	No	Yes	No
Utilized student evaluation of teaching	89.9	10.1	91.1	8.9
Sought advice from a fellow faculty member	84.4	15.6	86.7	13.3
Read articles in a publication about effective teaching	82.0	18.0	88.3	11.7
Utilized Department Head evaluation of teaching	55.8	44.2	60.9	39.1
Utilized Ag Communication in the development of visuals for my teaching (slides, overheads, etc.)	34.5	65.5	71.6	28.4
Utilized peer classroom observation of my teaching	29.9	70.1	63.4	36.6
Utilized Department Head classroom observation of teaching	26.1	73.9	45.1	54.9
Utilized video-tape review of my teaching	22.7	77.3	60.0	40.0
Sought assistance from Associate Dean of Resident Instruction	17.4	82.6	35.8	64.2
NACTA (National Assoc. of Colleges and Teachers of Agriculture)	9.3	90.7	32.8	67.2
ave N = 88 range 80-86			ave N = 88 range 71-86	

The data in Table 4 indicate the respondents would be receptive to some types of activities over others to be used in improving teaching. Being rewarded financially was checked extremely or somewhat helpful by 68.5 percent of the respondents. Opportunity for non-credit inservice courses and workshops, videotaped classroom performances and student ratings followed in that order.

**Table 4. College of Agriculture Faculty Responses to Activities that May be Useful in Improving Teaching**

Items	Percent				N
	Extremely Helpful	Somewhat Helpful	Slightly Helpful	Not Helpful	
Financial incentive program to reward excellent teaching	31.5	37.0	18.5	13.0	92
Informal non-credit inservices courses and workshops	27.2	48.9	19.6	4.3	92
Videotaped classroom performances	12.4	40.4	30.3	16.9	89
Student ratings	12.1	51.6	28.6	7.7	91
Formal credit (lecture and discussion) courses related to teacher improvement	9.8	38.0	30.4	21.7	92
Classroom observation by administrators or peers	6.7	33.3	26.7	33.3	90

Table 5 indicated that the respondents would look favorably on a formal course in education made available to new teaching faculty (89.1% strongly agree or agree). It was surprising to the author that approximately 54 percent of the respondents strongly agreed or agreed that formal and/or informal education training should be required of all faculty with any teaching appointment. From the response on other parts of the survey and the written responses it would be safe to assume the informal training would be preferred.

**Table 5. College of Agriculture Faculty Attitudes Toward Formal and Informal Educational Training for Faculty.**

Attitude	Percent				N
	SA	A	D	SD	
A formal course in education, taught at the university level, that is geared to new teaching faculty should be available.	39.1	50.0	6.5	4.3	92
Formal and/or informal educational training should be required of all faculty with any teaching appointment.	22.0	31.9	36.3	9.9	91
New teaching faculty members should be required to attend or have had a formal course in teaching methods.	19.6	25.0	37.0	18.5	92
Some formal educational (learning how to teach) training should be required of all new faculty involved in teaching	18.7	29.7	39.6	12.1	91
New teaching faculty members should be required to attend or have had a formal course in human relations.	13.0	18.5	46.7	21.7	92
New teaching faculty members should be required to attend or have had a formal course in educational theory.	5.4	22.8	39.1	32.6	92

A = Strongly Agree  
SD = Strongly Disagree  
A = Agree  
D = Disagree

The data summarized in Table 6 may present some cautions to those who might be involved in organizing and presenting teaching improvement opportunities. For example, nearly 30 percent of the respondents indicated college teaching is an art and cannot really be taught (28.2%), and most members of the academic community possess adequate knowledge of learning theory and motivation (27.3% agreed). Almost 31 percent of the respondents felt that excellence in either teaching or research is usually at the cost of neglecting the other. It was encouraging to see that approximately 84 percent of the respondents felt teaching ability and teaching improvement can be measured.

