

Mentoring in a College of Agriculture: Faculty Perspectives of Student Advisement



Robin Peiter Horstmeier¹
Department of Community and Leadership Development
University of Kentucky
Lexington, KY 40546-0215

Abstract

Mentoring students through academic and organizational advising has proved to be a key part of student's educational success. However, expectations for mentoring students have created important discussions in the higher education community. The purpose of this descriptive study was to analyze college of agriculture faculty attitudes, needs, level of competence, and level of training in mentoring in student advisement. Results showed faculty view academic and student organization advising represented in their teaching appointments. However, faculty believed they were not provided enough time to adequately advise students and that advising was not a valued component of the promotion and tenure process. Faculty felt most competent in communicating with students and assisting their students with scheduling and in the use of online advising tools. Advisor training for faculty was rare, however few times training did occur. Faculty perceived the most important role as an undergraduate advisor was assisting students with their degree program, while faculty perceived advising graduate students on research as most important. Increasing online advising tools, allocating time to faculty, providing resources, and a Distribution of Effort (DOE) system for faculty to adequately advise students is recommended, resulting in faculty rewarded for their advising commitment in the promotion and tenure review. A mentoring program for new faculty specifically targeted at advising both undergraduate and graduate students should be implemented. Lastly, Colleges of Agriculture should more fully incorporate mentoring and advising students when mentoring graduate students who choose to enter academia as their profession.

Introduction

University academic advising is an important step in mentoring undergraduate and graduate students. Stull (1997) identified student advising as an on-going and active process involving the student, advisor, and institution. The primary goal of advising is assisting students in the development of educational plans compatible with their life goals. Advising provides an opportunity for teaching and learning to occur (Woodbury, 1999) and contributes to overall student success (Habley, 1993). Habley further noted

faculty and administrators "recognize that students who formulate a sound educational/career plan based on their values, interests, and abilities will have an increased chance for academic success, satisfaction, and persistence. Academic advising remains the most significant mechanism available on most college and university campuses for aiding and abetting this important process" (p. 1).

The issue of who should serve as an academic advisor has been examined. Some universities utilize designated staff for academic advising and do not include advising as a responsibility for faculty. However, Hemwall and Tracte (1999) found faculty was most appropriate to use as student academic advisors. Faculty can rely on personal experience in the profession to serve as a mentor in the student's career development. When faculty advise students through course scheduling, faculty may learn why students want to take a specific course/instructor and involve the student in curriculum management and decisions (Miller and Alberts, 1994).

Ultimately, positive university student experiences are crucial to student academic achievement leading to career success. Kennedy, et al. (1995) stated faculty/student interaction plays a significant role in developing student attitudes (both positive and negative) towards their college experience. Relationships made with peers, staff, and faculty through advisement experiences plays a role and influences student retention. In a national study of faculty in agriculture colleges, 99% of respondents indicated advising plays an important role in retaining students (Myers and Dyer, 2005b).

Student retention is a significant issue also has large consequences for universities, including agriculture colleges. Dyer et al., (1996) reported an \$11 million loss at one institution because of student attrition. As more universities expand their student numbers, increase the advising load per advisor/mentor, while also tightening resources, funding is a vital issue. Glennen et al. (1996) noted that proper academic advising by faculty could improve graduation rates thus leading to greater fiscal stability of institution. Additional studies have identified poor advising as a frequent source of dissatisfaction among students. One study identified poor advising and dissatisfaction to be directly related to retention (Corts, et al., 2000).

¹Assistant Professor, 306 Garrigus Building; Phone: 859-257-7287; Fax: 859-257-1164; Email: rpeiter@uky.edu

Mentoring in a College

According to McIntyre and Hagger (1996), mentoring is a multi-faceted concept incorporating personal support and the more rigorous notion of professional development leading to enhanced competence. For faculty to be successful advisors and effective mentors, they must be appropriately prepared and motivated for this role. Petress (1996) identified four major factors that affect a faculty member's self-perceptions of his/her ability to advise 1) how advisors interpret their advising role; 2) training and/or guidance is provided to advisors; 3) administrator and colleague expectations of advisors; and 4) availability of recognition or rewards for competent and/or exemplary advising.

