Positive Teaching-Mentoring Experiences of Faculty in a College of Agricultural and Life Sciences

W.J. Dahl, R.W. Telg and R.E. Turner
University of Florida
Gainesville, FL

Abstract
Mentoring of early-career university faculty members who teach varies from formal policies and committees to informal, spontaneous relationships. The purpose of this study was to explore the teaching-mentoring experiences of newer faculty in a college of agricultural sciences. Pre-tenured, non-tenured (≤8 years employed), and recently tenured faculty were invited to participate in a Qualtrics® survey via the faculty listserv. Of the respondents meeting the inclusion criteria (n=34), 91% had a formal classroom teaching assignment and 64% had a formal mentoring committee. Although two-thirds of respondents (65%) did not have a specific mentor assigned to advise them on teaching, the same percentage (65%) reported that they had a teaching mentor. Experiences with teaching mentors were positive, with mentees perceiving similarities with their mentors’ attitudes, values, and philosophies. Many respondents indicated that they sometimes or often needed assistance with mentoring of graduate students, managing personal stress, teaching effectively, and using educational technology. Respondents were very satisfied with the assistance provided by their teaching mentor. Newer faculty have varied needs that may be successfully met through teaching-mentoring.

Introduction
Mentoring is often thought of as a dyadic relationship and has been described as a “complex, multidimensional phenomena” (Sands et al., 1991, p.191). In academic circles, the mentoring relationship has traditionally been a pairing of a senior and junior faculty member (Savage et al., 2004). Although mentoring has been widely explored in business organizations (Kahle-Piasecki, 2011), as well as in undergraduate and graduate student education (Lunsford et al., 2014), little published work has endeavored to elucidate the value of mentoring for teaching success of academic faculty, particularly in agricultural sciences (Ulery et al., 2004). Although many American universities have faculty mentoring programs (Bean et al., 2014), it is not clear if these programs specifically focus on the mentoring of teaching versus research scholarship. Given that there is an increasing expectation of faculty members to pursue innovations in teaching and assessment, in addition to the pressures of research publication and service (Bean et al., 2014), facilitating teaching excellence through some form of mentoring may be essential for early-career faculty success.

Although often thought to be a voluntary and informal relationship, it has recently been suggested that faculty mentoring should be considered a professional responsibility (McBride et al., 2017). Further, Sands et al. (1991) commented that providing guidance in a mentoring relationship needs to be integrated into the “values and norms of the organization” (p. 180), and this expectation of the organizational commitment to faculty mentoring has been recently been reiterated (McBride et al., 2017). However, the form that faculty mentoring should take is not as clear. Mentoring of faculty in North American universities has evolved from the social gathering and exchange that was commonplace in faculty clubs (Savage et al., 2004) to paternalistic novice and expert pairing of faculty that is still common today. The later mentoring arrangement has been challenged on issues of power and hierarchy (Sands et al., 1991) as well as of gender (Wasburn, 2007) and race (Thompson, 2008). Alternative approaches to dyadic mentoring have been proposed. Mentoring circles have been tried with limited success (Darwin and Palmer, 2009), whereas mentoring networks may offer an effective solution to mentoring needs (De Janasz and Sullivan, 2004). Within a mentoring network, the concept of multiple mentors is highlighted emphasizing that a single mentor may not adequate to meet the varied needs of the mentee.

1Thank you to A.C. Andenoro, M.G. Andreu, and X. Zhao with the Agricultural Education and Communication, School of Forest Resources and Conservation, and Horticultural Sciences, University of Florida and IFAS, respectively, for their thorough review of the evaluation tool used in this study and to Melissa Alvarez who assisted with data analysis.

2Corresponding Author, Food Science and Human Nutrition Department, Gainesville, FL, 32611; (352) 294-3707, wdahl@ufl.edu
Of the literature exploring mentorship in higher education, little research has specifically addressed the mentorship of teaching in post-secondary institutions. Wasbun and LaLopa (2003) reported on a mentoring program with such a focus and found that improved teaching was seen with good matches in terms of personality and interests, choosing a mentor from outside of the mentee’s department, frequent meetings, and clear expectations. Given that faculty needs may be best met with a network of mentors (De Janasz and Sullivan, 2004), the goal of this study was to specifically explore the mentoring of teaching and the characteristics of successful mentorship of this specific dyadic pair.

**Background**

The College of Agricultural and Life Sciences (CALS) administers degree programs of the University of Florida’s Institute of Food and Agricultural Sciences (UF/IFAS). In the academic year of the study, UF/IFAS employed 423 tenure-track faculty with 418 full-time equivalents (FTE), of which 99 FTE were dedicated to teaching. UF/IFAS is research intensive (234 FTE), and many tenure-track faculty have formal Extension appointments (85 FTE). The faculty breakdown included 189 professors, 128 associate professors, and 106 assistant professors. Of the non-tenure-track faculty (n=115), 28 FTE are dedicated to teaching.

