Peer and Faculty Mentoring in Doctoral Education: Definitions, Experiences, and Expectations

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Mentoring has long been recognized as an effective strategy for retaining and supporting doctoral students in their programs of study. In this qualitative investigation, we conducted three focus groups of protégés, peer mentors, and faculty mentors to explore definitions, experiences, and expectations of mentoring. Results indicated that the three groups had meaningful differences in all three areas of interest. These differences were consistent with emerging conceptual frameworks explaining adult learning processes and perceived needs. The frameworks involved “stages” of mentoring and classifying the student’s preferred mentoring style along dimensions of pedagogy and andragogy. These frameworks suggest the need for clarifying protégé and mentor roles/expectations early and throughout the doctoral program.

A high quality doctoral program involves a range of educational experiences that extend beyond coursework. While coursework can provide critical content and skills for leadership roles in special education, coursework alone may not be sufficient to motivate and retain doctoral students, provide them with necessary experiences associated with future job responsibilities, or socialize them to their new leadership positions. A few years ago we began a peer and faculty mentoring program for our special education doctoral students to address some of the program competencies and needs that are not addressed in coursework. We were particularly concerned about student satisfaction, retention, and socialization into the profession because a number of our students were employed full-time or had lengthy commutes to campus.

Researchers studying faculty mentoring programs for doctoral students have reported many benefits to protégés, including advantages in job placement, research skills, research productivity and self-efficacy, and collaborative publications (Kram, 1985; Paglis, Green, & Bauer, 2006; Rose, 2003; Terrell & Wright, 1988). Others have reported improved student retention, achievement, and degree completion (Maher, Ford, & Thompson, 2004; Tinto, 1993; Wunsch, 1994). Much like an apprenticeship, protégés are given individualized learning opportunities and experiences that socialize them into the profession (Lyons & Scroggins, 1990; Rose, 2005; Zachary, 2000). And as a result of mentoring, protégés report increases in self-confidence (Blank, 1988; Luna & Cullen, 1998) and satisfaction from having had "caring" experiences in their doctoral program (Redmond, 1990; Rose, 2003).

Benefits of veteran doctoral students mentoring new doctoral students (i.e., peer mentoring) have also been described in the literature (Bonilla, Pickron, & Tatum, 1994; Silva, Macian, & Garcia-Gomez, 2006). Peer-mentoring relationships are viewed by graduate students as providing a safe environment for giving and receiving feedback (Bonilla et al., 1994). Without concern for being evaluated or judged, students in peer-mentoring relationships said they felt freer to be authentic and to vent or reveal their feelings. In addition to providing a safe and supportive environment, students reported that peer mentoring was an important opportunity to receive additional guidance in meeting program requirements. Similarly, Dorn, Papalewis, and Brown (1995) found that peer mentoring helped keep students moving towards degree completion.

In addition to benefits to protégés (graduate students or junior faculty), mentoring programs also provide benefits to faculty mentors and their institutions. Faculty say that their own performance is enhanced through the mentoring experience (Ragins & Scandura, 1993), and that mentoring is generative and revitalizing (Blackburn, Chapman, & Cameron, 1993). Protégés frequently serve as catalysts in establishing new links among colleagues (Bargar & Mayo-Chamberlain, 1983), and as protégés become respected colleagues, they often provide social support to their mentors (Jacobi, 1991). Given that faculty and students are the heart of an academic institution, Wunsch (1994) posits, "The quality of an academic institution depends on the quality of the work and learning experience of its faculty, staff, and students" (p. 12). Furthermore, she believes that mentoring is a communal process that facilitates individual growth and counters feelings of isolation. Mentoring perpetuates itself: professionals who were mentored are likely to mentor others (Hunt & Michael, 1983).
Conceptual Framework

The conceptual framework for this study was based on two theoretical perspectives grounded in Vygotsky’s (1978) sociocultural constructivism: cognitive apprenticeship (CA) and communities of practice. Both involve scaffolding and support in moving the protégé from being on the periphery of the group to becoming an insider. The objective of a CA is to initiate the novice into a community of expert practice (Collins, Brown, & Newman, 1989). The social network within the community/culture helps the novice learn its language and belief systems. In turn, this initiation promotes the process of enculturation into the discipline.

