Re-Imagining the Human Dimension of Mentoring: A Framework for Research Administration and the Academy

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Author's Note

The explanation of technical mentoring and alternative mentoring appears in an earlier form (Mullen, 2005, *Mentorship Primer*, Peter Lang). However, that source focuses on K–12 public schooling and policymaking contexts; in contrast, this article examines the graduate school context, with comparisons to "outside" contexts. A second source to describe the changing climate of higher education is Mullen's (2007) article published in *The Educational Forum*. The creative language used throughout this discussion (e.g., co-mentoring, collaborative mentoring) appears elsewhere in the author's published works, and she confirms that the opinions stated in this article are her own, not The University of North Carolina at Greensboro's. Carol Mullen of The University of North Carolina at Greensboro can be contacted via camullen@uncg.edu.

Abstract

This article offers mentoring frameworks for higher education that are applicable to research administrators and academic scholars. The author describes theories of adult education, mentoring, and leadership that relate to these populations. In addition to the pertinent literature, support is drawn from the author's scholarship and professional experience in mentorship, leadership, and democracy in postsecondary settings. Critical and feminist perspectives on various mentoring approaches are articulated, as well as forms of mentoring that address the early adaptation and success of doctoral students and new professionals. These theory-informed practices of mentorship could assist mentors and administrators in both improving their work and deepening their impact. Administrative leaders are encouraged to proactively support the newer models of mentoring as well as to reward beneficial learning and socialization processes. Mentors and mentees who are searching for guidance in their own academic domains can adapt, for implementation purposes, the mentoring ideas and strategies shared.

Keywords: Mentorship, graduate student mentoring, research administrator mentoring, alternative mentoring, technical mentoring, reward structures, systems thinking

Introduction

Administrators and educators have become so metric oriented that it has become challenging to retrieve the human face of mentorship. In fact, mentoring may be considered a lost art and science. In Greek mythology, the spirit of mentoring is reflected in the character Mentor who serves as a faithful and wise advisor whose experience and knowledge benefit youth. The name "Mentor" is proverbial for a guide who opens up others to new experiences and the world, and who encourages and protects protégés. Today, exemplary research administrators and faculty mentors provide their expertise to less experienced individuals to help them advance in their academic programs and careers. Given that effective graduate student mentoring is not as common as it should be (Johnson, 2006; Johnson & Huwe, 2003), and given that fast-paced demands on education are suffocating quality mentoring (Mullen, 2007), how do those in research leadership and academic positions practice the wisdom and prudence necessary for developing, assessing, and improving programs? Because research administrators are systems thinkers who view the component parts of a system in relation to the whole (Senge, 2006), they should understand that the mentoring of novice research administrators is integral to their own work. As human relations experts, research administrators realize that human learning is a complex, and even mysterious and messy, business. Research leaders who comprehend that mentoring the new professional depends on intimate relationship building and new forms of learning are more apt to understand that mentorship defies quantification as well as formulaic approaches. Thus, leaders who grasp the qualitative dimensions of learning and situations lend strength to their professional domains.

Understanding the fuller breadth of mentorship and its potential for educating and preparing students for the professions is an emergent competency in the world of research administration. As the culture of higher education institutions changes, one-on-one mentorships can be expected to expand. Creative collaborations and group-learning contexts are slowly on the rise in the education discipline, serving not only to supplement but also to modify the traditional mentoring arrangement that is dyadic in nature (Arnabile, 1996; Mullen, 2005). A goal of this essay is to raise awareness about how the mentoring of novice research administrators and graduate students can become a more potent force, with implications for the mentoring of non-tenured faculty. Some of the historical, philosophical, and epistemological foundations of mentoring that aid in this vision are addressed, including theories of adult education, mentoring, and leadership. In particular, the problem—that piecemeal understandings of mentoring that lead to the inadequate preparation of the next generation of professionals—is examined. Toward this end, alternatives are presented for developing or transforming mentoring relationships, programs, and cultures, and for finding solutions to educational problems. The research on group learning that has relevance for educating female and ethnic students, in addition to a mentoring scenario involving research administrators, provides further support.

Mentoring and Learning in Education Theories

The educational literature presents an imbalanced picture of mentoring and learning in terms of the emphases given to school-based contexts and populations (Mullen, 2009). Consequently, study of higher education contexts and adult learning lags behind and needs greater attention. Researchers, leaders, and policymakers focus on issues pertaining to teacher supervision and instructional leadership, as well as the mentoring of preservice and inservice teachers and of

children across grade levels and from various backgrounds. Also, prospective and practicing administrators, and related matters of transition into leadership roles, have been the beneficiaries of steadfast research; hence, mentoring phenomena relevant to graduate students (Johnson, 2006) and dissertation candidates (Piantanida & Garman, 1999), in addition to novice research administrators (Easterly, 2008) and junior faculty members (Johnson-Bailey & Cervero, 2004) reflect emerging areas of research. Knowles (1984) has referred to the adult learner (e.g., research administrator mentee) as "a neglected species." In addition, research on postsecondary settings highlights particular aspects of mentoring—specifically, advising and supervising students—as do graduate programs. Because of this disjointed treatment of the mentoring enterprise, only a few discrete, isolated functions of mentorship receive attention. Hence, a comprehensive scope of mentorship that embeds multiple options and flexibility for participants and institutions alike needs to be promoted (Mullen, 2005).

Just as education is a powerful force that continually shapes the quality of experience (Dewey, 1938), so too is mentoring. Education as community and culture-based needs rediscovery—the ubiquitous energy of mentoring should be more fully utilized to connect people, reform values, affect decisions and actions, and contribute to the life, world, and future of institutions, communities, and societies. While pervasive in a more limited form, mentorship is misunderstood, depersonalized, and left to chance encounters in the academy (Eby, Rhodes, & Allen, 2007). Ironically, mentoring, focused on the development and success of graduate students, career professionals, and junior faculty members, is embedded in the mission of some professional associations. For example, as pertains to the author's service leadership, association-wide initiatives in mentoring graduate students (and junior faculty) have fundamentally changed the mindset and program offerings of the American Educational Research Association (McDonnell, 2009) and the University Council for Educational Administration.

Relevant Definitions of Mentoring

In university and policymaking circles, mentoring is thought of as academic advisement and supervision (see Council of Graduate Schools, 2008). *Mentoring* is not only commonly used interchangeably with *advising* and *supervising* but also with *coaching*, *assisting*, *guiding*, *leading*, *teaching*, *learning*, *readiness*, *compensation*, *support*, and *socialization* (Rix & Gold, 2000). Such linkages, while vital to the theory and practice of mentorship, fail to address its wider and deeper dimensions, which has implications for how mentoring is applied. In actuality, because mentorship is simultaneously an art and a science, performance supervisors and academic advisors cannot be "programmed" to function as mentors.

Thus, Merriam's (1983) assertion that mentoring and its dynamics need to be more clearly defined still has currency. As a starting point, *mentoring* is an educational process focused on teaching and learning within dyads, groups, and cultures (Mullen, 2005). Thinking beyond reductionist and piecemeal conceptualizations, mentorship is a holistic form of teaching and learning that embraces the professional, personal, psychosocial, and career facets of a protégé's development, and such activities as advising, tutoring, coaching, and counseling. Mentorship is a framework for theorizing developmental relationships in which people with experience and expertise invest time in those who are less experienced, responding to critical needs and enhancing the capacity for growth, productivity, and achievement (Johnson, 2006; Shea, 1994).