One way to increase motivation for mentoring students through academic advising is through professional development. Professional development opportunities are not always available to faculty. Gordon and Habley (2000) reported only about one-third of colleges and universities provide any type of professional development. Specific to College of Agriculture faculty, most had little or no professional preparation for advising students (Myers and Dyer, 2005a). A largely mistaken belief is that faculty can learn all they need to know about academic advising through their own student experiences as a student (Selke and Wong, 1993).

The balance between teaching, research, and service has also been examined. Crookston (1972) first stated advising is a form of teaching and Boyer (1990) expanded the definition of the scholarship of teaching to include activities like advisement of students. Yet, Boyer reported most faculty do not see their participation in activities in teaching and service activities as being rewarded by their administration. Dillon and Fisher (2000) evaluated faculty advising and found faculty do not feel that the advising load is considered in promotion and tenure decisions. In a study of College of Agriculture faculty and departmental administrators in 1862 land-grant universities, both faculty and administrators agreed that student advising should be considered in promotion and tenure decisions. However Myers and Dyer (2005a) found different views of faculty and administrators. Only 25% of the faculty agreed administrators consider involvement in student advising as a factor; however a majority of departmental administrators indicated that these activities are considered in promotion and tenure (Myers and Dyer, 2005).

Purpose and Objectives

The purpose of this study was to analyze College of Agriculture faculty attitudes, needs, and perceived level of expertise in mentoring students through academic advising. The following objectives accomplished this purpose:

1. Evaluate mentoring students in terms of rewards and time commitments,
2. Analyze attitudes of faculty toward student

mentoring through academic and organizational advising,

3. Examine faculty perspectives on their preparation level for advising students,
4. Determine training (professional development opportunities) available to faculty on how to mentor students, and
5. Identify advising roles faculty perceive to be most important.

Methods

This study used a descriptive research design. The population for this study was 65 faculty members in a land-grant university College of Agriculture. Names and contact information were obtained from the College's Associate Dean for Academic Programs Office. Data were collected from a census of the population. The instrument researchers used was developed by Myers and Dyer (2000) and used with their permission. This instrument was constructed to assess the attitudes, needs, and perceptions of faculty members. Respondents were mailed an attitudinal questionnaire that used a four-point Likert scale (1=Strongly Disagree, 2=Disagree, 3=Agree, 4=Strongly Agree) to assess their attitudes. A four-point scale was used to force or compel the respondent to express an opinion about the statement. Each question was stated so that all faculty serving as advisors would have adequate knowledge on the subject to form an opinion. Open-ended and short-answer questions were used to gather demographic information.

Validity was established using a panel of experts. Current faculty and administrators at three land-grant institutions examined the instrument for face and content validity prior to implementing the study. Few modifications were made focusing the instrument to meet specific topics pertaining to this university. The instrument was pilot-tested using individuals similar to those in the sample, and the coefficient of internal consistency was established at $r=0.94$.

Six contacts were made in an attempt to get as much input as possible and reduce non-response error (Dillman, 2000). These contacts included a pre-study electronic mail contact, instrument mailings, and reminders by phone calls, and electronic mail. Fifty-one faculty in this land-grant College of Agriculture returned questionnaires, a response rate of 79%. No significant differences were found between early and late respondents. Data were analyzed using SPSS software 10.0. Frequencies, standard deviations, percentages, and means were calculated for each question. Although by definition Likert-type scales produce ordinal data, results were treated as interval data for analysis and interpretation purposes. This procedure is commonly accepted in social science research, especially if data are categorized into equal intervals as was done in this study (Clason and Dormody, 1994).