In a mentoring relationship, apprenticeship and coaching begin by modeling and scaffolding for protégés as they enter into authentic activities within the professional “community.” As apprentices increase in self-confidence, they move into a more autonomous phase of collaborative learning and begin to participate more fully in the culture (Collins et al., 1989). Lave and Wenger (1991) discuss how members new to the community enter at the periphery. As the members learn the social rules and rituals of the community/culture, they move toward full participation and viewing themselves as full members of the community. In a study of an undergraduate mentorship program for minority students, Terrell and Hassell (1994) proposed a two-stage model to describe the shift in student mentoring needs and expectations that accompanies their growth in their new academic culture. In stage 1, protégés seek academic and career guidance; in stage 2, protégés desire collaboration with mentors to avoid pitfalls and learn strategies for success in the future.

Similarly, communities of practice have been defined as "groups of people informally bound together by shared expertise and passion for joint enterprise "(Wenger & Snyder, 2000, p. 139). In a community of practice, social relations are created around the common work of the group. People work and learn collaboratively: "Learning occurs within the context of social relationships with other members of the community who have similar, if not identical, issues and concerns for realms of practice" (Buysse, Sparkman, & Wesley, 2003, p. 267). The passion generated from this core community energizes the larger community by providing intellectual and social leadership (Wenger & Snyder, 2000). Wenger and Snyder further state that communities of practice are particularly effective arenas for (a) solving problems by knowing whom to ask for help, (b) sharing and spreading best practices, and (c) fostering professional development for both the protégés and the mentors.

Brown, Collins, and Duguid (1989) stated that while speaking of academic disciplines as communities or cultures appears strange, these communities of practitioners are bound by socially constructed webs of belief and shared language which is essential in understanding the culture.

From a very early age and throughout their lives, people, consciously or unconsciously, adopt the behavior and belief systems of new social groups. Given the chance to observe and practice in situ the behavior of members of a culture, people pick up relevant jargon, imitate behavior, and gradually start to act in accordance with its norms. (Brown et al., 1989, p. 34)

Brown et al. (1989) continue by discussing how advanced graduate students acquire refined research skills through the apprenticeships they serve with senior researchers. As apprentices, they must recognize and resolve the ill-defined problems of the field, in contrast to the well-defined exercises that are typically given to them in textbooks and on exams throughout their earlier schooling. Brown et al. note, “It is at this stage, in short, that students no longer behave as students, but as practitioners, and develop their conceptual understanding through social interaction and collaboration in the culture of the domain” (p. 40).

Purpose

We conducted this study as a formative evaluation activity. Our purpose was to explore the nature and outcomes of mentoring from the perspectives of our mentoring program participants. We also wondered if the participants shared common beliefs, expectations, and experiences about mentoring. Specifically, we posed the following research questions:

1. How do doctoral student protégés, peer mentors, and faculty mentors define mentoring?
2. What are the mentoring experiences of the three groups?
3. What are the outcomes of these mentoring experiences?