Mentors and mentees can engage in learning partnerships that are formal (e.g., structured) or informal (e.g., spontaneous). In the case of formal mentoring, relationship structure, objectives, and expectations are communicated at the outset, as in grants programs and programs of study that involve mentors and mentees; regarding informal mentoring, relationships are self-initiated, unplanned, and left to chance. Further, mentoring extends beyond job-related tasks and coursework, with respect for learning (and relearning and unlearning) as a lifelong commitment (Mullen, 2005). Mentoring is thus an integral part of the developmental and life cycles of human and organizational systems.

Higher Education Challenges and Barriers

Whether one-on-one or group based, the success of any mentoring relationship or program depends on acceptance, full participation, and transparency (Mullen, 2008). Learning is, fundamentally, a social process that activates these conditions, as in the instance of transparency of social relations and of the social organization itself (Lave & Wenger, 1991). Educational relationships are thought to rely on and benefit from ideological transparency that is situated within contemporary mentoring situations (e.g., peer learning). Mentors must understand that mentees constitute vulnerable populations to be protected from concealed agendas and ulterior motives (Johnson, 2006; Lincoln & Holmes, 2008). Such principles of adult education foster the idea that mentoring—a form of developmental learning—brings together mentors and mentees in a "mini learning community" in which each proactively teaches the other (Galbraith, 2002–2003, p. 17) in ways that are open and honest, reflective and critical (Herman & Mandell, 2004).

Proactive mentorship is essential to the academic success of graduate students (Merriam, 1983). Whether relationships develop informally or formally, graduate mentors need to be intentional in their mentoring practices (Johnson, 2006; Johnson & Huwe, 2003). In the United States, as many as 50% of doctoral students never graduate (Dorn & Papalewis, 1997; Glatthorn, 1998); this loss financially burdens universities and devastates students (Golde & Dore, 2001; Lovitts, 2001). Importantly, national studies report that the program attrition of female students from U.S. institutions is higher than male students, minority students drop out more often than white students, and Americans leave at a higher rate than international students (Council of Graduate Schools, 2006; National Education Association, 2007). Given this snapshot of reality, mentoring is seen as an investment and tool for curtailing program attrition. As Lovitts (2001) observes, "It is not the background characteristics students bring with them to the university that affect their persistence outcomes; it is what happens to them after they arrive" (p. 2).

In fact, the myriad of challenges facing doctoral students and the associated low completion rate calls for new mentoring interventions offering creative solutions (Allen & Eby, 2007; Hansman, 2002a; Johnson, 2006; Mullen, 2005, 2007). Programs that boost higher graduation rates and student satisfaction sponsor intentional mentoring by dissertation chairs and through program (e.g., cohort) structures. In this context, practical apprenticeship learning is facilitated via the preparation of dissertation and grant proposals and more (Johnson & Huwe, 2003; Mullen, 2006; Piantanida & Garman, 1999). Internationally, researchers confirm that mentoring influences student retention, degree completion, and overall satisfaction (Council of Graduate Schools, 2006; Dinham & Scott, 2001; Nyquist & Woodford, 2000). Intentional mentoring by faculty and administrators confronts the perennial problem of disillusionment and academic

failure, as well as writing and inquiry challenges (Dorn & Papalewis, 1997; Mullen, 2006). Thus, scholarly mentoring processes can promote viable faculty–student relationships, increase student engagement with research and scholarship, encourage peer support, and enhance mentee success (i.e., retention, persistence, and graduation) (Mayo, 2008; Mullen, 2007).

Trends in the applied professions have had an impact on higher education in unprecedented ways. For example, a growing demand exists in teacher education and educational leadership programs at the graduate and undergraduate levels to become standardized and aligned with the expectations of the field. Even doctoral education, especially within applied-knowledge disciplines involving the preparation of teachers and leaders, must "modernize" by accommodating the current needs of the professions (Nyquist & Woodford, 2000). Unfortunately, as Weinstein (2004) argues about the changing values of universities, "The capitalist model of human behavior has restructured academic choice, and our goal has become to satisfy our students, not to provide them with an education" (p. 105). Doctoral education is becoming a means to an end for students seeking promotions, credentials, and salary increases.

Coined the "McDonaldization of society," Ritzer (2004) reveals how the mentality of the fast-food industry dominates entire sectors of westernized society. Extending this line of thought, "fast food" education characterizes graduate education as a "Hurry up! I have to get this done so I can get a (better) job" process, which is antithetical to the notion of a lifelong learner and respect for the process of education and lifelong learning. Compounding the issue, dissertation candidates are often so obsessed with completing their study and "getting on with their lives" that they miss becoming immersed in the very issue for which they will be viewed as an expert, or even learning the requisite skills. Consequently, many shortchange their development. Due in part to the "professionalization" or "modernization" of the graduate degree, then, many students have become career-focused to the detriment of their own education (Nyquist & Woodford, 2000). Unfortunately, this cultural change, intended to make scholarship useful and programs competitive, has inadvertently led to a "dumbing down" of programs. Otherwise willing research leaders and faculty mentors may not want to educate adults within these changing systems, even though they know this is mandatory for "staying in business."

Doctoral supervisors and instructors alike complain that many doctoral students do not exhibit the capacities expected of lifelong learners. These include a willingness to learn and to accept constructive criticism, a yearning to engage in meaningful inquiry, the ability to be an independent problem solver, and a desire to contribute new insight to the field (Mullen, 2005). In a random survey of 800 professors in 2004, the National Education Association (NEA) found that "higher education faculty overwhelmingly believe that students are less prepared for college today than they were in the past," and that their aspirations for an increased salary are rivaled only by the desire for better prepared students (NEA Higher Education Research Center, 2005, p. 1).

Such scenarios hint at a deeply fractured culture within higher education institutions that are themselves fragmented, outdated systems (Tierney, 1999). Such complications conspire to make the roles of mentor and mentee even more challenging, placing undue stress on promising practices of mentoring within and across university contexts. Hence, professors who are deliberate in their mentoring practices stand out, especially given the host of other elements

central to their professional competence and performance evaluation (Johnson, 2006). Certain fundamentals in the formation of mentoring relationships must be established if supervisory practices are to flourish; notably, faculty and their students should share interpersonal chemistry and mutual respect. Similar goals and interests matter, as advisees who are practitioners report feeling disconnected when mentors devalue their life and work. Moreover, in studies of what graduate students look for in their mentors, they have identified as crucial certain salient behaviors (e.g., encourages a high level of motivation), mentoring functions (e.g., provides career and psychosocial support), and personality characteristics (e.g., conveys intelligence, caring, and honesty) (Allen & Eby, 2007; Clark, Harden, & Johnson, 2000; Johnson, 2006).

