

Enhancing Graduate Education: Promoting a Scholarship of Teaching and Learning Through Mentoring

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This article highlights the importance of mentoring processes in the education of future scholars. The purpose is to recommend that scholars link the process of mentoring graduate students with promoting a scholarship of teaching and learning (SoTL). It suggests that through this process graduate students will acquire some of the skills they need to be successful in careers that require teaching as a central component of their work. Recommendations are provided for informal and formal mentoring initiatives.

A promising path to improving graduate education is the relatively new emphasis in academia on broadly implementing a scholarship of teaching and learning, also referred to as SoTL. A scholarship of teaching and learning emphasizes learning and reflecting on pedagogical techniques as they relate to our academic disciplines. The purpose of this article is to recommend that scholars begin to link the process of mentoring graduate students with promoting a scholarship of teaching and learning. We argue that it is not sufficient in the current academic job market for graduate students just to acquire strong research skills. Instead, they also need to learn to be strong teachers as that has become a major component of most academic jobs. We hope that this discussion will lead academicians to reflect on how to better prepare future scholars and teachers for the realities of their careers.

In the introductory essay of *Universities and their Leadership*, a collection of written works celebrating the 250th anniversary of Princeton University (1998), Frank Rhodes, Emeritus President of Cornell University wrote the following:

We need our best scholars to be our teachers, and we need them to give the same creative energy to teaching as they give to scholarship. We need to identify, support, and reward those who teach superbly. There is no antithesis between teaching and research. Great teaching can, in fact, be a form of synthesis and scholarship. (p. 11)

Yet, as Burton Clark suggested in *The Academic Life* published by the Carnegie Foundation in 1987, excellence in teaching is seldom fully valued. In fact, in a study about the promotion and tenure process, Tierney and Bensimon (1996) depicted the current situation with respect to junior faculty:

Good teaching is not particularly valued, and service is often seen as a waste of time. Research is

pursued not because of any intrinsic interest, but in order to attain job security. Collegial relationships are sporadic at best and intellectual conversation appears to be on the verge of extinction. (p. 128)

A serious contradiction in contemporary U.S. academic life is that while most professors teach extensively, this is not an activity that is primarily rewarded by the academic profession nor very valued by the higher education system at large. Further, professors who are invested in teaching are often penalized for their efforts as it is thought that they may publish fewer articles and books and have less time for research (Tierney & Bensimon, 1996). Such notions ultimately affect their annual evaluations as well as promotions.

Most graduate students embark on an academic career because of their desire to engage in scholarly dialogue and collaboration, to teach, and to conduct research. However, our current system of graduate education, with its primary focus on research, tends not to prepare recent graduates for the actual realities of their jobs (e.g., Eitzen, Bacca Zinn, & Gold, 1999). This broad assessment of graduate education is also reflected in the fields of family studies and human development. Most departments continue to stress research, publication agendas, and the securing of external grants in their graduate programs and new hires. As a consequence, graduate students have few opportunities to teach or to engage in reflective activities that may allow them to develop their own strengths in the classroom. Thus, new academics are often bewildered by a system that had one set of expectations for their future roles while they were in graduate school, and another set of criteria once they enter jobs at either a university or college. They come to the professoriate unprepared as teachers and uncertain of where to devote the bulk of their energy (Boice, 1992; Sorcinelli, 1994).

To better prepare future academicians, we need to revise graduate education to serve the needs of the students we teach, and in turn, re-think some of the

broader goals of our programs. One path to improving graduate education is through implementing stronger mentoring programs which promote a scholarship of teaching and learning. By expanding mentoring to promote a scholarship of teaching and learning, pedagogical concepts become part of the formal and informal education of graduate students. As our world becomes increasingly diverse through globalization, technology, and migration, we need to train our students to work with a heterogeneous student body. This will require graduate programs to re-focus their emphasis on producing not just good scholars but also good teachers.