Methods

Participants and Setting

We conducted three focus groups: There were four protégés in the first group, four peer mentors in the second group (protégés of their faculty mentors, and mentors to novice doctoral students), and eight faculty
mentors in the third group. As indicated in Table 1, focus group participants were predominantly female and Caucasian. Protégés ranged in age from 31 to 52 years, and three had taught from 5 to 10 years. One had no teaching experience. None of the protégés had any experience teaching in higher education or with mentoring programs. The peer mentors were a slightly younger group (mean age of 39 compared to 41 years), ranging in age from 34 to 49 years. There was one male in the group. As a group they had a great deal more K-12 teaching experience (ranging from 5 to 20 years) than the protégés, and all had teaching experience in higher education. Professionally, the peer mentors were much more experienced than the protégés. None of the peer mentors had experience with mentoring programs. The faculty mentor participants ranged in age from 36 to 61 years. They had 3 to 14 years K-12 teaching experience and had been in higher education from 2 to 30 years, with all but two having 10 years or more of higher education experience. Four of the eight faculty mentors had either participated in a formal mentoring program or professional development activities focused on mentoring. Given the backgrounds of the participants, most faculty had experience as protégés and mentors; whereas, most students (protégés and peer mentors) felt they only had experience as protégés.

The focus groups were held in the department's conference room, a familiar setting for all participants (all had regularly attended classes or meetings in the room). The conference room held a large rectangular table with seating for 14 persons. A tape recorder and snacks were in the center of the table. All focus groups were conducted within a two-week period early in the fall semester, and each lasted approximately 90 minutes.

Focus Group Procedures

As participants entered the room, the first author asked them to read and sign a consent form and to complete a brief demographic questionnaire. They were also invited to have some snacks. Once all participants had arrived, the first author distributed the focus group questions (listed below), reminded participants of the 90-minute time frame, and suggested that they address each question by telling "stories" of their experiences. In each group, one participant seemed to take the lead and read each question. The discussion followed a round-robin format, with each person in the group responding in turn. They were also requested to turn the audiotape over when the recorder clicked off indicating the tape had reached the end of the first side. For the two student groups, the first author started the tape recorder, read the first question aloud, and left the room. No faculty were present during the student focus groups, although the second author was a member of the protégé group. The same procedures were followed for the faculty focus group, except the first and third authors were participants and contributed to the discussion. The focus groups discussed the questions for 90-120 min.

The focus group questions were

1. Have you had a mentor at any point in your professional career? If so, what made that relationship an effective mentoring experience?
2. What is your definition of mentoring?
3. We've described our doctoral advising as mentorship. What do you believe the goals/outcomes of the faculty mentor-doctoral student protégé relationship should be?
4. Our doctoral program includes peer mentorship among the doctoral students. What do you believe the goals/outcomes of the seasoned student mentor-novice student protégé relationship should be, and how might we facilitate it?

Data Coding and Analysis

The research team consisted of two faculty mentors (the first and third authors) and a protégé (the second author). Applying grounded theory (Glaser & Strauss, 1967; Strauss & Corbin, 1990) with inductive coding, we transcribed, coded, and analyzed the data in an alternative independent and collaborative fashion. We worked independently to develop and test emerging themes and codes and collaboratively to refine our analyses and build consensus on coding and our interpretations. Table 2 summarizes our process.

Verification and Validation

Prior to coding the transcripts, we distributed copies of respective transcripts to each focus group participant for member checks (i.e., focus group participants were asked to check transcripts for accuracy; Guba, 1981). A few participants chose to clarify/elaborate on their contributions to the focus groups. Their clarifications/additions were included in the data set.

We included independent coding and analysis steps to allow for our individual perspectives to emerge. This was particularly important because our research team had a wide range of experience and vested interests in the doctoral program: The first team member was a full professor, the doctoral program developer, coordinator, and advisor to four doctoral students; the second was an
### TABLE 1
Focus Group Participants

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### TABLE 2
Data Analysis Process

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<th>Independent Steps</th>
<th>Collaborative Steps</th>
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<td>1. Read all transcripts and identified themes</td>
<td>2. Reached consensus on themes and codes</td>
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<td>3. Piloted themes and codes</td>
<td>4. Clarified and refined themes and codes</td>
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<td>5. Piloted revised themes and codes</td>
<td>6. Clarified and finalized themes and codes</td>
</tr>
<tr>
<td>7. Coded all data</td>
<td>8. Reached consensus on discrepancies in coding.</td>
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associate professor, the program evaluator, and an advisor for three doctoral students, and the third was a protégé and doctoral advisee of the first team member. The independent work also contributed to verifying that codes were clearly defined and applied consistently throughout the data analysis.