Results and Discussion

Faculty Definition of Advising

Time commitments were expressed through number of advisees served. Faculty reported 22 undergraduate advisees and six graduate student advisees. Faculty stated they met with their undergraduate advisees 2 times per semester for an average of 33 minutes per session. Faculty stated they met with their graduate advisees 8 times per semester for an average of 41 minutes per session. Faculty also stated spending approximately eight hours per month advising other undergraduate students and 12 hours per month advising other graduate students.

Advising was evaluated in terms of rewards and time commitments. Faculty felt very strongly that student numbers advised should be a component the teaching Distribution of Effort (DOE); almost three-fourths (74%, n=37) of faculty strongly agreed and 24% (n=12) agreed. The same support was given for advising student organizations and teaching Distribution of Effort (DOE) allocations. However, the support was slightly less for advising student organizations (48% [n=24] strongly agreed, 38% [n=19] agreed). Thirty percent (n=15) agreed and 47% (n=23) strongly agreed student advising should be a component of promotion and tenure. Less support was given (27% [n=13] strongly agreed, 41% [n=20] agreed) for advising student organizations as a component of promotion and tenure.

Few faculty (20% [n=10] agreed or strongly agreed) viewed student advising as a valued component of the promotion and tenure review, while a total of 80% (n=39) disagreed or strongly disagreed with the statement. Few faculty agreed (16.0%, n=8)

serving as a student organization faculty advisor is a valued component of promotion and tenure review (Table 1).

When asked if students should utilize advising sessions with faculty on a walk-in basis, one-third (33%, n=16) of faculty agreed or strongly agreed, while 67% (n=33) disagreed or strongly disagreed. In addition, a slight majority (53%, n=27) of the faculty disagreed that faculty are provided with enough time to adequately advise students.

Attitudes toward Student Advising

Attitudes toward student advising were examined to achieve the second objective (Table 2). Faculty agreed that advising students is an effective way to recruit students (67%, n=33), build rapport (100%, n=50), and retain students (94%, n=46). Faculty also believed advising graduate students is a scholarly activity (96%, n=47); however, a difference existed for undergraduate advising where only 55% (n=27) agreed with the statement. Quality of faculty advising was examined at each level: department (72% agreed, n=35); college (62% agreed, n=31); and university (34% agreed, n=17). In relation to mentoring students as academic advisor, 46% of faculty believe only those with teaching appointments should be engaged as academic advisors at the undergraduate level. Similarly looking at graduate advising, 17% of faculty believe those with only teaching appointments should serve as academic advisors for graduate students.

Table 1. Faculty Perceptions of Advising in Terms of Rewards and Time Commitments

Area of Advising	M	Strongly Disagree ^a		Disagree ^a		Agree ^a		Strongly Agree ^a	
		f	%	f	%	f	%	f	%
		The student number advised should be a component of teaching Distribution of Effort.	3.72	0	0.0	1	2.0	12	24.0
Students should utilize the electronic advising schedule.	3.43	1	2.2	2	4.3	19	41.3	24	52.2
Advising of student organizations should be part of the teaching Distribution of Effort.	3.34	0	0.0	7	14.0	19	38.0	24	48.0
Student advising should be a component of faculty compensation.	3.33	0	0.0	4	8.3	24	50.0	20	41.7
Student advising should be a component of the promotion and tenure review.	3.18	3	6.1	8	16.3	15	30.6	23	46.9
University faculty should be responsible for advising students regardless of pay.	2.79	5	10.6	11	23.4	20	42.6	11	23.4
Advising student organizations should be a part of promotion and tenure review.	2.68	4	8.2	12	24.5	20	40.8	13	26.5
Advising quality, determined by advising evaluations should be part of faculty merit pay.	2.61	3	6.1	19	38.8	21	42.9	6	12.2
Faculty are provided with enough time to adequately advise students.	2.27	15	29.4	12	23.5	19	37.3	5	9.8
Advising is currently a valued component for promotion and tenure review.	1.92	16	32.7	23	46.9	8	16.3	2	4.1
Students should utilize advising sessions with faculty on a walk-in basis.	2.16	9	18.4	24	49.0	15	30.6	1	2.0
Advising student organizations is currently a valued part of promotion and tenure.	1.86	16	32.7	20	51.0	7	14.3	1	2.0
Only faculty with teaching appointments should advise student organizations.	1.78	19	38.8	24	49.0	4	8.2	2	4.1