Delineating a Scholarship of Teaching and Learning

In 1990, Boyer's pivotal *Scholarship Reconsidered* revolutionized the discussion about the relationship between teaching and scholarship. Boyer introduced a new vision of scholarship, one that includes original research but also advocates stepping back from one's studies, to make connections, to build bridges between theory and practice, and to communicate knowledge to students. His work has led to vigorous debates in various disciplines about the nature of scholarship itself and the role that teaching should play in graduate education and promotion reviews. In a recent report, responses from 23,000 faculty, chairs, deans, and administrators from colleges and universities around the United States, agreed that institutions of higher learning were emphasizing scholarship to the detriment of teaching (Halpern, Smothergill, Allen, Baker, Baum, Best, et al., 1998, p. 293). Further, these surveys revealed agreement that teaching needed to be recognized as playing a central, not a marginal role, in academic life. Respondents also concluded that there is no single definition of the scholarship of teaching and learning, nor can every faculty member be expected to excel at every type of scholarship.

In 1995, Diamond and Adams expanded the concept of scholarship of teaching and learning to include the following criteria:

- An activity that requires a high level of discipline-specific expertise
- The activity breaks new ground, is innovative
- The activity can be replicated or elaborated
- The work and its results can be documented
- The work and its results can be peer reviewed
- The activity has significance or impact

Their perspective provided a foundation for arguing that teaching can also be a scholarly pursuit since it shares the same general features as the scientific method. Diamond and Adam's work spurred further discussion of Boyer's (1990) initial ideas and led

Halpern et al. (1998) to write a ground breaking article on the scholarship of teaching and learning in which they argue that teaching can be scholarship and that the distinctions often blur. According to their discussion, the importance given to any particular aspect of evaluating teaching as a form of scholarship will vary with context, and at times, discipline (Halpern et al., 1998).

The scholarship of teaching and learning is currently defined as knowledge that can be shared with and reviewed by a community of peers, and built upon by members of this community (Kreber, 2001). This broad definition permits integration of a scholarship of teaching and learning into graduate programs as well as into faculty development. It is based on the assumption that the growth of a scholarship of teaching and learning can and will emerge from any and all disciplines (Kreber, 2001).

The Importance of a Scholarship of Teaching and Learning to Family Studies and Related Fields

A scholarship of teaching and learning requires knowledge of the discipline as well as knowledge of teaching and learning. This requires thoughtful integration of the two and results in pedagogical content knowledge (Kreber, 2001). However, until recently, pedagogical knowledge has not occupied a significant role in the advancement of the knowledge base of postsecondary teaching and learning. This is particularly true in family studies and related fields where the primary emphasis in graduate education remains on training students to develop formal, often highly positivistic, research agendas. Teaching, to the extent that it is taught in graduate programs in family studies, family and consumer sciences and human development, tends to be treated as an add-on to in-depth knowledge acquisition of the discipline. Further, most programs do not attempt to bring together discipline knowledge and pedagogy. While graduate programs train future faculty in the advancement of content knowledge, few emphasize the provision of the kinds of experiences necessary for future faculty to develop the knowledge and skills they will be required to use to assist their own students. Basically, graduate programs emphasize the education of researchers, and for the most part neglect the advancement of pedagogical knowledge (Kreber, 2001).

One potential arena that has barely been explored in academic writings is how formal and informal mentoring could enhance the education and professional development of graduate students. Mentoring activities that promote a scholarship of teaching and learning could move teaching and teaching related activities to a central position without relinquishing the importance of training students in research methodologies. By shifting

the emphasis from a formal acquisition of disciplinary knowledge to a new model where faculty and graduate students share insight and experiences related to pedagogy, we would be preparing our students to become better teachers as well as to conduct research.

What is Mentoring?

Perhaps the most basic assumption underlying this discussion is that we assume we know what mentoring is. In popular usage, mentoring is defined as “a deliberate pairing of a more skilled or experienced person with a lesser skilled or experienced one, with the agreed-upon goals of having the lesser skilled person grow and develop specific competencies” (Murray, 1991, p. 4). This definition also encompasses the notion that a mentor is to be concerned with the upward mobility of their proteges’ careers (Kram, 1985).