We also analyzed a related data set for purposes of triangulation: We described our focus group findings at a meeting of the doctoral students and faculty one year after the focus groups were conducted. Following the description of the findings, we asked the group to have small group discussions (3 to 5 individuals; a mix of faculty and students) on the implications of our findings and to suggest recommendations to improve the mentoring program. The nine groups reported back orally to the entire group and submitted a one-page written summary of their recommendations and reflections.

Limitations

Personal biases. As noted earlier, the research team members had vested interests in the success of the mentorship program. Our biases could lead to overly favorable interpretations of the data. To minimize the impact of this bias, we used five strategies. First, faculty members were not present during the student focus groups. Second, we coded the focus group transcripts independently as well as collaboratively. Third, we conducted member checks of the transcripts. Fourth, we triangulated the focus group data with recommendations and comments from a faculty and student meeting in which we presented initial findings. And fifth, we’ve illustrated our findings with direct quotes from focus group members.

Small data samples from one doctoral program. The three focus groups were relatively small samples of new doctoral students, veteran doctoral students/peer mentors, and doctoral faculty/faculty mentors (four, four, and eight, respectively) within a single university. The findings appear to be valid for the sample population, but the small sample size limits our ability to generalize our findings beyond this group. However, our findings are consistent with the literature and do contribute to a growing database on mentoring in higher education.

Discrepant size of focus groups. The faculty mentor group had eight participants compared to four participants in each of the student focus groups. Because the faculty's focus group was larger, there were more individuals contributing stories and commenting on each of the stories. This larger group size may have accounted for the "richer" and more in-depth data obtained from the faculty compared to the data collected from the student groups.

Findings

Definitions

Each focus group was asked to define mentoring. The groups used similar words and definitions. They described the mentoring process as both informal and formal. They believed that mentors could be found in a number of roles – professor, advisor, and peer – and that mentors functioned as helpers and guides. A mentor could be defined as someone who is "more knowledgeable," "has more and/or recent experience," "gives insight," "shares knowledge," and "clears confusion." Mentorship was also described as a "reciprocal relationship," meaning that mentors as well as protégés benefited from the partnership.

Although the three groups used similar terms and provided comparable definitions of mentoring, there were clear differences in the discussions conducted by the three groups. The protégés’ discussion included fewer comments than the other two groups (i.e., they had a much briefer discussion of this question), and their comments emphasized that they defined a mentor as a guide. The role and responsibility of a mentor/guide was to meet the protégés’ immediate needs:

I have always felt that the mentor should be able to help the mentee, I mean, almost on any level or at any stage. You know, whether you have content-related issues or personal issues... I know that I've used my mentor when I've been so confused and I've felt like I was really floundering this semester... She's kind of set me on my way. I used those words with her. I said, "I'm just floundering with the dissertation topic...." She said to me, "Well, you know I'm working on inclusion. Why don't you go look at that?" Sounds good to me, so then I went [and] looked it up and very quickly it became specific enough and narrow enough that I could work on it.

The goal is to make sure the doctoral student is on track. You know, academically, and everything else that impact the academic...situation: the person's life, the department politics. Whatever... could happen that throws you off track.

Peer mentors, in contrast, defined a mentor in broader terms and emphasized the informal nature of the mentorship relationship (for faculty mentors and peer mentors). Consistent with their emphasis on the informal nature of mentoring, they discussed the importance of "relationship" at length. They believed that a mentoring relationship was multifaceted and
could be characterized as "personal," "professional," "reciprocal," and "collegial."

[We] are interested in doing the same kind of research, this qualitative phenomenological case study sort of research... We play off each other, you know, ideas for doing our research and theoretical and conceptual framework, and that sort of thing. So we really learn from each other.... She gives me a lot of good stuff and I give her a lot of good stuff. So I don't feel like we had a mentor-mentee relationship, but I feel like we had a very strong collegial relationship where we helped each other.