^a Means categorized as: Strongly Disagree (M=1.00), Disagree (M=2.00), Agree (M=3.00), Strongly Agree (M=4.00).

Table 2. Faculty Attitudes Regarding Advising

Area of Advising	Mean	Strongly Disagree ^a		Disagree ^a		Agree ^a
		f	%	f	%	
Advising students is an effective way to build rapport.	3.62	0	0.0	0	0.0	19
Advising plays an important role in retaining students.	3.57	1	2.0	2	4.1	14
Advising <u>graduate</u> students is a scholarly activity.	3.49	0	0.0	2	4.1	21
Advising <u>undergraduate</u> students is a good use of faculty time.	3.39	1	2.0	7	13.7	14
Advising student organizations is a good use of faculty time.	3.23	0	0.0	7	14.6	23
Advising plays an important role in recruiting students.	2.90	4	8.2	12	24.5	18
Quality advising is valued in my department.	2.86	2	4.1	12	24.5	26
Quality advising is valued in my college.	2.78	4	8.0	15	30.0	19
Advising <u>undergraduate</u> students is a scholarly activity.	2.69	5	10.2	17	34.7	15
Faculty with teaching appointments should advise <u>undergraduate</u> students.	2.48	11	22.0	12	24.0	19
Quality advising is valued at the University level.	2.12	15	30.0	18	36.0	13
Only faculty with teaching appointments should advise <u>graduate</u> students.	1.79	20	42.6	19	40.4	6
Only faculty with teaching appointments should advise student organizations.	1.78	19	38.8	24	49.0	4

^a Means categorized as: Strongly Disagree (M=1.00), Disagree (M=2.00), Agree (M=3.00), Strongly Agree (M=4.00).

Faculty Perspectives on Advising Knowledge and Preparation

Faculty perspectives on their advising knowledge and preparation level were identified (Table 3). An overwhelming 98% (n=50) agreed they were comfortable in communicating with students. In regard to assisting students in planning schedules, 98% (n=48) agreed or strongly agreed they were competent. Furthermore, 94% agreed or strongly agreed they were able to assist students with career choices with 42.0% in strong agreement. A majority of the faculty agreed (82%) they felt competent to advise student organizations; however, two faculty (4%) strongly disagreed that they felt competent to advise student organizations. Forty-four faculty members (69%) reported they were competent in counseling students with personal matters. Regarding using online advising tools, 62% of faculty agreed that they were competent in this area. Almost two-thirds (n=30, 60%) disagreed that they felt competent in their knowledge regarding legal issues concerning advising, and 16% strongly disagreed with this aspect.

Perceived Advisor Mentoring Competence

Faculty perceptions of advising competence levels in indicated in Table 4. Course scheduling was identified as the area of greatest competency (M=3.48). Respondents felt very competent (54%) in assisting students with scheduling courses. Degree and program

requirements were perceived as important areas for academic advising (M=3.46) and a majority 58% of the faculty believed that they were very competent with this advising responsibility. Faculty were split (M=2.42) on advising students with personal issues. Faculty felt the least prepared (M=2.17) in assisting students with financial assistance opportunities when compared to other competencies evaluated.