While promising mentoring practices may be slowly gaining recognition at the executive levels of higher education (see, e.g., McDonnell, 2009), they are nonetheless insufficiently supported (Mullen, 2008). Both targeted and whole-scale reward structures are needed. Of course, this "reculturing" solution assumes that, with systemic support, all experienced faculty members will rise to the occasion of mentoring novice administrators and students through their programs and careers. This sentiment is idealistic, but rigorous faculty performance assessments (that the author thinks, in her role as department chair, should include the productive mentoring of others) can help remedy this problem (Tierney, 1999).

Historical Associations of Mentoring

The wider dimension of mentoring and its historical antecedents are vital to this conversation. Mentorship historically involves training youth or adults in skills building and knowledge acquisition, both inside and outside education (Merriam, 1983). Professionals in universities, schools, and other organizations enact *technical mentoring*—a needs-based, short-term solution involving the transfer of know-how to apprentices within skills-building (advising and training) contexts (Mullen, 2005)—or, to use Darwin's (2000) term, *functionalist mentoring*. Technical/functionalist mentoring hierarchically transmits authoritative knowledge within organizational and relational systems (Mullen, 2005). Examples within the academic disciplines and professional domains include scientific management, technical efficiency, bureaucratic leadership, and skills-based learning—what English (2003) quips, "management speak."

Technical mentoring occurs in instructional supervision and professional development contexts—what might be thought of as the "parents" of mentoring—perpetuating scientific management approaches to teaching and learning. Unlike mentoring theorists, supervision experts think of mentoring as collegial supervision. Difference in theoretical outlook aside, in recent years the surging interest in mentoring has created a new relationship among these practices that, ironically, links mentoring and supervision as change forces. The new era that began through ardent educational reform efforts in the early 1980s has reintroduced the past in the form of neoconservative or "neoscientific management."

Technical mentoring also circumvents "why" and "what if" questions, the spectrum of socio-cultural and political issues, and especially the regulatory dimensions of its own making. Instead, what gets promoted is an efficient, managerial perspective on advising, training, instructing, coaching, and leading. Largely patterned after Tyler's (Pinar, Reynolds, Slattery, & Taubman, 1995/1996) view of program development as divorced from human inquiry, technical mentoring

is a firmly entrenched paradigm in American education. Even though supervising, advising, and training do not equate with the complex and creative art that is mentorship (Mullen, 2005), mentorship gets reduced to supervising, advising, and training. As one effect of this reductionism, creative solutions (including reciprocal and group learning) are not accommodated. Because mentoring activities are not exempt from transmissions of power and authority, these dynamics must be investigated from the perspective of mentors *and* mentees (Darwin, 2000; Hansman, 2003; Mullen, 2000). It is troublesome that female and minority protégés are socialized to unconditionally accept the power-laden politics of academies that many find oppressive (Hansman, 2002b; Johnson-Bailey & Cervero, 2004).

While ideologically restrictive, many would counter that technical mentoring is useful and necessary for the support it gives within practical apprenticeships and in skills building contexts. Human interaction, positive engagement, and fair treatment can be honored in this context. Hence, one cannot assume that technical mentoring has absolutely no educational value or that it cannot function synergistically with alternative forms. On the other hand, critics (e.g., Darwin, 2000; Freire, 1997; Hansman, 2003) believe that the power and authority, and the efficiency and competitive values implicit in technical mentoring undermine the capacity for democratic mentoring at human and organizational levels, and so should not be tolerated.

A Feminist Deconstruction of Technical Mentoring

While some mentors consider technical mentoring viable for teaching and socializing individuals, critics judge this method passé and, depending on the situation, even politically unsound or morally dubious. Top-down guidance of a faculty mentor who functions as an expert and teacher (but not co-learner) and who manages the learning tasks of (but does not journey with) others presumed incapable results in adult learners (e.g., novice research administrators) who act as codependent, diplomatic receivers of facts and knowledge. In Freire's (1997) worldview, this mentoring arrangement is terribly misguided. Synonymous with "banking," mentors who treat mentees as repositories of information to whom they make "deposits" can perpetuate actions that are oppressive, degrading, and dehumanizing. In contrast, mentoring relationships steeped in humanity are based on respect and equality, and developed through dialogue, engagement, and challenge. While many adult educators blend technical and alternative mentoring approaches in their advising, supervising, and teaching or "training," they may not realize that the epistemological tenets and values embedded in these paradigms radically differ. As a result, they hold implications for the socialization and educational process itself. Hence, one can deepen one's impact when these paradigms are well grasped and knowingly implemented.

Clearly, technical mentoring is problematic. First, it perpetuates cultural socializing forces that produce inequities for particular groups (Freire, 1997). Second, it justifies the algorithmic reduction of complex developmental issues, with the consequence of treating mentoring as a mechanical problem. Consider what Aristotle wrote in a treatise: ". . . moving a big weight with a small force [such as a lever] seems absurd, and the more so the bigger the weight" (Aristotle [or a follower of Aristotle's, unknown], see Winter, 2007, p. 1). The analogy here is that academic mentorship has a better chance of succeeding when major efforts, not just minor ones, are enacted. The goal, then, becomes to think and act beyond *technocracies* that support learning as efficiency oriented, power based, and unidirectional (Mullen, 2005). "Technical mentors" can

re-learn their craft by engaging in critical self-relation and by maximizing risk taking and inquiry in their educational relationships (Freire, 1997; Herman & Mandell, 2004). They would, in effect, begin to ask protégés, "How can *we* learn from *each other*?" The challenge they would accept is becoming personally immersed in complex interactions aimed at facilitating substantive guidance and interpersonal connection.

Hierarchical authority structures set the parameters for technical mentoring wherein non-critical reflection and feedback is encouraged, as well as the mediation of autocratic (non-democratic) frames of reference (Hansman, 2002a, 2002b, 2003). As such, inappropriate "father" and "mother" transferences and power plays compound instrumental, linear processes of learning. Educational processes rooted within a Eurocentric male ideology confront, and even disarm, many female and minority university students and faculty (Bona, Rinehart, & Volbrecht, 1995; Johnson-Bailey & Cervero, 2004; Packard, Walsh, & Seidenberg, 2004). Antithetically, a smaller number of empirical studies have found that women and men fared equally well in the mentoring venture and post-graduate employment placement (e.g., Clark et al., 2000), but few comparative studies of white majority and ethnic student populations exist.

Mentoring is a moral act that permeates the mentor–mentee relationship, yet technical mentoring, at its best, allows mentors to fulfill their role only to the extent necessary. At its worst, technical mentoring reflects poor performance and is ethically unsound. Clark and colleagues' (2000) analysis of the mentoring literature in higher education identified behavioral downfalls. Mentors who are "ethically suspect" may (1) engage in sexualized behavior toward their mentees; (2) exercise poor boundaries and become too emotionally involved; and (3) steal students' work for personal credit and self-promotion (Johnson, 2006). Needless to say, the reverse also occurs, with protégés as predators, plagiarists, emotional dependents, and unreliable professionals who drain or exploit their mentors. Unethical behaviors must be monitored and changed so that entire communities can be protected.