And in contrasting a mentor to an academic advisor, a peer mentor said,

I think she thought she was both: a mentor and an advisor. Because there's more to our relationship than her just advising me as far as classes. I think that the mentorship encompasses more than just the advising stuff; there's more of a personal relationship, personal concern.... And she'll continue. I mean I know that even though her advising portion of it is over... I know that we'll continue with... that mentor relationship.

Of the three focus groups, the faculty mentors had the lengthiest discussion of the definition and their definitions were the broadest. In direct contrast to the protégés, faculty mentors' definitions were focused on future needs

I tried to pick a task where there'd be something like what... I actually need done, but something that would also fit with what the student needs to be doing for their own... professional development... I set up kind of a database for them [and had them] go through some articles and basically just categorize [them]... I think the student's getting into the literature and that's good because they need to do that. They really need to know what's going on with that.

Like the peer mentors, faculty made a distinction between an academic advisor and a mentor. They emphasized that mentors served various roles: facilitator, instrumental, teacher, collaborator.

He was kind of a shrewd person in that he was a mentor that just kind of got out of the way...and then he provided support when you need it. So if you needed to get connected or something like that, he allowed that to happen. He assisted in kind of getting your program adjusted and he did lots of kinds of things like that.

Mentoring Experiences

Focus group discussions were devoted primarily to stories of mentoring experiences. To identify themes characterizing mentoring experiences, we looked for explicit mentoring behaviors. Six themes portrayed the mentoring experiences/behaviors of the three groups, and the six themes were found across all three focus groups. The themes were (a) relationship, (b) motivation, (c) professional socialization, (d) instruction, (e) opportunity, and (f) procedures.

Relationship. Participants emphasized the relationship quality of mentorship. They described the development and importance of the professional and personal connection between the protégé and peer mentor or faculty mentor.

There has to be a personal connection on some level... whether it's an interest, or... personalities that work, or the fact that one person just wants to help someone else and give them suggestions about how to make it easier. It's a matter of wanting to share... with someone else. I think if you really don't want to then it's not going to work.

She's under similar circumstances of having children and having to commute...I remember asking her questions before she was even my mentor: "How on earth did you even get up in the morning?" You know, generic stuff that has nothing to do with the program but like getting through the day in this program.

Motivation. The motivation theme included behaviors illustrating mentoring behavior that encouraged and supported students to feel confident and to advance through their studies.

If we're talking about mentors on a broad scale, I mean, I would say that those professors we had this summer were wonderful mentors... They certainly boosted our egos if nothing else... to guide us, encouraging us to publish a paper that we wrote together, which really will be fun, and as soon as we have time we're going to do that.

He was just the kind of person that just assumed you were going to do it and [the next thing] you know he hands me the schedule and so I tried doing it... He kind of socialized me from lower ed. to higher ed. This thing of the difference between being a classroom teacher and being a graduate student, then being an instructor in higher ed. and all the culture and stuff like that... He was real good at developing confidence
because you typically don't have a lot of confidence... when you're moving across environments.

Professional socialization. Participants mentioned a number of mentor behaviors that provided professional development experiences beyond the content and skills typically developed through coursework. These included experiences to prepare and support students in administrative or higher education positions, and to assist them in shifting from practitioner roles to leadership roles. We characterized these behaviors as "socialization into the profession."

I think that [he] was a mentor in socializing me to the profession... Like, what kind of social expectations are there in going into higher education and what kind of politics are there?.. That was completely foreign to me, and just explaining to me... these are the kind of things you expect,... how to go to a conference and meet people and network... and that was all above and beyond the research.

Instruction. Mentors made sure their protégés learned essential knowledge and skills, either by teaching their protégé (often in the context of their research), or by helping them to access educational experiences.

