Current and Expected Roles of Graduate Student Faculty Mentors

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Abstract

Faculty and graduate students 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. In order to more closely approximate the ideal role, faculty should be more supportive in helping graduate students develop important skills.

Introduction

Graduate education is a crucial part of the mission of the College of Agricultural, Consumer and Environmental Sciences (ACES). The interaction between graduate students and their faculty mentors is central to the success of research programs and the graduate students. The University of Illinois and ACES are vitally interested in making graduate education as meaningful, productive and collegial as possible.

The Michigan State University Task Force on Research Mentoring of Graduate Students (2003) indicates in their guidelines for graduate student advising and mentoring, that "Graduate Education, research, and creative activities take place within a community of scholars where constructive relationships between graduate students and their advisors and mentors are essential for the promotion of excellence in graduate education and for adherence to the highest standards of scholarship, ethics, and professional integrity" (p.1). The Marquette University Graduate School handbook states that, "Mentoring involves a constellation of activities that goes beyond advising or guiding a student through a project... Mentoring is an important mechanism that enables graduate students to acquire a body of knowledge and skills they need as well as an understanding of the way the discipline operates. Research shows that students who have mentoring relationships have higher productivity levels, a higher level of involvement with their departments, and greater satisfaction with their programs" (How to Mentor Graduate School, 2002, pp 2-3).

Mentoring partnerships that fail typically do so for one of four reasons, as defined by Zachary (2000).

The partners take their roles for granted, never discussing expectations. The mentor assumes too large of a role. The lines of authority between mentor and student become blurred and perhaps overlapping, or the mentor intercedes in areas where assistance is not needed and unwelcome.

For the most part, graduate student mentors do not deliberately think about nor prepare themselves to serve in that role (Zachary, 2000). Without understanding the role, faculty may struggle to become good mentors. Graduate students have needs in their development but some cannot easily communicate those needs. Therefore, an important step in addressing these issues is to identify the ideal role of the graduate student mentor and see how closely current practice matches the ideal.

The Graduate College of the University of Illinois at Urbana-Champaign includes 11 standards to which graduate faculty aspire (Graduate College, 1999). Those standards include fostering excellence, being fair and committed to student welfare, encouraging and supporting students, advising about career opportunities, and encourage ethical practice. Further, the standards emphasize skills enhancement and communication of progress. Graduate faculty are not to permit animosity or personal differences to interfere, and should recognize but not exploit the power they hold over students.

Purpose and Objectives

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 to:

- 1. Ascertain the perceptions of the faculty regarding the ideal role of the faculty mentor
- 2. Ascertain the perceptions of graduate students regarding the ideal and current roles of the faculty mentor
- 3. Compare the perceptions of the ideal and current roles of the faculty mentor $\,$

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Methodology

ACES Academic Programs Office and ACES Professional Development Office are partnering in planning and conducting a variety of programs and activities that are directed toward improving the mentor/graduate student relationship. As a part of a needs assessment phase of those endeavors, faculty and graduate students were asked to complete an online survey regarding the role of faculty mentors in graduate education. There is no common term for identifying faculty mentors. Frequently used terms in ACES are major professor, research professor, graduate committee chair, and graduate advisor. For the purposes of this survey, a faculty mentor was considered to be the faculty member who is providing primary guidance and assistance to the graduate student.

An extensive literature review related to graduate student mentoring was conducted. This review revealed a number of survey instruments. After reviewing these 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 Wisconsin Center for Education Board at 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 ask to indicate their agreement/ disagreement related to behaviors/ characteristics of an "ideal mentor." Demographic data were collected for graduate students and faculty. Graduate students were asked to identify whether they were Masters or Ph.D., age, gender, gender of their mentor, gender of ideal mentor, racial identity and whether they were a domestic or international student. Faculty were asked to indicate whether they mentored Masters or Ph.D. students or both, age, gender, and racial identity.