Alternative Mentoring

Contrasting with authoritative or transmissive mentoring relationships, co-mentors (e.g., administrators, professors, students) develop egalitarian relationships that are collaborative. Mentoring as an equalizing force requires a commitment to ethical agendas centered on power, virtue, and circumstance in all projects (Easterly, 2008; Hansman, 2003; Herman & Mandell, 2004). Intentional mentors promote the dynamics of challenge and care, and foster satisfying learning environments (Galbraith, 2002–2003) through promising practices of alternative/non-technical mentoring. These include cohort learning, cross-cultural mentoring, inquiry/writing groups, learning communities, mentor-based programs, peer coaching and learning, professional activism, staff development, telementoring, and e-mentoring. Mentors use such conduits to remedy the drawbacks of traditional mentoring relationships, support issues of quality in student learning and success, and vigorously problem solve within changing organizational structures.

Alternative ideologies of mentoring include collaboration, co-mentorship, democratic learning, and shared leadership. *Co-mentorship* refers to individuals or groups proactively engaged in reciprocal teaching and learning that value egalitarianism and transforming power structures to reflect this value. *Democratic learning* can be a formal or an informal experience of mentoring

wherein the team or committee helps all members develop the desired knowledge and/or skills toward a common goal or vision; members participate in democratic forms of learning through team building, goal setting, problem solving, delegating, assessing, and resolving conflict. And *shared leadership*—also shared governance and collaborative decision making—is either a single leader who distributes power and authority to a professional body or a team that functions more democratically (see Mullen, 2005).

Faculty members who mentor in alternative ways strive to make a difference and concurrently learn from others (e.g., co-mentorship). Seeking to enhance the education of protégés outside the traditional supervisory or advisory context, they mentor beyond the demands of their position. In fact, psychologists describe mentorship as a superordinate function separate from teaching and instruction, one that requires an "above and beyond" effort (pivotal studies from the 1980s and the 1990s are summarized in Clark et al., 2000). "Alternative mentors" take risks, experiment with educational ideas, and exert influence in guiding others. For example, they confront invisible yet influential forces within educational domains that can adversely affect protégés and programs. These mentors are transparent in providing and eliciting performance feedback for their self-improvement. They also seek to understand the influence of their ideologies, values, and allegiances on people and contexts. As social justice advocates, they attempt to change archaic structures and policies that keep systems closed (Pinar et al., 1995/1996), and they advocate for the full equality of disenfranchised groups (e.g., Darwin, 2000). Such mentors have proactively integrated marginalized populations in their mentoring work that they envision as transformative cultural work (Johnson-Bailey & Cervero, 2004).

Central to the social justice perspective on alternative mentoring are constructivist, connectivity, and radical formulations. *Connectivity* links persons by a common set of beliefs as they conduct themselves from a premise of connection to others. *Constructivist* means that people see knowledge as actively constructed by individuals who are situated knowers. *Radical* refers to extreme conservatives or liberals seeking major reform in society, politics, or institutions (Mullen, 2005). The wheels of social justice itself have as spokes the agendas of antiracism, collaboration, community, dialogue, empowerment, subjectivity, and transformation. Proliferating examples of diversity and experiments in learning are outgrowths of the critical democratic framework of mentoring (see, e.g., Davis, 2008; Mullen, 2008).

Political agendas are a driving element within alternative mentoring contexts. The mentoring of non-white women by white males is one such issue that has been overshadowed by the inequitable systems of socialization and learning for women and minorities in postsecondary institutions. Some researchers support mentoring that is open to white males being paired with female and minority protégés (e.g., Johnson, 2006). Dreher and Chargois' (1998) studies of historically black universities have found that women and minorities paired with white male mentors can benefit from access to power structures that provide compensation through such means as visibility, assistantships, and employment. Hence, they encourage the infusion of cross-race mentoring to foster professional networks and increase social capital. Critics see access for disenfranchised groups within organizations as the issue, not whether white males should mentor women of color (e.g., Darwin, 2000). Darwin's "cycle of power" is a systems concept that depicts cultural socializing forces as closed systems that recycle power between male mentors and protégés, in effect reducing the likelihood of women and minorities being mentored. Because

career advancement is a protected "investment," "only those who best represent dominant cultural values may be chosen to serve as mentors. . . ." (Hansman, 2003, p. 103). Hence, intentional mentors seek to diversify higher education systems by eliminating constrictive access and critiquing the replication of organizational values.

Synthesis of Mentoring Paradigms

In administrative and academic contexts, an "unapologetic" free-flow exists between the contradictory ideologies of technical and alternative mentoring. The synthesizing of these paradigms in everyday life and in scholarship is practically indiscernible. For example, Paulus and Nijstad (2003) uncritically discuss how domain knowledge (e.g., background knowledge) and creative skills (e.g., risk taking) can be taught and, moreover, used to support intensive group creativity. Their perspective, a combination of social psychology and industrial administration, aligns a technical–rational training approach to mentoring with work-group innovation. Intermixing perspectives on training with those of social transformation is common practice. Educators collapse, with apparent ease, the language of management (e.g., "monitoring quality," "managing conflict," "accountability safeguards") with empowerment (e.g., "learning environments," "relationship sensitivity," "cross-cultural mentoring"). If the deep semantic structure of technical language informs our thoughts and actions, then technical mentoring would seem natural and even have magnetic appeal.

Another example of the blending of the two ideologies can be seen in the role of mentors as evaluators. The alternative mentoring stance is that faculty mentors should *not* serve an evaluative function, yet their feedback often does involve assessment with respect to their instructional and supervisory tasks (Mullen, 2005). The evaluative function of mentoring also extends to classroom learning and such actions as creating activity settings and determining appropriate assessments (Herman & Mandell, 2004). Further, instructors and dissertation (and thesis) chairs use a range of assessments not only for assigning course grades but also for judging the merits of a student's inquiry and progress. If anything, the increasing intensification of standards for program improvement has amplified the evaluative aspects of mentoring.

Hence, while technical and alternative mentoring may appear bipolar in theory, in practice they overlap, at times becoming indistinguishable. Nonetheless, fundamental distinctions exist and distinctions are discernable in practice. Overarching paradigms of technical mentoring and alternative mentoring embed very different views of the purpose of education. As a result, this affects how programs, relationships, and systems are envisioned and organized.

Feminist Approaches to Mentorship

Feminist scholars underscore the potency of informal mentoring in adult learning and development (e.g., Davis, 2008; Mullen, 2008). Some mentees have taken it upon themselves to compensate for the perceived inadequacies of their education by creating democratically organized, collaborative support groups. Doctoral students belonging to one such group successfully bridged their differences in background and expertise, augmenting their learning in programs and dissertation mentorships (Harris, Freeman, & Aerni, 2009). Alternative mentorships reach beyond the academic and career development of protégés to address

psychosocial development in such areas as friendship and emotional support, enhanced self-esteem, and confidence (Darwin, 2000; Hansman, 2002a, 2003; Mott, 2002).