I complained so much about one of the courses on assessment, that I wasn't getting what I wanted out of it, that he said, "Okay. I'll get a seminar, and I'll teach it again, and you can take it." Although he wasn't directly involved with the field-based research,... he was a person I met with on a regular basis... looking at methodologies, setting up a study, all of those kinds of things.

Opportunity. In providing opportunities as a part of mentorship, mentors used their networks, accumulated knowledge, and status to provide connections, access, or experiences that otherwise would not be available to the protégé. These opportunities were generally ones that the mentor deemed important to advancing their protégé’s career.

I got to contribute a chapter... She said, ... "You're the expert... You've done so much research on it. Would you please contribute? Would you write that section for my book?" And so I did, and ... so now on the front of the book it says "contributing author." So that's my first publication!... I felt that she was really looking out for me. She was thinking, "How can I help [him] progress in his... academic career? This is a way I know I can get him a publication."

Procedures. Mentors provided course and program guidance to students that went beyond academic advising: They provided advice and recommendations based on their knowledge of the student and his/her strengths and needs; their own personal experiences as a student, educator, and faculty member; and their acquired knowledge from guiding students and working within the institution over time.

She's answered every single question that I have had to the best of her ability. She's been very open and not only answers the surface level of the question but really how to think about it. So if I asked her... "How do I go about picking... people... for my committee?" or "What's the committee all about?"... she'll not only describe what it's about in terms of what the book says, but she'll say things like, "Well, it's really important that all your committee members get along well." You know, these things aren't in the book, and that's been really helpful.

There was this other female who had just completed the program when I was starting. And I remember, one day I was in the office and she just took me into the other office and just said, "Okay, let me tell you. This is who you need to take classes from... Make sure you do this." And she really laid out the whole... "This is what you... better do to get through," and who to avoid, or who to make sure to take a class from, and, "This is the way it'll go." And I learned more from her than anybody else.

Mentoring Outcomes

In addition to identifying definitions and mentoring behaviors, we analyzed the focus group data to identify tangible outcomes that participants attributed to their mentoring experiences. We did not include "desired" or "expected" outcomes, only outcomes that participants said had actually occurred. A number of "procedural" outcomes resulting from mentorship were mentioned, including program admission, scholarship/tuition, knowledge of program procedures, degree requirement completion, and degree completion:

"He helped me get into the master's program... He kept reinforcing me to try and apply for the doctoral program... It just made all the difference in the world." Participants also discussed learning outcomes (professional behaviors, subject matter, and skills), professional activities (university teaching, conference
presentations, research, writing/publishing), networking, and acquiring a job as resulting directly from their mentorship experience.

My graduate assistantship was..., "Do this. Make copies."... And [my mentor] took me aside. He said, "You know, if you want to go onto higher ed... you are going to have to stand up for yourself and say that these kinds of assignments are not appropriate. You are not going to learn how to be a professor by making copies."... And that was so scary. And so I did end up doing that and lost my job because of it... So then I had to find another assistantship with someone else and a different area... just so I could have a mentor who would be a mentor.

Discussion

Definitions and Experiences

As noted in the findings, the three focus groups defined mentoring with different emphases: more inexperienced protégés defined mentoring as guiding, assisting, and keeping on track; peer mentors (veteran students) defined mentoring as a personal relationship that acknowledges, encourages, and supports; and faculty defined mentoring as facilitating, socializing, and preparing the protégé for a future professional role. These differences are inconsistent with the findings of Rose (2005) who explored effective mentoring using the Ideal Mentor Scale (Rose, 2003). In contrast to our findings, Rose did not find differences in mentoring needs at different stages of progress toward the doctorate. This might be explained by Rose’s sample which included students from a variety of disciplines. However, differences in defining mentoring relative to student progress toward the doctorate are supported by the findings of Terrell and Hassell (1994) who suggested two stages in the mentoring experience: In Stage 1, protégés seek academic and career guidance, while in Stage 2, protégés desire collaboration with mentors to avoid pitfalls and learn strategies for success in the future. In our study, Stage 1 protégés were the new students who had an immediate need to learn the procedures and expectations of their new venture into graduate school. This first stage might be conceptualized as “structural.” As students gained some experience in the doctoral program, they learned the day-to-day expectations and logistics (e.g., which courses to take, how to obtain reliable information) and became more self-assured and confident. As they “settled in” and no longer felt insecure about being in a doctoral program, they were free to look to the future and consider the relationships, knowledge, skills, and experiences they needed to be successful in their future leadership role. Stage 2 might be thought of as “relational.”