The survey was conducted using the university's secure web site 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 248 faculty and 631 graduate students were invited to participate in the study. A description of the study and directions for accessing the instrument were distributed using the campus e-mail system in November 2003. Several reminders were sent, encouraging faculty and graduate students to reply. By the close of the data collection in January 2004, 31% of the faculty (76) and 31% of the graduate students (194) had completed the instrument and provided useable data. No additional follow-up measures could be taken, since the responses were completely anonymous. Response rates for individual departments ranged from 25% to 33%. Results from this study should not be generalized beyond the respondent group, and no inferential statistics can be reported. Data are reported as response frequencies, which is the appropriate statistic for an ordinal scale (Ary et al., 1990).

Total responses: Faculty = 76; Students = 194	No Response	Strongly Disagree	Disagree	Agree	Strongly Agree
1. Is available when the student needs help wi	th his/her researc	_			
Faculty Ideal	0%	0%	0%	38%	62%
Student Ideal	1%	0%	0%	18%	81%
Student Current	2%	2%	8%	36%	53%
2. Is available to the student when he/she need	ls to talk about h	is/her progra	m and his/he	r progress	s in the
program.					
Faculty Ideal	0%	0%	1%	34%	64%
Student Ideal	1%	0%	0%	17%	82%
Student Current	3%	1%	5%	40%	51%
3. Treats the student ideas with respect.					
Faculty Ideal	0%	0%	0%	20%	80%
Student Ideal	1%	0%	0%	20%	80%
Student Current	3%	1%	6%	29%	61%
4. Gives the student regular and constructive:					
Faculty Ideal	0%	0%	1%	26%	72%
Student Ideal	1%	0%	0%	23%	77%
Student Current	3%	4%	15%	36%	43%
Teaches the student the details of good rese	arch practice.				
Faculty Ideal	0%	0%	0%	25%	75%
Student Ideal	1%	0%	1%	23%	75%
Student Current	4%	4%	21%	34%	38%
6. Provides the student with information about	it ongoing resear	ch relevant to	his/her wor	k.	
Faculty Ideal	0%	0%	9%	51%	39%
Student Ideal	1%	1%	2%	38%	59%
Student Current	3%	5%	15%	42%	36%
7. Teaches the student survival skills for this f	ield.				
Faculty Ideal	0%	0%	7%	62%	32%
Student Ideal	2%	1%	4%	38%	56%
Student Current	3%	5%	20%	46%	26%
B. Helps the student secure funding for his/her	r graduate studie	s.			
Faculty Ideal	0%	3%	8%	47%	42%
Student Ideal	2%	0%	2%	24%	73%
Student Current	4%	3%	8%	26%	59%
9. Helps the student develop professional relati	tionships with oth	ers in the fie	ld.		
Faculty Ideal	1%	0%	3%	43%	53%
Student Ideal	2%	0%	1%	30%	68%
Student Current	4%	6%	16%	38%	36%
10. Assists the student with writing presentati	ons or publicatio				
Faculty Ideal	0%	1%	0%	39%	59%
Student Ideal	2%	0%	1%	37%	60%
Student Current	5%	2%	10%	40%	44%
11. Teaches the student to write grant and cor		-70	2070	10 70	. 1 70
Faculty Ideal	0%	0%	13%	63%	24%
Student Ideal	2%	0%	5%	43%	49%
Student Current	7%	8%	28%	40%	17%
12. Advocates for the student with others whe		0 70	2070	+0 /0	1 / /0
Faculty Ideal	0%	0%	3%	61%	37%
Student Ideal	3%	0%	3% 2%	32%	62%
	370	070	270	3470	0270