Advisor Training for Advising

The training faculty received regarding advisement was also investigated (see Table 5). Sixty-four percent stated they had received no training on how to advise students on academic and professional matters. Thirty six percent of the faculty stated training was received at the college and department levels or campus workshops. Eighty-eight percent had no training on how to advise student organizations, with 12% stating they had received training. Two respondents stated training occurred at a formal level in their college coursework and through workshops. Several others identified training through more informal pathways such as visiting with other advisors outside of the university, through practice, or through other youth organizations.

Table 3. Perceived Knowledge and Preparation for Advising by Faculty

Area of Advising	Mean ^a	Strongly Disagree ^a		Disagree ^a		Agree ^a		Strongly Agree ^a	
		f	%	f	%	f	%	f	%
Faculty feel comfortable in communicating with students.	3.76	0	0.0	1	2.0	10	19.6	40	78.4
Faculty feel competent in assisting students plan schedules.	3.65	0	0.0	1	2.0	15	30.6	33	67.3
Faculty feel competent in counseling students on career choices.	3.36	0	0.0	3	6.0	26	52.0	21	42.0
Faculty know where to find information on academic policies.	3.33	0	0.0	5	10.2	23	46.9	21	42.9
Faculty are aware of campus resources to assist students who are in academic difficulty.	3.10	0	0.0	12	24.0	21	42.0	17	34.0
Faculty feel competent in advising student organizations.	3.10	2	4.0	7	14.0	25	50.0	16	32.0
Faculty feel competent in counseling students in personal matters.	2.82	6	12.2	9	18.4	22	44.9	12	24.5
Faculty feel competent in using on-line advising tools.	2.76	6	12.0	13	26.0	18	36.0	13	26.0
Faculty feel competent in knowledge of legal issues concerning advising.	2.36	8	16.0	22	44.0	14	28.0	6	12.0

^a Means categorized as: Strongly Disagree (M=1.00), Disagree (M=2.00), Agree (M=3.00), Strongly Agree (M=4.00).

Table 4. Perceived Level of Advising Competence by Faculty

Area of Advising	Mean ^a		Not at all ^a		Somewhat ^a		Competent ^a		Very ^a	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Course Scheduling	3.48	0	0.0	4	8.3	17	35.4	27	56.3	
Degree/Program Requirements	3.46	0	0.0	6	12.5	14	29.2	28	58.3	
Career Counseling	3.10	0	0.0	9	18.8	25	52.1	14	29.2	
Industry/Job Market Demands	3.06	0	0.0	10	20.8	25	52.1	13	27.1	
Student Organization Advising	2.69	5	10.4	16	33.3	16	33.3	11	22.9	
Activities/Competitions	2.60	8	16.7	12	25.0	19	39.6	9	18.8	
Personal Issues	2.42	10	20.8	13	27.1	20	41.7	5	10.4	
Financial Assistance Opportunities	2.17	14	29.2	16	33.3	14	29.2	4	8.3	

^a Means categorized as: Strongly Disagree (M=1.00), Disagree (M=2.00), Agree (M=3.00), Strongly Agree (M=4.00).

Eighty percent of respondents said they had received no training on counseling students on personal matters. Of the 20% who responded yes, training occurred through the university testing/counseling center, workshops, coursework in counseling, or meetings coordinated by the college academic program office.

Student organization advising was viewed as the least important role for advising graduate students.

Recommendations

The College of Agriculture at this university should continue involving faculty as advisors -- both as academic advisors and with student organizations. Further studies should examine the mentoring relationship between faculty advisors and students. In addition, an area to be investigated includes a cost/benefit analysis of faculty time and impact to the university and college as a result of this mentoring relationship.

Electronic scheduling for advisement is viewed a good resource and preferred by faculty, therefore this tool should be continued, and those faculty advisors not using these on-line tools should be encouraged to do so. Staff and faculty should continue to encourage students to utilize electronic scheduling of appointments. Further research should explore how this tool impacts both faculty and students.