Explaining our findings in terms of Terrell and Hassell’s (1994) stages of mentoring is consistent with the theoretical perspective of cognitive apprenticeship (CA) (Collins et al., 1989). The concept of “scaffolding” in CA supports the notion that students enter the community on the periphery as they are initiated into the profession. Over time they are gradually enculturated: they participate in authentic activities, gain self-confidence, and then are able to engage in collaborative learning as full members of the community (Collins et al.; Lave & Wenger, 1991). As full members of the community, learning is able to occur as in a community of practice (Wenger & Snyder, 2000).

Six themes emerged from the participants’ stories of their mentoring experiences: (a) relationship, (b) motivation, (c) professional socialization, (d) instruction, (e) opportunity, and (f) procedures. Although the themes were evident across the focus groups, the behaviors and experiences reflecting the themes differed qualitatively for each group. Building on the stages identified by Terrell and Hassell (1994), Table 3 is a conceptual framework that we propose to summarize and illustrate the qualitative differences in mentoring behaviors/experiences. Column one lists the six themes identified in our data. Columns two and three delineate the types of behaviors/experiences/expectations that illustrate the theme relative to Terrell and Hassell’s stages of mentoring. For example, in Stage 1, protégés expect and desire a relationship (theme 1) with a mentor who provides explicit direction and guidance, whereas, protégés in Stage 2 (veteran students/peer mentors) value a reciprocal/colllegial relationship. During the first “structural” stage, protégés’ motivation (theme 2) is primarily to get through the courses and program requirements; their instructional focus (theme 3) is course content. In contrast, protégés nearing completion of their program (Stage 2, “relational”) are less concerned with program requirements and more concerned with acquiring the necessary experiences and competencies to achieve their career goals. Stage 1 protégés express only an emerging awareness of a need for professional socialization (theme 4), whereas Stage 2 protégés are well aware that their roles will be shifting from practitioner to leader and they value experiences that help them with their role redefinition (and they realize that many of these experiences go beyond what coursework and program requirements can provide). As learning and professional opportunities (theme 5) arise, Stage 1 protégés willingly and eagerly take advantage of the offerings; Stage 2 protégés identify their own professional development needs and create the corresponding opportunities. And finally,
during Stage 1, protégés seem to be consumed with learning the procedures (theme 6) and policies of their program (understandably so), to the point that the procedures seem to be the “end” of a “means to an end.” Stage 2 protégés have passed the hurdle of learning procedures and realize that the procedures are the “means” to the end.

The mentoring outcomes that emerged from our data also fit with Terrell and Hassell's stages of mentoring. As illustrated in Table 4, "procedural" outcomes, such as program admission and completing coursework, may be thought of as Stage 1 outcomes; whereas more substantive and relational outcomes, such as learning professional expectations and presenting at conferences, are associated with Stage 2. Students may complete a doctoral program by achieving primarily Stage 1 outcomes (completing their coursework and research requirements), but certainly their doctoral program experiences and outcomes will be fuller and richer if they also achieve a number of Stage 2 outcomes. Additionally, we would project better career success (a more marketable graduate with a greater likelihood of obtaining desired employment) for those students who also achieve a number of Stage 2 outcomes.