The Mentoring Mosaic Model

A significant alternative conception of mentoring (e.g., Eby et al., 2007; Head, Reiman, & Thies-Sprinthall, 1992; Mullen, 2005) is Kram's (1985/1988) "relationship constellation," also known as a "mentoring mosaic" or "academic network." Even though the concept of network mentoring was articulated more than 20 years ago, its impact on the education literature is only more recently felt. In fact, developmental networks in which people invest in one another's learning and success have even been heralded by *The Wall Street Journal* as not only "a new approach to mentoring" in business organizations but also essential for staying abreast of global trends (Kram & Higgins, 2008, p. R10). The mosaic model can be formal or informal in nature (Head et al., 1992) and members can benefit from "enhance[d] performance, learning, self-awareness, social skills, and leadership capability" (Kram & Higgins, 2008, p. R10). Easterly (2008) describes a dynamic mentoring mosaic that enabled women academics to collaborate on grant writing within a research institution wherein the culture of collaboration had to be created.

Mosaics can be designed as a primary or secondary network, or as a more informal resource, and they assume various guises, such as network, community, and even resource. Because mentors cannot be "everything" to any one person, mentoring mosaics play a practical role in helping protégés optimize the effects of mentoring (Kram & Higgins, 2008). In fact, Head and colleagues (1992) have encouraged mentees to access developmental networks to overcome shortcomings in their primary mentoring dyads and expand academic and career opportunities.

Within the mentoring mosaic, peers interact around an area of shared interest, tapping the strengths and qualities of their partners. Members interchange roles as mentors and protégés, sponsoring the learning of all parties through a synergistic, flexible structure. This kind of network is indispensable for cultivating peer mentors, compensating for the dissatisfactions of traditional mentoring relations, and facilitating larger, team-oriented projects (Mullen, 2005). Indeed, if mentoring is defined more as a learning process than an activity performed by an individual, then several people can simultaneously engage in nurturing, advising, befriending, and instructing. Within such networks, one person may serve as a subject specialist and others as counselors, advocates, advisors, and promoters. Co-mentoring is a key element in the creation of such scholarly think tanks, dependent on commitment, discipline, and synergy (e.g., Davis, 2008; Mullen, 2008). Mentees have been given opportunities for peer collaboration and networking, and skills development in research, writing, and speaking. The camaraderie and interdependence, and identity formation and ownership in learning that emerge from this activity setting underscore that *how* mastery is achieved matters no less than mastery itself (Galbraith, 2002–2003).

The Co-mentoring Relationship Strategy

The co-mentoring relationship strategy complements mentoring mosaics as a model for engaging adult learners. Activities that are especially valued include power sharing, turn taking, co-leading, dialogue, constructive feedback, and transparency and authenticity in learning. Specifically,

co-mentorship is a process of reciprocal learning whereby mentors function as adult educators and mentees as adult learners within the mentoring dyad or group (Cohen, 2002).

Group approaches to co-mentoring help students grapple more effectively and creatively with problems associated with one-to-one mentorships. For example, the issue of mentor pairing with respect to similarities in gender, ethnicity, age, and discipline (e.g., Wilson, Pereira, & Valentine, 2002) becomes diminished when groups are configured to reflect diversity. Some minorities may feel that ethnic mentors would be more ideal but nonetheless draw strength from diversified activity settings that include cohort peers. Women students, who generally prefer female mentors because of the perceived opening for personal contact (Wilson et al., 2002), can derive satisfaction from mixed-gender groups led by male mentors. *Peer mentoring* has maximum benefit within groups whereby "the opportunity for synergy and cross-fertilization of ideas and experience" contributes to the bridging of "organizational chasms" and enhanced "teamwork and improved performance" (Ellinger, 2002, p. 22).

The idea of a mentor as somehow separate from or above the group that follows one's charge is outdated (Banks, 2000). Thus, beyond individual and group learning, co-mentoring also functions as a catalyst for changing traditional practices, hierarchical systems, and homogeneous cultures (Bona et al., 1995; Easterly, 2008). Diversity is promoted when women and minorities are brought into a network or culture (Bona et al., 1995; Darwin, 2000; Easterly, 2008) and when "unequal power relationships" are changed (Hansman, 2003, p. 105). Because mentoring relationships tend to be hierarchical in nature (Hansman, 2003; Johnson-Bailey & Cervero, 2002), mentors who are explicitly critical of "the inherent power of mentors" and organizations (Hansman, 2003, p. 103) confront such mentoring behaviors as "fierce negotiation, infantilization, prejudicial grading, and silencing" (Ervin, 1995, as cited in Mott, 2002, p. 8). Such behaviors erupt when mentors, male or female, exert control over female mentees. Because not all mentors are comfortable with power sharing and promoting the "*mutual* enhancement of independent and critically reflective thinking" (Galbraith, 2002–2003, emphasis in original, p. 9), administrative researchers can make a difference by providing leadership and guidance.

A Mentoring Mosaic for Research Administrators

Novice research administrators "hit the ground running" within academic contexts that are intentionally designed for collaborative and interdisciplinary science (Laughlin & Sigerstad, 1990; Lowenstein, 2006). According to a study carried out by Carnegie Mellon University, while individual faculty initiate interdisciplinary research, administrators facilitate a supportive environment and make available the funding for conducting research (Laughlin & Sigerstad, 1990). These days, socializing novice research administrators should rely less on individual mentoring relationships and more on group learning contexts. Promoting a boundary-spanning approach to the research endeavor should reduce the time it takes for mentees to adjust to a new environment, develop their learning capacities, and become socially integrated. Females and persons of color frequently experience professional and social isolation in their new professional roles. If not circumvented quickly and in their early years, this isolation can have a negative affect on development and promotion (Davis, 2008; Easterly, 2008; Lowenstein, 2006; Mullen, 2008). For example, in a 2005 study, only 52% of junior faculty reported having a mentor to assist with their career development. But even among junior faculty who were matched with a career

mentor, only 24% had received assistance with the requisite skills-development, as many of the mentorships had not been launched (see Lowenstein, 2006).

Newer mentoring models, primarily the mentoring mosaic and co-mentoring relational model, can enable research administrators to address such cultural deficits in their work environments. This can be accomplished while more wisely investing university resources to support the mission of their institutions. As Sá (2008) attests, "Traditional university structures and reward systems were built to support and account for single-investigator, discipline-based research" (p. 37; see also Mullen, Murthy, & Teague, 2008). Outdated systems do not support the development and early success of novice research administrators and faculty members whose needs range from entry-level concerns (e.g., learning the functions of key personnel) to academic agendas (e.g., securing resources), to performance reviews (e.g., clarifying requirements). Research shows that entry-level professionals, in general, falter not because of inadequacies relating to expertise or motivation but from lack of access to mentors. Nurturing the academic career prowess of new professionals through primary and secondary mentors who work together as a team means providing support in a myriad of ways. New professionals need to understand the promotional process, generate a research agenda, identify funding and writing opportunities, problem solve (e.g., negotiate resources, manage time), learn presentation and teaching skills, and navigate the political workings of their environment (Lowenstein, 2006). Learning to resolve ethical dilemmas related to research administration means becoming educated about ethical dilemmas that affect one's decision-making. Mentors should ask their mentees questions that promote moral awareness and action, and that provide them with models and examples that will help them to make ethically sound judgments (see Lincoln & Holmes, 2008).