Current and Expected

13. Provides emotional support when Faculty Ideal	0%	1%	5%	68%	25%
Student Ideal	3%	2%	14%	43%	39%
Student Current	4%	7%	21%	39%	29%
14. Is sensitive to the student needs.	.,,,	, ,,,	21.0	23,10	
Faculty Ideal	0%	0%	4%	66%	30%
Student Ideal	2%	1%	5%	49%	43%
Student Current	4%	4%	14%	44%	34%
15. Takes an interest in the student pe		.,,			
Faculty Ideal	0%	4%	21%	67%	8%
Student Ideal	2%	4%	20%	49%	25%
Student Current	4%	8%	16%	45%	28%
16. Has the student best interests at h	eart.				
Faculty Ideal	0%	0%	0%	42%	58%
Student Ideal	2%	0%	4%	37%	57%
Student Current	4%	2%	10%	41%	42%
17. Cares about the student as a whol	e person not just as	a scholar.			
Faculty Ideal	0%	0%	5%	54%	41%
Student Ideal	2%	1%	2%	42%	53%
Student Current	4%	4%	7%	45%	40%
18. Provides direct assessments of the	student progress.				
Faculty Ideal	0%	0%	3%	53%	45%
Student Ideal	2%	0%	0%	37%	61%
Student Current	4%	2%	19%	45%	31%
19. Would support the student in any	career path he/she	night choose.			
Faculty Ideal	3%	0%	25%	46%	26%
Student Ideal	2%	0%	5%	32%	60%
Student Current	5%	3%	11%	41%	40%
20. Sees the student as a source of lab	or to advance his/he	r research.			
Faculty Ideal	1%	28%	50%	21%	0%
Student Ideal	2%	32%	46%	16%	4%
Student Current	3%	25%	36%	25%	12%
21. Expects the student to work so ma	any hours that it is d	ifficult for him/	her to have a	life outside	of scho
Faculty Ideal	1%	45%	46%	8%	0%
Student Ideal	2%	49%	48%	1%	1%
Student Current	3%	44%	36%	12%	5%
22. Gives the student regular and con	structive feedback o	n his/her progr	ess toward de	egree comp	letion.
Faculty Ideal	1%	0%	1%	46%	51%
Student Ideal	2%	0%	0%	30%	68%
Student Current	4%	3%	19%	46%	28%
23. Provides information about caree	r paths open to the s	tudent.			
Faculty Ideal	1%	0%	4%	53%	42%
Student Ideal	3%	0%	3%	39%	56%
Student Current	4%	7%	29%	41%	20%
24. Solicits the student input on matte	ers of teaching and r	esearch.			
Faculty Ideal	4%	1%	7%	70%	18%
Student Ideal	2%	1%	4%	47%	46%
Student Current	4%	7%	19%	44%	27%
25. Provides opportunities to attend p	rofessional meeting	s in the student	field.		
Faculty Ideal	1%	0%	1%	49%	49%
Student Ideal	2%	1%	0%	21%	77%
Student Current	4%	2%	6%	34%	54%

Results and Discussion

Faculty respondents indicate that the majority mentor master's students (74%) and/or doctoral students (68%), and only 13% mentor off-campus extramural students. The typical age of faculty respondents was 51-55 (17%), followed by 46-50 (14%) and 41-45 (13%). More than 85% of the faculty respondents are white, not of Hispanic origin.

Graduate student respondents were doctoral students (55%) or master's students (43%). Only one respondent was an off-campus extramural master's student. The typical graduate student was 20-25 years old (40%), followed by 26-30 (36%) and 31-35 (16%). The majority of the respondents were female (53%). Three-fourths of the students indicated that their faculty mentor is male. Of the 134 who responded, 68% indicated that their ideal mentor would be a male. Two-thirds of the graduate student respondents are white, not of Hispanic origin, and two-thirds were domestic students.

Role of the Ideal Mentor

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% or more of both the faculty and student respondents agreed or strongly agreed on the Ideal role. (See Table 1.)

Graduate student and faculty agreed to a lesser extent to the role of "takes an interest in the student's personal life." Only about 75% of the respondents agreed or strongly agreed with that statement. Faculty (72%) agreed less strongly than students (92%) to the statement "would support the student in any career path he/she might choose."