Given the priority of excellence in teaching, the college provides resources through the CALS Teaching Resource Center, which delivers yearly teaching enhancement symposiums, and since 2007, has offered a yearly “teacher’s college” with the goal of enhancing teaching skills of junior faculty. In 2013, CALS initiated the Council for Teaching Enhancement and Innovation. The broad charge to the council is to support educational activities by identifying needs and providing input to the CALS dean and appropriate entities (Turner, 2018). The Council was envisioned to be faculty empowered to provide input and suggestions to the dean regarding specific projects or needs associated with teaching and learning in CALS/IFAS (Turner, 2018). One of the proposed roles of the committee was to provide support and mentoring of teaching faculty and, specifically, to develop a mentoring program for faculty with teaching appointments.

During the first term of the council, academic department chairs were surveyed regarding departmental policies for mentoring new faculty. The results of this initial survey indicated that departments varied from having formal policies to no policy whatsoever. A significant gap was recognized, as few departments identified mentoring of teaching as the role of mentoring committees leading to the hypothesis that mentoring of teaching may be limited in the college. The purpose of this study, therefore, was to explore the current teaching-mentoring experiences of pre-tenure, recently tenured, and early-career, non-tenure track faculty. From the perspective of the researchers, faculty mentoring was considered a professional relationship between a junior and a senior faculty member who would offer advice, support, guidance, and encouragement regarding teaching. However, due to the exploratory nature of the survey study, such a definition of teaching-mentoring or any suggestions as to whom the study participants might consider a teaching mentor were not provided.

**Methods**

In August 2015, pre-tenured, recently tenured faculty (2014 and 2015), and non-tenured (≤8 years employment) were invited to participate in the survey study through Qualtrics®. The University of Florida’s Institutional Review Board approved the study. A modification of the Mentoring Relationship Questionnaire (MRQ) which measures psychosocial mentoring, dyad similarity, and dyad satisfaction was administered (Greiman, 2002). Because the MRQ was developed to assess mentoring relationships of secondary school agricultural teachers and their mentors, several modifications were made to the tool. Members of a subcommittee of the Council for Teaching Enhancement and Innovation reviewed the tool and suggested further revisions. In the psychosocial mentoring, dyad similarity and dyad satisfaction sections of the tool, the rating was modified from a rating scale of Not At All to Very Large Extent to a scale from strongly disagree to strongly agree. Social interaction (non-work) items such as “Got together with you informally after work” were removed. This decision was based on published research that reported the social component of a faculty mentoring program was not maintained (Savin et al., 2006). Also, stems were written in first person “I” vs “you” as was used in the MRQ. For the dyad satisfaction section, deletions and additions were made to the roles/responsibilities, given that faculty responsibilities differ from that of beginning agricultural teachers, the original intent of the tool. For example, advising undergraduate students and mentoring graduate students were added to the roles and responsibilities. Furthermore, open-ended questions regarding the main benefits and barriers to the mentor relationship and questions, such as tenure-accruing status, formal teaching appointment, and mentorship committee status, were included.

In the final tool, the first of three sections explored the interactions of the mentee with the teaching mentor. Similar to the MRQ (Greiman, 2002), examples of statements included were “thought highly of me”; “served as a role model”; “conveyed feelings of respect”; “provided support and encouragement”; “been willing to discuss my questions and concerns”; “served as a sounding board for me to develop and understand myself”; “been someone I could trust”; and “accepted me as a competent colleague.” The second section asked about the teaching mentor and mentees similarities including “have similar values and attitudes”; “are alike in a number of areas”; “have similar working styles”; “see things in much the same way”; and “have similar teaching philosophies.” Items explored the quality of the relationship, including “the relationship has been a
positive experience”; “I am glad I had the opportunity to interact with my mentor”; “the relationship has been successful”; “if I had it to do over again, I would want to have the same mentor”; and “I was satisfied with the interaction.” The third section, with the MRQ (Greiman, 2002), listed a number of professional roles and responsibilities in response to two questions. First, “[t]o what extent did you need assistance during your first year of teaching?” using ratings of this section consistent with the MRQ: “never,” “rarely,” “sometimes,” “often,” and “considerable.” Second, “[t]o what extent were you satisfied with the assistance provided by your teaching mentor?” using the ratings “did not receive,” “very dissatisfied,” “somewhat dissatisfied,” “somewhat satisfied,” and “very satisfied.”

Results and Discussion

Of the 57 respondents, 23 were excluded as they did not meet the criteria of pre-tenured, non-tenured (≤8 years employed), and recently tenured faculty. The academic appointments of all respondents were 44.2% Teaching, 21.7% Research and 19.1% Extension. Of the 34 qualifying respondents, 21 had or did have a mentoring committee. Of those with a past or current mentoring committee, about 50% reported that their committee was assigned by the unit leader and 35% self-selected the committee. Of the respondents, 22 (65%) did not have a particular mentor specifically appointed or selected to advise them on their teaching. However, 22 (65%) did have a mentor who advised them on their teaching. Nineteen completed most of the remaining questions of the survey. Of those who had a mentoring committee, 11 (50%) said this “teaching mentor” was part of their mentoring committee.