Faculty members feel they are not provided with enough time to adequately advise students. Therefore, agriculture colleges should allow time, resources and a Distribution of Effort (DOE) system for faculty to adequately advise students, and be rewarded for advising. One way to accomplish this goal is to make the DOE system a major component of

Table 5. Student Advisement Training Received by Faculty

Area of Advising	Yes (%)	No (%)
Academic and Professional Matters	36	64
Student Organizations	12	88
Personal Matters	20	80

Table 6. Advisor Roles Faculty Perceived to be Important by Faculty

Item	Undergraduate		Graduate	
	Rank	Index Score ^a	Rank	Index Score ^a
Degree/program requirements	1	358	2	328
Course scheduling	2	341	4	267
Career counseling	3	309	3	307
Industry/job market demands	4	199	5	240
Personal issues	5	187	6	161
Scholarship/aid counseling	6	161	7	145
Student organization advising	7	142	9	62
Activities/competitions	8	119	8	141
Research	N/A	N/A	1	365

^a An index score was calculated by reverse coding respondent ranking (e.g., 1 = 8 pts, 2 = 7 pts, etc.) and summing total points received by each item.

Important Advisor Roles

Important roles for advising undergraduate and graduate students were examined (Table 6). Faculty identified the most important role for advising undergraduate students was assisting with degree and program requirements. Course scheduling and

Mentoring in a College

the university and college promotion and tenure process. Administrators at the department, college and university levels should provide leadership direction reinforcing the importance and value of student mentoring of advising students.

Faculty should receive formal training in advising as both an academic advisor and in advising student organizations. This could be included as a component of the university new faculty orientation or a special college session for new faculty. It is also recommended that an overview of new curricula and policies be discussed annually by all faculty members serving as academic advisors. Topics of the faculty trainings could include legal issues for advising students and assisting students with financial aid opportunities.

Mentoring should occur for new faculty, specifically targeted towards advising students. Experienced faculty could be paired with new faculty to adequately meet the needs of those with less experience. Focus could be given especially to new assistant professors who not only may be learning a new system and requirements for graduation, but also learning how to advise students for the very first time. Faculty new to the university would find it useful to seek out those experienced advisors and ask questions as needed.

Summary

Selke and Wong (1993) reported a mistaken belief is faculty can learn all they need to know about academic advising through their own experiences as a student. Furthermore, only one-third of colleges and universities are reported to provide any type of professional development activities for advisors (Gordon and Habley, 2000). This study provides information to Colleges of Agriculture that they are not exempt or alone. Providing faculty professional development and mentoring is vital to the success of student advising in areas of student/faculty rapport and student retention. Kennedy et al. (1995) reported students feel that personal interaction with faculty has a positive influence on their overall experience at an institution. Not only will positive interaction through advising generate student success, it will provide great financial rewards back to the university. Students are an important aspect to faculty, college, and university success. Therefore, academic and organizational student advisement should be further investigated and faculty rewarded accordingly.

College of Agriculture faculty members believe the number of students advised should be a component of the teaching Distribution of Effort (DOE). Faculty also feel advising student organizations should be represented in the Distribution of Effort (DOE) and faculty without teaching appointments should not be required to serve as an academic advisor. Faculty members believe they do not have

enough time to adequately advise undergraduate and graduate students. In regards to promotion and tenure, faculty want student advising to be valued, however advising responsibilities are viewed as not valued in the current promotion and tenure process. Faculty view the value of student advising to decrease as one ascends the university hierarchy (department chair, college dean, university president).

Faculty did believe advising is beneficial in the recruitment, rapport, and retention of students. Faculty members consider advising graduate students as a more scholarly activity than advising undergraduates. Assisting students their degree program is the most important role of the undergraduate student advisor, whereas research is the most important role of the graduate student advisor. Serving as a student organization advisor and helping students with activities and competitions are less important roles for both the undergraduate and graduate advisor.

