

ACADEMIC PROGRAMS



College of Agricultural,
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UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

From the Office of the Associate Dean

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Current and Expected Roles of Graduate Student Faculty Mentors

Faculty and graduate students in ACES were surveyed to gain their perceptions regarding the current and ideal role of the graduate student faculty mentor. While faculty and graduate students generally agreed on the ideal role of a faculty mentor, there were several differences between the current and ideal role perceptions as indicated by the graduate students. A complete report of the survey, conducted by Academic Programs and ACES Professional Development has been shared with departments, including a summary for each graduate program.

The overall purpose of the study was to gather perceptions from faculty and graduate students regarding the role of the faculty mentor. The information gained from the study should be useful in faculty and graduate student development programs and could also lead to changes in how graduate programs are administered. Specifically, the objectives of this study were:

1. to ascertain the perceptions of the faculty regarding the ideal role of the faculty mentor;
2. to ascertain the perceptions of graduate students regarding the ideal and current roles of the faculty mentor; and
3. to compare the perceptions of the ideal and current roles of the faculty mentor.

After reviewing existing survey instruments for content, reliability and validity, and ease of implementation, the study team decided to modify the Survey of Doctoral Education instrument developed by the University of Wisconsin-Madison (2001). The section of the instrument related to mentoring and advising was modified into a graduate student form

and a faculty form. Graduate students were asked to indicate their agreement/disagreement on the four-point scale of Strongly Disagree to Strongly Agree on each of 25 questions related to behaviors/characteristics of their "ideal mentor" and their "current mentor". Faculty members were asked to indicate their agreement/disagreement related to behaviors/characteristics of an "ideal mentor". The survey was conducted using the Bluestem system to assure the anonymity of respondents. Responses were not associated with any individual. The report of the survey includes only aggregate data for the College and for each graduate program.

A total of 76 of the 248 faculty and 194 of the 631 graduate students completed the instrument and provided useable data. No follow-up measures other than reminders could be taken, since the responses were completely anonymous. Response rates for individual departments ranged from 25 percent to 33 percent. Results from this study should not be generalized beyond the respondent group.

Generally, no major differences were noted between the faculty and graduate student responses regarding their perceptions of the Ideal role of the faculty mentor. For most role statements, 80 percent or more of both the faculty and student respondents agreed or strongly agreed on the Ideal role.

For 15 of the 25 statements of the role of the faculty mentor, students responded that the Current role differs considerably from the Ideal role as described by faculty and graduate students. The following summary statements indicate where those differences occurred, as indicated by the respondents.

- Graduate students indicated that the current availability of the mentor when the student needs help with research is somewhat less than the Ideal role.
- Graduate students indicated that their ideas are treated with slightly less respect than the Ideal role.
- One-fourth of the graduate students indicated that they had not been taught the details of good research practice when compared to the Ideal

Cognitive Growth in College

In an article in *Change* (November/December 2001), F. T. Pascarella, holder of the Mary Louise Petersen Chair in Higher Education at the University of Iowa, shared findings from the National Study of Student Learning. He reported four findings that “sustain conventional wisdom” including this excerpt on Good Teaching Practices.

A prominent reform position in higher education makes the claim that particular “good instructional practices” enhance growth in general cognitive development in college. To what extent is this the case? To answer this question, we asked students to indicate how often the classes they took exhibited an extensive list of teacher behaviors or instructional practices. The list we used was taken from the large body of research on teacher behaviors and student learning.

Using this list, we developed two reliable scales—“teacher organization and preparation” and “teacher skill and clarity”—that measured instructor behaviors shown in previous research to be particularly strong predictors of student achievement. The teacher organization and preparation scale consisted of items like “presentation of material is well organized,” “class time is used effectively,” and “course goals and requirements are clearly explained.” The teacher skill and clarity scale, in turn, contained such items as “instructors give clear explanations,” “instructors effectively review and summarize the material,” and “instructors interpret abstract ideas and theories clearly.”

After controlling for confounding influences, the teacher skill and clarity variable had little consistent net impact on our measures of general cognitive development. But students who judged the overall instruction they received as high in teacher organization and preparation tended to demonstrate significantly larger net gains than their peers who perceived less well-organized and prepared instruction. This held true in first-year reading comprehension, mathematics, and critical thinking; second-year writing skills; and third-year reading comprehension and critical thinking.

These findings have two potential practical implications. First, they suggest that the positive link between student perceptions of teacher organization and preparation and course-level achievement might

mentor role. A similar proportion indicated that they also had not been taught student survival skills for their field, compared to the Ideal mentor role. Further, more than one-fifth of the graduate students indicated that they received less help in developing professional relationships with others in their field than is expected from the Ideal mentor.

- A smaller proportion of students (12 percent) indicated that the assistance they received with writing presentations of publications was less than indicated as the Ideal role of the mentor.
- More than a third of the graduate students disagreed that they were taught to write grant and contract proposals, compared to approximately 10 percent of faculty and students disagreeing with this statement as part of the Ideal mentor role.
- While six percent of faculty and 16 percent of students disagreed that providing emotional support when the student needs it is a part of the Ideal mentor role, 28 percent indicated that such support is currently not a role of the faculty mentor. Likewise, students indicated that the Current role of the faculty mentor is less sensitive to student needs and has the best interests of the student at heart to a lesser degree than the Ideal role.
- Nearly one-fourth of the students indicated that they received less regular and constructive feedback on their progress toward degree completion than the Ideal role would indicate. A similar proportion of the graduate students also indicated that the mentor provided less direct assessment of student progress than the Ideal.
- More than a third of the graduate students indicated that they received less information about career paths than is expected from the Ideal mentor. A fourth of the graduate student respondents indicated that the mentor did not solicit input on matters of teaching and research to the extent expected from the Ideal mentor.