Two statements regarding the Ideal role were regarded less favorably. For the statement "sees the student as a source of labor to advance his/her research," 78% of the faculty and 78% of the graduate students disagreed or strongly disagreed that that is the role of the Ideal mentor. Likewise, 91% of the faculty and 97% of the students disagreed or strongly disagreed with the statement "expects the student to work so many hours that it is difficult for him/her to have a life outside of school" as an Ideal role for a mentor.

Current versus Ideal Roles of the Mentor

For 15 of the 25 statements of the role of the faculty mentor, students responded that the Current role differs considerably (more than 20 percentage points) 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.
- Nearly one-fifth of the graduate students indicated that the faculty mentor provides less regular and constructive feedback on their research than the Ideal.
- One-fourth of the graduate students indicated that they had not been taught the details of good research practice when compared to the Ideal mentor role. A similar proportion indicated that hey 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%) 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% of faculty and students disagreeing with this statement as part of the ideal mentor 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.

Perceived Differences by Degree Program, Nationality, Gender and Ethnicity

Student responses regarding their perceptions of the current and ideal roles of the graduate student mentor were also examined. Doctoral students were more negative regarding the current role of the graduate student mentor than were master's students. The statements that doctoral students tended to disagree with most frequently were: teaches student survival skills, teaches student to write grant and contract proposals, provides emotional support, and takes an interest in the student's personal life. At least 30% of the doctoral respondents disagreed or strongly disagreed with those statements. Master's students also tended to disagree with the statements but to a lesser extent.

Few differences were noted between U.S. and international student responses. While international students tended to disagree with statements to a greater extent than U.S. students, the differences were generally within five percentage points. Four statements varied from this generalization. International students indicated that they disagreed or strongly disagreed to a greater extent than U.S. students on these statements: helps the student develop professional relationships with others in the field, teaches student to write grant and contract proposals, takes an interest in the student's personal life, and has the student's best interest at heart.

Student responses regarding the Current role of the graduate student mentor did not differ between male and female respondents with one exception. While 85% of the males agreed or strongly agreed that the mentor takes an interest in the student's personal life, only 65% of the females agreed or strongly agreed with that statement.

The graduate student respondent group rarely differed in responses by ethnic group (American Indian and African American respondents numbered less than 10 and are not included in this summary). When differences did occur, White/Non-Hispanic students tended to agree with the statements to a lesser degree than Asian or Hispanic students.

Graduate students were consistent in their responses regarding the Ideal role of the graduate student mentor. No major differences in responses were noted on the basis of degree program, nationality, gender, or ethnicity.

Summary

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.

The results of the study were also summarized for each graduate program, with those data shared only with the specific department. Graduate faculty need to review and discuss the findings to determine changes that could be made in the faculty mentor process. Specific attention should be given to the extent of differences and similarities based on demographic traits.

The study should also be repeated within two years to ascertain what changes have occurred to improve student faculty relationships. The College should provide workshops for faculty and graduate students that address mentoring.

Literature Cited

- Ary, D., L. C. Jacobs, A. Razavieh. 1990. Introduction to research in education (4th edition). NY: Holt, Rinehart and Winston.
- Graduate College. 1997. A handbook for graduate students and advisors. University of Illinois at Urbana-Champaign. www.grad.uiuc.edu/policies/guidingstandards.html
- Graduate School. 2002. How to mentor graduate students. Marquette University.
- University Task Force on Research Mentoring of Graduate Students. 2003. Guidelines for graduate student advising and mentoring relationships. Michigan State University.
- Wisconsin Center for Education Research. 2001. Survey of doctoral education. University of Wisconsin-Madison.
- Zachary, Lois J. 2000. The mentor's guide. Facilitating effective learning relationships. San Francisco: Josey-Bass.