College of Agriculture faculty members are most comfortable in communicating with students and assisting students with their schedules. In addition, faculty feel competent in using on-line advising tools and prefer students to utilize an electronic advising scheduling rather than a traditional walk-in schedule. However, faculty perceive themselves less competent in assisting students with financial aid opportunities, and believes they are least competent in knowledge of legal issues concerning advising.

Most College of Agriculture faculty in this study received no formal training for mentoring students through advising. However, faculty who had received some form of training sought it out on their own through other university workshops, youth organizations, or through mentorship with other faculty.

Literature Cited

- Boyer, E.L. 1990. *Scholarship reconsidered priorities of the professorate*. Princeton, NJ: The Carnegie Foundation for the Advancement of Teaching.
- Clason, D.L. and T.J. Dormody. 1994. Analyzing data measured by individual Likert-type items. *Jour. of Agricultural Education* 35(4): 31-35.
- Corts, D.P., J.W. Lounsbury, and R.A. Saudargas. 2000. Assessing undergraduate satisfaction with an academic department: A method and case study. *College Student Jour.* 34(3): 399-408.
- Crookston, B.B. 1972. A developmental view of academic advising as teaching. *Jour. of College Student Personnel* 13: 12-17.
- Dillman, D.A. 2000. *Mail and internet surveys: The tailored design method* (2nd ed.). New York: John Wiley & Sons, Inc.
- Dillon, R.K. and B.J. Fisher. 2000. Faculty as part of the advising equation: An inquiry into faculty viewpoints on advising. *NACADA Jour* 20(1): 16-22.
- Dyer, J.E., R. Lacey, R., and E.W. Osborne. 1996. Attitudes of University of Illinois College of Agriculture freshmen toward agriculture. *Jour. of Agricultural Education*, 37(3): 43-51.

- Fiddler, M.B. and M. Alicea. 1996. Use of a collective narrative process to articulate practice-based advising competencies. *NACADA Jour.* 16(1): 14-20.
- Glennen, R. E., P.J. Farren, and F.N. Vowell. 1996. How advising and retention of students improves fiscal stability. *NACADA Jour.* 16(1), 38-41.
- Gordon, V.N. and W.R. Habley. 2000. *Academic advising: A comprehensive handbook*. San Francisco: Jossey-Bass.
- Habley, W.R. 1993. Advisor training in the context of a teaching enhancement center. *Academic Advising as a Comprehensive Campus Process*. Monograph Series, No. 2. National Academic Advising Association, Manhattan, KS.
- Hemwall, M.K. and K.C. Trachte. 1999. Learning at the core: Toward a new understanding of academic advising. *NACADA Journal*, 19(1): 5-10.
- Kennedy, G. J., R.L. Gordon, and V.N. Gordon. 1995. Changes in social and academic integration in freshman of high and average ability: Implications for retention. *NACADA Jour.* 15(2), 9-18.
- Mager, R.F. 1992. No self-efficacy, no performance. *Training*, 29(4): 32-36.
- Miller, M.A. and B. Alberts. 1994. Developmental advising: Where teaching and learning intersect. *NACADA Jour.* 14(2): 43-45.
- Myers, B.E. and J.E. Dyer, 2005a. A comparison of the attitudes and perceptions of university faculty and administrators toward advising undergraduate and graduate students and student organizations. *NACTA Jour.* 49(4): 34-40.
- Myers, B.E., and J.E. Dyer. 2005b. Attitudes, Value, and Preparation of University Faculty and Administrators for Advising. *Jour. of Agricultural Education* 46(3): 35-46.
- Petress, K.C. 1996. The multiple roles of an undergraduate's academic advisor. *Education* 117: 91.
- Selke, M.J. and Wong, T.D. 1993. The mentoring-empowered model: professional role functions in graduate student advisement. *NACADA Jour.* 13(2): 21-26.
- Woodbury, J. 1999. Advising with a strong assessment component helps students achieve their educational goals. *NACADA Jour.* 19(2): 10-16.

“Advancing the scholarship of teaching and learning”