Although faculty and graduate students generally agreed on their perceptions of the ideal graduate student mentor, the graduate students tended to describe their Current mentor as less than the Ideal on many attributes. Those differences appeared in attributes related to skill development as well as in attributes related to relationships. Graduate faculty need to review and discuss the findings to determine changes that could be made in the graduate student mentoring process.

Spring 2005 Teaching Enhancement
Grants due February 15th.

extend to more broad-based, general cognitive proficiencies. Second, and perhaps more important from a policy perspective, effective teacher organization and preparation are skills that can be taught and learned through purposeful teaching improvement programs.

What can we do to respond to Pascarella's findings? Be prepared and show your students good organization. From a well-written syllabus to extensive daily teaching plans, students will learn more, and not just the course context. Secondly, participate in programs designed to improve teaching!

How to Improve Student Learning

Ideas #2, 3 and 4

Idea #2 Encourage students to think - quite explicitly - about their thinking

Give them specific suggestions for how to go about it. For example, most students left to themselves do not think very effectively as learners. Many have poor reading and listening habits. Most rarely ask questions. Most could not explain the thinking they are using in the learning process. Much of their thinking turns out to be short-term memorization (rote learning). We suggest that you discuss with students the kind of thinking they need to do to master the content you are teaching.

You should point out to students the danger of relying on rote memorization and periodic cramming as a way to try to pass the course. You should tell the students on the first class day that thinking through the content is the key agenda in the course and that this task will be the business of the class.

Idea #3: Encourage students to think of content as a form of thinking.

For example, encourage students to recognize that the key to history (as a body of content) is historical thinking; that the key to biology is biological thinking, etc. Discuss the purposes that define the field of study—"Biologists have the following aims:...". Name and explain some of the kinds of questions, problems, and issues that people in the field answer, solve, or resolve. Give examples of the way in which data is collected in the field and of the way those data are processed (the inferences or conclusions that professionals come to). Discuss the point of view or

perspective that the field involves. How do biologists look at the world (or at the data they collect)? How do anthropologists? How do artists? Nurses? Lawyers? Doctors?

There is a particular set of performances we are striving for in teaching any body of content. We want basic concepts to be internalized. We want students to leave our classes with the content of the course available to them in their minds, so that they can actually use the content they learned in the "real" world. Thinking is the only vehicle for that internalization and use. When students think poorly while learning, they learn poorly. When they think well while learning, they learn well.

Idea #4: Use engaged lecture.

When lecture is essential, we recommend use of what we call an "engaged lecture" format. During the lecture, routinely stop and ask student to state in their own words their understanding of what you have said. This can be done through a "random card" format wherein you flip through a set of 3 by 5 cards, each containing one student's name, calling on students randomly as their card happens to come up. You keep shuffling the cards to ensure that each new draw is completely random. You call on students in class to state, elaborate, exemplify, and illustrate (in their own words) the most important points in the lecture or in a chapter in the textbook. This strategy involves every student in the class (since any one of them may be called upon at any moment) and ensures that they are actively listening during the discussion.

In addition, randomly call on students to state in their own words comments made by other students. Begin by selecting one student to state her understanding of a concept or principle you introduced. Then randomly select another student to summarize what the first student said. Then ask the first person if the second person accurately represented what she originally said. We recommend that you do this several times during the lecture so students remain engaged in active listening and participating. Model the kinds of questions you welcome (those important to deep learning).

From *30 Practical Ideas on How to Improve Student Learning*, Foundation for Critical Thinking, 2002.

ACES Convocation, Sunday, May 15

Undergraduate 9:30 a.m. Krannert Center for
Performing Arts

Graduate 10:00 a.m. Smith Music Hall

The Case for Outcomes Assessment

In one of the few candid assessments of the branding of higher education, Robert L. Woodbury, former chancellor of the University of Maine system, noted the folly of the current institutional *U.S. News and World Report* rankings:

When *Consumer Reports* rates and compares cars, it measures them on the basis of categories such as performance, safety, reliability, and value. It tries to measure “outputs”—in short, what the car does. *U.S. News* mostly looks at “inputs” (money spent, class size, test scores of students, degrees held by faculty), rather than assessing what the college or university actually accomplishes for students over the lives of their enrollment. If *Consumer Reports* functioned like *U.S. News*, it would rank cars on the amount of steel and plastic used in their construction, the opinions of competing car dealers, the driving skills of customers, the percentage of managers and sales people with MBAs, and the sticker price on the vehicle (the higher, the better). From an article by James B. Twitchell in *Wilson Quarterly*, Summer 2004.

Award for Walter Hurley

The American Dairy Science Association presented Walter Hurley the Land-O-Lakes/Purina Teaching Award. The award is to recognize outstanding teaching of undergraduate students in dairy science. Dr. Hurley is a professor of lactation in the Animal Sciences department. He has taught for 22 years. Among his courses is one of the most popular in the department, a laboratory in handling animals that is particularly helpful for many pre-veterinary students who come from non-farm backgrounds and have little experience with livestock. Congratulations, Walt!

MARK YOUR CALENDARS! ACES STUDENT AWARDS BANQUET

SUNDAY, APRIL 24, 2005
12:00 NOON
HAWTHORN SUITES,
CHAMPAIGN

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