**Table 6. College of Agriculture Faculty Response to Barriers to Successful Faculty Development Programs**

Attitude	Percent		
	A	D	N
At the U of I there is a lack of a formal program or an organizational structure capable of developing a formal program for improving teaching.	51.9	48.1	81
In the College of Agriculture, there is a general attitude among administrators that the modest results that might be forthcoming are not important enough to warrant developing a program to improve teaching.	35.9	64.1	64
In regard to the whole controversy of teaching versus research, it is true that excellence in one is inevitably at the cost of neglecting the other.	30.8	69.2	91
College teaching is an art that cannot really be taught, but it is something that develops only through years of experience.	28.2	71.8	85
Most members of the academic community possess adequate knowledge of learning theory and motivation.	27.3	72.7	88
Professors' classrooms are their castle. They should not be disturbed by visitations to observe them in action, or harassed by any questions that seek to discover the purposes of their course, or how their teaching was designed to achieve these purposes.	19.1	80.9	85
Neither teaching ability nor teaching improvement can be measured.	16.1	83.9	87

A = Agree, D = Disagree

### Summary

Although there are additional questions that could be asked to increase our knowledge of faculty attitudes toward teaching improvement, the current data can be valuable as a faculty development plan is formulated for the College of Agriculture. For the most part, the faculty who responded seemed receptive to improvement of teaching. Note following comments:

"Ability to teach should be considered highly during the employment process, not just technical abilities."

"I believe that indeed quality college teaching is a neglected area. I suppose there is a great deal of truth to the idea that the emphasis is on research and not on teaching, especially from the promotion standpoint. I believe that this is unfortunate and wrong. High quality teaching must be a priority of an institution of higher learning."

"Sometimes I feel that administrators really don't care about courses or course content since they never visit classes or facilities."

"The University administrator does not recognize excellence in teaching worthy work. Only excellence in research is rewarded! Until teaching and research are given equal consideration in faculty reviews, teaching will not be a priority among the faculty. While poor teaching performance is discouraged, poor research performance means job termination."

Certainly there needs to be administrative commitment if teaching is to be given a higher priority. Faculty must see some visible actions to reward them for quality teaching.

## Conclusions/Recommendations

Below are several conclusions/recommendations based on the data collected with the questionnaire:

1. Over one-third (35%) of the faculty members in the College of Agriculture who responded to the questionnaire had five or less years of teaching experience. There would seem to be a sizable number of faculty members who could still be in the formative stages of developing a teaching style and may benefit most from a program to improve teaching.
2. A substantial percent (65%) of the teaching faculty in the College of Agriculture have less than a 50 percent teaching appointment, thus indicating that faculty have many other commitments.
3. Only 16.3 percent of the respondents have been certified to teach indicating they have completed the education courses for their degree. This indicates a large percentage of faculty members have not had the opportunity to take education courses they could apply directly to improve their teaching.
4. Three courses in education could have potential interest if offered as faculty improvement opportunities. These are: 1) Strategies for Teaching — methods, 2) Electronic Media — audio/visual aids, and 3) Curriculum Development and Evaluation.
5. Almost 78 percent of the respondents reported that their student evaluations indicated their teaching was effective, but needs improvement. This should confirm that there is an interest in improving teaching.
6. A significant number of faculty said they would like to utilize Ag Communications more in the development of visuals (71.6%), utilize peer classroom observation (63.4%), and utilize video-tape review of teaching (60.0%). These three activities might be considered by RIAC or the Office of Resident Instruction as potential faculty development opportunities.
7. The respondents indicated that a financial incentive program to reward excellent teaching (68.5%) would be somewhat to extremely helpful. More research is necessary to determine what might serve as incentives to improve teaching.
8. The responses in Table 6 (College of Agriculture response to barriers to successful faculty development programs) raise the fact that nearly one-third of the faculty in the College of Agriculture feel teaching can only be developed through experience (28.2%); excellence in teaching or research is inevitably at the cost of neglecting the other

(30.8%); members of the academic community possess adequate knowledge of learning theory and motivation (27.3%); therefore, anyone involved in planning and developing faculty development programs must proceed with caution and understanding.

9. The tone of the responses to the questionnaire indicated that there is a positive atmosphere in the College of Agriculture to begin a faculty development program. This program should provide the opportunity and incentive for teaching faculty members to improve their teaching.

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## Stressed Agricultural Producers' Educational Needs for Seeking Off-farm Employment

Philip Buriak and Rich Whitacre

### Abstract

*Agricultural producers and their spouses were surveyed to determine educational and training needs and delivery systems congruent with needs and schedules of those seeking off-farm employment. Instructional topics were identified. Programs targeted to this group should be offered in an interim semester, November through March, in evening sessions lasting 4 to 8 hours.*

### Background

The United States Department of Agriculture reported in 1985 that more than four percent of all farmers were in such poor financial condition that they would be forced out of farming in 1986, eight percent were in "critical" financial condition, and an additional thirty percent were having moderate to serious financial difficulties. Declining agricultural exports, continued high real interest rates, and declining farm assets are some of the economic factors that have led to

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