Regarding the mentoring dyad relationship, all respondents (n=19) with a teaching mentor agreed or strongly agreed with the following statements: “my mentor has thought highly of me,” “has served as a role model,” “conveyed feeling of respect,” “willing to discuss my concerns,” and “has been someone I could confide in.” All but one respondent agreed or strongly agreed that their teaching mentor served as a sounding board. In response to “shared personal experiences as another perspective to my problems,” two respondents disagreed, whereas all respondents agreed with the following statement: “my mentor has been someone I could trust.” Figure 1 shows the percentages of the responses strongly agree, agree or disagree to statements about teaching mentor and mentees similarities. No respondents strongly disagreed with these statements. All respondents reported that the mentoring relationship had been a positive experience and had been successful. Only one respondent indicated if the respondent had to do it over again, the respondent would not want to have the same mentor. However, all respondents were satisfied with the interaction.

Figure 2 represents the percentages of respondents indicating that they needed assistance with various professional roles and responsibilities (responses of never, rarely, sometimes, often, or considerable) during their first year of teaching. Figure 3 depicts the responses regarding satisfaction with the assistance provided by their teaching mentor with various teaching-related activities. Satisfied is the sum of somewhat and very satisfied. Dissatisfied refers to respondents being somewhat dissatisfied. None were very dissatisfied.

Mentee experiences with teaching mentors were positive, with perceived similarities in values, attitudes, and philosophies. Early-career faculty have varied needs that can be successfully met though teaching-mentoring, but many did not have a formal or informal teaching mentor. Mentorship of early-career faculty may well need to be approached as a “synergistic” success.
A major finding of this study was that many junior faculty did not have teaching mentors. As many early-career faculty are not trained as teachers and vary in their teaching experience, but instead arrive with their discipline expertise, lack of teaching-mentoring may be a concern. Further, of those faculty with teaching mentors, most were not appointed to the faculty member's mentoring committee. This finding suggests that many of the teaching mentor-mentee relationships may be informal. Previous research suggested potential drawbacks to "spontaneous mentoring" (Boyle and Boice, 1998, p. 159), as these types of relationships may disadvantage women and minorities. In addition, formal mentoring relationships have been evaluated more favorably than "natural" mentor pairs (Boyle and Boice, 1998). In this study, most mentees perceived that their mentors were similar to them, including teaching philosophies, values, attitudes, although less so with working styles. Mentees perceived that they were similar to their mentors. This agrees with previous research, although this perception may not necessarily be shared by mentors (Alleman et al., 1984). However, similar personalities may not be as important as what is accomplished in the mentoring relationship (Alleman et al., 1984).

The results of the present study suggest that early-career faculty need assistance with a variety of professional roles and responsibilities, especially during their first year of teaching, including managing personal stress. Challenges with managing time are a likely contributor to personal stress, and 50% of the respondents in the study indicated a need for assistance in this area. An evaluation of a mentoring program at West Chester University found that a common theme was time and scheduling challenges (Bean et al., 2014). It is interesting to note, that the aim of a faculty mentoring program at the University of Arkansas Department of Crop, Soil and Environmental Sciences was to "reduce stress" while facilitating research, teaching, and service programs (Savin et al., 2006), which suggests mentoring may have a valuable role in stress management. Most early-career faculty in the present study, were satisfied with the assistance they received from their teaching mentors related to time and stress, although 30% did not receive such assistance from their mentor. McBride et al. (2016) describe some strengths of primary mentors in an evaluation of school of nursing faculty development program. Mentees commented that their mentor helped them "focus on goals and keep on track" (McBride et al., 2017 p.6). It is possible that this type of advice may assist the mentee manage the often overwhelming and competing roles and responsibilities of a faculty position.

Sands et al. (1991) explored the mentoring of assistant, associate, and full professors and through principal component analysis, four factors emerged, namely: "friend," "career guide," "information source," and "intellectual guide." The preferred type for teaching was "career guide" (professional schools) or "information source" (for colleges of arts and sciences) (Sands et al., 1991). In the present study, certain professional roles and responsibilities highlighted by mentee respondents seemed to fit the mentorship factor "information source." For example, needing assistance with using educational technology and teaching effectively were noted by the majority of mentee respondents in this study. Although the mentees were generally satisfied with the assistance they received from their teaching mentor in these areas, more research is needed to determine if the knowledge and skills of early-career faculty related to these areas may be best met through workshops and facilitated group meetings. Prior research has reported that mentoring through group meetings was most favorable, and during these group meetings, teaching was the second most common topic of conversation (Boyle and Boice, 1998). In addition, it has been reported that teaching improvement with mentoring needs frequent meetings and rapport, particularly group meetings to encourage the development of a network (Wasburn and LaLopa, 2003).

An important question that needs to be addressed is how graduate student advising fits into teaching responsibilities, as this role is a mentoring relationship. In the questionnaire used in this study, graduate student advising was considered a teaching responsibility. However, this professional activity also falls within the scope of research. With any mentorship model, preparation of mentors needs to be considered (McBride et al., 2017). This preparation may need to include senior faculty mentors to facilitate their role as mentors of early-ca-
Positive Teaching-Mentoring