In institutions that emphasize collaborative and interdisciplinary science, research administrators are called upon to deal with these new stresses, with the need for strong interpersonal relations, and with the need to be organized and to multi-task. For example, they must not only be exceptionally resourceful in today's worsening budgetary climate but will also need to be unusually creative as they problem-solve ways to assign credit to collaborating scientists (e.g., principal investigators, project developers)—according to their relative contributions and across units and universities (Sá, 2008). Research administrators must work to dissolve traditional boundaries to research productivity—typically lack of communication and collaboration—that impede team-based approaches across organizational and disciplinary boundaries (Mullen et al, 2008). For example, they will need to figure out how to align assessment-based performance (e.g., promotion and tenure) with the collaborative and interdisciplinary science values that have permeated the academic culture (Sá, 2008).

New professionals across disciplines consider mentors important and vital to their success. A university-wide faculty survey of research resources and academic culture found that junior faculty members considered "intellectual and scholarly resources"—that is, research mentors and senior researchers—indispensable to their acclimation, progress, and achievements (Mullen et al, 2008, p. 29). The newer mentoring models can be fostered through cross-race mentoring, scholarly programs, research panels, and workshops organized to promote academic collaboration and mentee development. Research administrator mentors can share information about the norms and culture of the school, and facilitate skills building in such areas as career planning, time management, and grants writing (Lowenstein, 2006; Mullen, 2008).

A challenge to research administration and the professorate is to align theories and practices of adult development. To avoid replicating hierarchical and demeaning power situations as they themselves grow into research administrator mentors, mentees will need understanding of how power dynamics are structured in organizations and how these influence relationships and settings. It must become widely known that women and minorities encounter troubling dilemmas as learners (Darwin, 2000; Hansman, 2002b, 2003), and that they report having fewer academic mentors, collegial relationships, and other resources that facilitate success (Lowenstein, 2006; Mullen, 2008). "Pathways of power" wend their way "from the bureaucracy of government" through "systems of human interaction and language" (English & Irving, 2008, p. 307) reproducing organizational values and influencing power in professional mentoring contexts. Developing an organizational capacity for mentoring requires that mentors and mentees establish culture-changing solutions and experiment with them.

Obstacles to collaboration can be overcome within mentoring mosaics and co-mentorships that enable research administrators to model professional expectations, including research ethics. Mentors should be supported in their efforts to work closely with mentees from inside and outside their units. As new research administrators join schools and universities, they will need to be socialized at the outset to experience success and a sense of belonging. Importantly, the group context functions as a catalyst for female faculty who, for example, submit fewer proposals than their male counterparts for external funding and yet who thrive in research-based mosaics (Easterly, 2008). Where university infrastructure and organizational culture are brought into alignment, units will be better organized to support the development and success of novice professionals. However, mentors and mentees do not need to work at the center of established systems to generate productive mentorships. They have the option of working at the margins to "grow" the new professional. A distinctive intellectual signature arises out of networks of scientists from multiple units that rely on the common interests of participants and very little on established infrastructure (Sá, 2008). Other networks are organized around university-based initiatives, with input and even controlling interest from senior administrators for whom collaboration among scientists serves as a grant strategy and vehicle for securing highly competitive federal and private funding, contract opportunities, and sponsored research support. Mentors will need to know both the vision of their institutions and the research interests of the next generation so they can devise contexts for professional learning that cultivate human, physical, and financial resources. New professionals will be looking to them for proactive assistance in developing their identity and reputation as collaborative and interdisciplinary investigators. Research administrators can enable the conditions that allow faculty to work together through established reward systems (e.g., incentive programs) and creative solutions.

"Banking" on Mentoring in Research Administration

Administrators and faculty members are expected to retool outdated graduate programs (Nyquist & Woodford, 2000), be knowledgeable about promising practices in mentoring new professionals, and experiment with fresh ideas in their own settings (Mullen, 2005, 2007). However, unless the effective mentoring of research administrator mentees becomes fully supported at the executive levels of their organizations, they will continue to encounter roadblocks. Sullivan and colleagues (2007), scholars from the Carnegie Foundation for the

Advancement of Teaching, state in no uncertain terms that "institutional intentionality" must become a reality if new developments and mandates in mentoring are to succeed.

Bringing home these ideas to research administrators as a group and to the profession of research administration raises questions: First, how can research administrators assist with the establishment and development of mentoring programs for scientists and new research administrators? For both of these targeted populations, research administrators can lead or facilitate relevant program activities by becoming familiar with the research on mentoring and best practices, and by identifying ideas for implementation that fit their own environments. They can also create mentor–mentee matches using proven criteria (e.g., shared research interests). Another component of intentional mentoring practice is the establishment of participant roles, the development of guidelines and orientation, and the preparation of mentors (Mullen, 2008). In addition, social events can be organized for all participants so they can develop mentoring relationships more naturally; other gatherings, such as team-based workshops and research panels, can be sponsored throughout the year. Procedures can also be established for recruiting and screening mentor and protégé applicants. Moreover, leaders can facilitate problem solving by, for example, adjusting procedures and plans to enhance effectiveness and making available to mentees and mentors a confidant who addresses relational issues. One may also want to utilize an e-mentoring administrator or develop electronic components that support the communication of participants and administrators. By collecting data through surveys and possibly other means, one should periodically assess the intervention's effectiveness from the perspective of those involved and by making modifications to ensure continuous improvement. Finally, updates can be distributed to highlight the work and impact of the intervention (Mullen with Hutinger, 2008).

Second, how does mentoring challenge and expand the idea of "education" as something that takes root in the person? By digging deeply into their own experiences, mentors and mentees engage in reciprocal learning within dyads and groups. In these contexts, value is given to a social constructivist approach to knowledge created through mutual learning and lived experiences. A shift of education from a delivery model to a constructivist model puts the spotlight on self-efficacy and the notion that one must accept, as a starting point, responsibility for one's own education. According to US President Barack Obama, we are living in a social responsibility era that is, simultaneously, a personal responsibility era. Traditional ideas of education limit the possibilities of what we can become; for example, emulation is at work in being "groomed" for professional and academic success. Freire (1997) warns that "banking" and emulating are potentially dangerous forms of mentorship. In the case of women and minority protégés, they must realize that while organizational cultures shape their experiences, they in turn shape their relationships and cultures, recognition of which is the first step toward embracing what they can become (Clover, 2006).

Third, what prophetic stance(s) might research administrators promote among the researcher communities and academic departments they serve? Progressive mentoring calls for a vision of a world in which the ideology of patriarchy is subverted through organizing principles that foster holistic development, cultural engagement, and institutional change. Reclaiming mythological stories sheds light in this direction. Few may be aware, that in Homer's *The Odyssey* Mentor is actually a woman, disguised as an elderly male sage. While under this guise, Athena, the Greek goddess of wisdom, persuades Telemachus to seek news of his father. She also teaches the boy

how to think and act for himself and nourishes the intellectual, spiritual, social, and professional facets of his life. Telemachus develops shrewdness without sacrificing virtue, two qualities that Mentor treats as a formative part of a "higher" education (Herman & Mandell, 2004; Mullen, 2005).