Conceptualizing mentoring experiences and outcomes according to Terrell and Hassell's (1994) stages is consistent with some perspectives on adult learning. In a study of business school students, Delahaye, Limerick, and Hearn (1994) found that adult learners progress through four stages that characterize their "orientation to learning" (Knowles, 1984) and represent growth in "learner maturity." These stages are described in terms of two learning style preferences: pedagogy (a subject-centered approach to learning) and andragogy (a life-centered, task-centered, or problem-centered approach to learning). The four stages are

- Stage 1 - Low Andragogy/High Pedagogy
- Stage 2 - High Andragogy/High Pedagogy
- Stage 3 - Low Pedagogy/High Andragogy
- Stage 4 - Low Pedagogy/Low Andragogy

Stage 1 and Stage 3 are comparable to Terrell & Hassell’s Stage 1 and Stage 2 of the protégé’s mentoring experience, respectively. These two stages have been documented in the literature for some time (Delahaye et al., 1994). Stage 4, Low Pedagogy/Low Andragogy, may be viewed as independent learning (without a teacher), and includes behaviors such as observing, reflecting, generating ideas, reformulating previously acquired knowledge, and creating/ experimenting. Delahaye and his colleagues suggest that learners in Stage 2 may be "rebelling" against the structured style of pedagogy, but are insecure about taking more responsibility for their own learning in an andragony style. Understanding how adults learn explains why our results suggest that doctoral student mentoring should change (moving along a continuum from directive to collegial) as the students progress through their program. Failing to gradually modify the mentoring style in a doctoral student’s program may result in an ineffective or unsatisfactory mentoring experience for students and professors alike.

Implications for Doctoral Student Mentoring

Although the findings of this study are limited by our restricted sample, our results are fairly consistent...
with the literature and thus have some generalizability to mentoring doctoral students. There are several implications based on the findings, feedback from focus group participants, and emerging conceptual framework. First, mentors and protégés would benefit from clarifying their roles and expectations in the mentoring relationship. Although most "new" protégés will be at a structural stage, not all will desire or expect mentoring that is focused on academic and career guidance. Instead, some new protégés will prefer more of a relational focus in their mentoring. Second, mentors should ask protégés what they feel their immediate needs are and what kind of assistance, if any, might help them meet those needs. Third, consider providing protégés with a "tip sheet" addressing strategies for meeting common procedural needs and "lessons learned." This could be developed by faculty mentors and veteran protégés. Giving protégés a tip sheet might be particularly appropriate to protégés in the high pedagogy/high andragogy stage who are apparently struggling to move to more self-directed learning because it provides clear guidance but puts the onus on the protégé to actually refer to the tip sheet and follow the advice. Fourth, include relationship-building strategies in the mentoring program. This applies to the faculty mentor/protégé relationship, as well as to the peer mentor/protégé relationship. Relationship building can be facilitated in one-to-one situations as well as in group mentoring meetings. Participants in our study suggested scheduling periodic social gatherings -- some for faculty and students, and some for students only. There are several excellent sources describing activities for building the mentoring relationship (c.f., Megginson & Clutterbuck, 1995; Zachary, 2000). Relationship building may help protégés mature as learners and move from a pedagogical orientation to a more andragogical orientation.

Directions for Future Research

As we implement a number of relationship-building strategies suggested by our focus group participants, it would be informative to follow-up with our students (protégés and peer mentors) and revisit the discussion on mentoring. It would be interesting to see if the relationship-building strategies are perceived as effective and useful and if protégés’ definitions and expectations of mentoring change as a result of the strategies. Given that our results contribute to a growing data base on mentor effectiveness, it would be worthwhile to further explore protégés’ learning orientation and how it might change during the mentoring process and/or how it relates to various mentoring strategies. Protégés’ learning orientation could be assessed with an instrument modified by Christian (1982) to assess learning orientation in terms of pedagogy and andragogy. And finally, given the increasing cultural diversity in our nation, it would be useful to investigate the impact of culture on definitions and expectations in mentoring. It is possible that the limited diversity of special education's doctoral students is due to cultural differences among faculty and students that function as a "hidden curriculum."

References


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