Research administrators, too, can contribute to communities of scholars in profound and sustaining ways. Their own prophetic pragmatism can be expressed through structures and activities that are multi-faceted, not "metrified," and that infuse ideologies of cultural diversity, group learning, learner-centered pedagogy, and personal change. Because research administrators and academic scholars are members of hegemonic groups (Hansman, 2002b), they are being called upon to rebuild who they are. We can begin by discerning how models of scientific management and democratic renewal influence our own educational ideas and practices. Then, we can reflect on the impact of our selfhood on the places in which we work. Next, in order to affect systems-wide change, we must endeavor to promote congruency between who we are and what we are called upon to be. By taking these steps, we can more fully commit to undertaking the important cultural work of mentoring others (Bash, 2003).

Conclusion

To "re-culture" their organizations, research administrators must exhibit institutional intentionality. Current tough economic times in which deficit thinking abounds will require that they be especially resourceful about not only perpetuating but also recognizing exemplary mentoring that builds human and organizational capacity. Studies show that administrators fail to assign mentoring as a faculty duty embedded within reward structures (e.g., Clark, et al., 2000) and yet they depend on professors stretching well beyond their work assignments. Needed, then, are incentive programs and other reward structures that acknowledge the expertise, creativity, and time of mentors who foster best practices. One can make a difference by valuing mentoring accomplishments that emerge not just at the level of the individual but perhaps especially at the level of the group. This has strong implications for elevating the creativity, motivation, and productivity within one's domain (Arnabile, 1996) and for better satisfying the needs of non-traditional student groups (Mullen, 2008). Mentoring that results in the diversification of academic contexts and the enrichment of adult learners is a precious resource that institutions depend on but take for granted. By combining intentional mentoring and reward structures, one can have a lasting impact on root systems.

References

Allen, T. D., & Eby, L. T. (Eds.). (2007). *The Blackwell handbook of mentoring: A multiple perspectives approach.* Malden, MA: Blackwell.

Arnabile, T. (1996). *Creativity in context: Update to the social psychology of creativity.* Boulder, CO: Westview Press.

Banks, C. (2000). Gender and race as factors in educational leadership and administration. In Jossey-Bass Publishers (Ed.), *The Jossey-Bass reader on educational leadership* (pp. 217-256). San Francisco: Jossey-Bass.

Bash, L. (2003). *Adult learners in the academy*. Bolton, MA: Anker Publishing.

Bona, M. J., Rinehart, J., & Volbrecht, R. M. (1995). "Show me how to do like you: Comentoring as feminist pedagogy. *Feminist Teacher, 9*(3), 116-124.

Clark, R. A., Harden, S. L., & Johnson, W. B. (2000). Mentor relationships in clinical psychology doctoral training: Results of a national survey. *Teaching of Psychology, 27*(4), 262-268.

Clover, D. E. (2006). Culture and antiracisms in adult education: An exploration of the contributions of arts-based learning. *Adult Education Quarterly, 57*(1), 46-61.

Cohen, N. H. (2002). The journey of the Principles of Adult Mentoring Inventory. *Adult Learning, 14*(1), 4-7.

Council of Graduate Schools. (2006). *Advocacy, research, and innovation: Ph.D. completion project*. Washington, DC. Retrieved May 18, 2008, from http://www.cgsnet.org/Default.aspx?tabid=157

Council of Graduate Schools. (2008). *Promising practices: Mentoring and advising*. Washington, DC. Retrieved March 1, 2009, from http://www.phdcompletion.org/promising/mentoring.asp

Darwin, A. (2000). Critical reflections on mentoring in work settings. *Adult Education Quarterly, 50*(3), 197-211.

Davis, D. J. (2008). The mentorship of a sharecropper's daughter: Being young, gifted, and Black in academe. In C. A. Mullen (Ed.), *The handbook of formal mentoring in higher education: A case study approach* (pp. 73-83). Norwood, MA: Christopher-Gordon.

Dewey, J. (1938). *Experience and education*. New York: Macmillan.

Dinham, S., & Scott, C. (2001). The experience of disseminating the results of doctoral research. *Journal of Further and Higher Education, 25*(1), 45-55.

Dorn, S. M., & Papalewis, R. (1997). *Improving doctoral student retention*. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL.

Dreher, G. F., & Chargois, J. A. (1998). Gender, mentoring experiences, and salary attainment among graduates of an historically black university. *Journal of Vocational Behavior, 53*, 401-416.

Easterly, D. (2008). Women's ways of collaboration: A case study in proposal development. *The Journal of Research Administration, 39*(1), 48-57.

Eby, L. T., Rhodes, J. E., & Allen, T. D. (2007). Definition and evolution of mentoring. In T. D. Allen & L. T. Eby (Eds.), *The Blackwell handbook of mentoring: A multiple perspectives approach* (pp. 7-20). Malden, MA: Blackwell.

Ellinger, A. D. (2002). Mentoring in contexts: The workplace and educational institutions. In C. A. Hansman (Ed.), *Critical perspectives on mentoring: Trends and issues* (pp. 15-26). (Information series no. 388). ERIC Clearinghouse on Adult, Career, and Vocational Education. (ED99CO0013).

English, F. W. (2003). Cookie-cutter leaders for cookie-cutter schools: The teleology of standardization and the de-legitimization of the university in educational leadership preparation. *Leadership and Policy in Schools*, 1-20.

English, L. M., & Irving, C. J. (2008). Reflexive texts: Issues of knowledge, power, and discourse in researching gender and learning. *Adult Education Quarterly, 58*(4), 267-283.

Freire, P., with Fraser, J. W., Macedo, D., McKinnon, T., & Stokes, W. T. (Eds.). (1997). *Mentoring the mentor: A critical dialogue with Paulo Freire*. New York: Peter Lang.

Galbraith, M. W. (2002–2003). The adult education professor as mentor: A means to enhance teaching and learning. *Perspectives: The New York Journal of Adult Learning, 1*(1), 9-20.

Glatthorn, A. (1998). *Writing the winning dissertation: A step-by-step guide.* Thousand Oaks, CA: Corwin.

Golde, C. M., & Dore, T. M. (2001). *At cross purposes: What the experiences of doctoral students reveal about doctoral education.* Philadelphia, PA: The Pew Charitable Trust. Retrieved June 5, 2008, from www.phd-survey.org

Hansman, C. A. (Ed.). (2002a). *Critical perspectives on mentoring: Trends and issues.* (Information series no. 388). ERIC Clearinghouse on Adult, Career, and Vocational Education. (ED99CO0013). Retrieved March 2, 2009, from http://www.cete.org/acve/docs/mott/mentoring1.pdf

Hansman, C. A. (2002b). Diversity and power in mentoring relationships. In C. A. Hansman (Ed.), *Critical perspectives on mentoring: Trends and issues* (pp. 39-48). ERIC Clearinghouse on Adult, Career, and Vocational Education. (ED99CO0013).

Hansman, C. A. (2003). Power and learning in mentoring relationships. In R. Cervero, B. Courtenay, & M. Hixson (Eds.), *Global perspectives: Volume III* (pp. 102-122). Athens, GA: University of Georgia. Retrieved March 2, 2009, from http://www.coe.uga.edu/hsp/pdf/year3/hansman.pdf

Harris, J. B., Freeman, T. L., & Aerni, P. W. (2009). On becoming educational researchers: The importance of cogenerative mentoring. *Mentoring & Tutoring: Partnership in Learning, 17*(1), 23-39.

Head, F. A., Reiman, A. J., & Thies-Sprinthall, L. (1992). The reality of mentoring: Complexity in its process and function. In T. M. Bey, & C. T. Holmes (Eds.), *Mentoring: Contemporary principles and issues* (pp. 5-34). Reston, VA: Association of Teacher Educators.

Herman, L., & Mandell, A. (2004). *From teaching to mentoring: Principle and practice, dialogue and life in adult education*. London: RoutledgeFalmer.

Johnson, W. B. (2006). *On being a mentor: A guide for higher education faculty*. Mahwah, NJ: Lawrence Erlbaum.

Johnson, W. B., & Huwe, J. M. (2003). *Getting mentored in graduate school*. Washington, DC: American Psychological Association.

Johnson-Bailey, J., & Cervero, R. M. (2002). Cross-cultural mentoring as a context for learning. *New Directions for Adult and Continuing Education, 96*, 15-26.

Johnson-Bailey, J., & Cervero, R. M. (2004). Mentoring in black and white: The intricacies of cross-cultural mentoring. *Mentoring & Tutoring: Partnership in Learning, 12*(1), 7-21.

Knowles, M. S. (1984). *The adult learner: A neglected species* (3rd ed.). London: Gulf.

Kram, K. E. (1985/1988). *Mentoring at work: Developmental relationships in organizational life*. Lanham, MD: University Press of America.

Kram, K. E., & Higgins, M. C. (2008, September 22). A new approach to mentoring. *The Wall Street Journal*, R10-R11.

Laughlin, P., & Sigerstad, A. M. H. (1990). The research administrator's role in creating a supportive environment for interdisciplinary research. *Research Management Review, 4*(1), 1-8. Retrieved March 24, 2009, from http://www.ncura.edu/data/rmrd/pdf/v4n1.pdf

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation.* New York: Cambridge University Press.

Lincoln, S. H., & Holmes, E. K. (2008). A need to know: An ethical decision-making model for research administrators. *The Journal of Research Administration, 39*(1), 41-47.

Lovitts, B. (2001). *Leaving the ivory tower: The causes and consequences of departure from doctoral study*. Lanham, MD: Rowman & Littlefield Education.

Lowenstein, S. R. (2006). *Behind every great star: A mentoring guide for school of medicine faculty and administrators* (pp. 1-13). Retrieved March 25, 2009, from http://www.uchsc.edu/som/faculty/MentoringWebPDF.pdf

Mayo, R. (2008, January). *Enhancing success of students of color through research mentoring.* Paper presented at the Annual Conference on Best Practices in Black Student Achievement, Clemson, SC.

McDonnell, L. M. (2009). From the desk of the President: Mentoring in a changed environment. *Educational Researcher, 38*(1), 59-60.

Merriam, S. B. (1983). Mentors and protégés: A critical review of the literature. *Adult Education Quarterly, 33*, 161-173.

Mott, V. (2002). Emerging perspectives on mentoring: Fostering adult learning and development. In C. A. Hansman (Ed.), *Critical perspectives on mentoring: Trends and issues* (pp. 5-13). ERIC Clearinghouse on Adult, Career, and Vocational Education. (ED99CO0013).

Mullen, C. A. (2005). *Mentorship primer*. New York: Peter Lang.

Mullen, C. A. (2006). *A graduate student guide: Making the most of mentoring.* Lanham, MD: Rowman & Littlefield Education.

Mullen, C. A. (2007). Trainers, illusionists, tricksters, and escapists: Changing the doctoral circus. *The Educational Forum, 71*(4), 300-315.

Mullen, C. A. (Ed.). (2008). *The handbook of formal mentoring in higher education: A case study approac*h. Norwood, MA: Christopher-Gordon.

Mullen, C. A., with Hutinger, J. L. (2008). At the tipping point? Role of formal faculty mentoring in changing university research cultures. *Journal of In-service Education*, *34*(2), 181-204.

Mullen, C. A. (Ed.). (2009). *The handbook of leadership and professional learning communities.* New York: Palgrave Macmillan.

Mullen, C. A., Murthy, U., & Teague, G. (2008). Listening to those we serve: Assessing the research needs of university faculty. *The Journal of Research Administration, 39*(1), 10-31.

National Education Association. (2007). Speaking out: Support campus equity week. *Advocate online*. Washington, DC: National Education Association. Retrieved June 1, 2008, from http://www2.nea.org/he/advo01/advo0108/speaking.html

NEA Higher Education Research Center. (2005). Findings from the 2004 NEA higher education member survey. *NEA Higher Education Research Center Update*, *11*(1), 1-6. Retrieved June 26, 2008, from www.nea.org/he

Nyquist, J. D., & Woodford, B. J. (2000). *Re-envisioning the Ph.D.: What concerns do we have?* Seattle: Center for Instructional Development and Research/University of Washington.

Packard, B. W-L., Walsh, L., & Seidenberg, S. (2004). Will that be one mentor or two? A cross-sectional study of women's mentoring during college." *Mentoring & Tutoring: Partnership in Learning, 12*(1), 71-85.

Paulus, P. B., & Nijstad, B. A. (2003). *Group creativity: Innovation through collaboration*. New York: Oxford University Press.

Piantanida, M., & Garman, N. B. (1999). *The qualitative dissertation: A guide for students and faculty.* Thousand Oaks, CA: Corwin.

Pinar, W. F., Reynolds, W. M., Slattery, P., & Taubman, P. M. (1995/1996). *Understanding curriculum: An introduction to the study of historical and contemporary curriculum discourses*. New York: Peter Lang.

Ritzer, G. (2004). *The McDonaldization of society* (4th ed.). Thousand Oaks, CA: Sage.

Rix, M., & Gold, J. (2000). 'With a little help from my academic friend': Mentoring change agents. *Mentoring & Tutoring: Partnership in Learning*, *8*(1), 47-62.

Sá, C. M. (2008). University-based research centers: Characteristics, organization, and administrative implications. *The Journal of Research Administration, 39*(1), 32-40.

Senge, P. M. (2006). *The fifth discipline: The art and practice of the learning organization* (Rev. ed.). Toronto: Random House.

Shea, G. F. (1994). *Mentoring: Helping employees reach their full potential*. New York: Management Briefing.

Sullivan, W. M., Colby, A., Wegner, J. W., Bond, L., & Shulman, L. S. (2007). *Educating lawyers: Preparation for the profession of law*. Stanford, CA: Carnegie Foundation for the Advancement of Teaching.

Tierney, W. G. (Ed.). (1999). *The responsive university: Restructuring for high performance*. Baltimore, MD: Johns Hopkins University Press.

Weinstein, J. R. (2004). Aliens, traitors, and elitists: University values and the faculty. *NEA Higher Education Journal*, *20*(1), 95-106.

Wilson, P. P., Pereira, A., & Valentine, D. (2002). Perceptions of new social work faculty about mentoring experiences. *Journal of Social Work Education, 38*(2), 317-333.

Winter, T. N. (2007). *The mechanical problems in the corpus of Aristotle.* DigitalCommons, University of Nebraska-Lincoln, 1-43. Retrieved March 16, 2008, from http://digitalcommons.unl.edu/classicsfacpub/68