According to Kram (1985), mentors play two important roles in the lives of their mentees. On a public level, they provide career advancement opportunities by providing insight into work related situations, fostering visibility and protecting their mentees from deleterious situations. On a more private level, mentors are supposed to be role models and provide counsel and empathy. Research in business environments indicates a positive relationship between the number of functions that a mentor fulfills and the achievements of the mentee. In other words, the greater the involvement by the mentor, the greater the success by the protégé (Dreher & Ash, 1990; Orpen, 1995).

Various models of mentoring co-exist, particularly in business environments. The most common model involves the identification of individuals that are prepared to take over “senior” roles. In this scenario, high-ranking executives are coupled with promising individuals in order to assist in their systematic acquisition of knowledge and skills. The goal of the relationship is to prepare more junior executives to move into the upper ranks of administration (Jowett & Stead, 1994). In this hierarchical model, the primary focus is the well being of the organization instead of the learner.

Another common model is concerned with issues of recruitment. The learners are regarded as “beginners” who are taught the “system” of either an organization or a profession. According to this model, mentors help trainees to acquire their professional qualifications. Perceived benefits go to both the learner and the organization or profession (Jowett & Stead, 1994). Another variation of this model focuses specifically on uplifting disadvantaged groups or individuals. In this situation, mentoring provides role models to someone or a group that would otherwise, potentially, not have an opportunity to enter a certain position or organization (Jowett & Stead, 1994).

A third mentoring model emphasizes more egalitarian relationships and the benefits that can accrue through networking between peers. In this model, peers come together, and with the assistance of a facilitator share their experiences and insights. Mentoring networks are thought to empower individuals by taking the focus off of assimilation and promoting equality (Girves, Zepeda, & Gwathmey, 2005).

While there is no consensus about what elements make mentoring successful, there is a great deal of acknowledgement that it does work and that we need to promote it (Girves, Zepeda, & Gwathmey, 2005). In a recent article describing the need for mentoring in academia, Girves et al. (2005) list the multiple national initiatives now devoted to mentoring activities including the Department of Education’s mentoring program grants and the White House’s Presidential Awards for Excellence in Sciences, Mathematics and Engineering Mentoring, among others (p. 451). The proliferation of mentoring efforts suggests that this is a phenomenon of increasing significance.

Mentoring in Academic Environments

In academic environments, mentoring is often described as a relationship between individuals that involves passing on traditional academic norms and values (Goodwin, Stevens, & Bellamy, 1998). Mentoring is a way of organizing the activities of professional socialization that are not captured in the simplistic ways that classes, field experience, and advising are usually characterized. As a concept, mentorship, suggests that there is an asymmetric relationship among the faculty and their graduate students. One group has special knowledge or judgment that is not generally available to the other. The appropriate sharing of such insights can prove helpful in the other’s development (Goodwin et al., 1998).

Just as there is a lack of consensus about the exact nature of mentoring roles in the business world, there is even greater confusion in academia (Boyle & Boice, 1998; Ehrich, Hansford, & Tennent, 2004; Gibson, 2004). To further muddle the issue, there are very few empirical studies on mentoring in academic settings (Girves et al., 2005). However, Gibson (2004) identified five themes in her research on academic mentoring, that she suggests are more important than agreeing on a definition. These themes are (a) a mentor who really cares and acts in the mentee’s best interest, (b) a feeling of connection between mentee and mentor, (c) the mentor affirming the mentee’s work, (d) the mentee not feeling isolated, and (e) the mentor helping the mentee understand the politics of the work place and profession. What distinguishes Gibson’s description from the models described in the business literature is the informal nature of most of these

relationships. In the academic world there is great variation in how norms and values are shared through mentoring. Mentoring may encompass activities such as professional guidance in grant writing, inclusion on research projects, job placement, networking, writing, and teaching, and, at times, includes social features such as shared meals and outings (Goodwin et al., 1998). Mentoring, as we have seen, can be either formal with specific goals, or informal and more casual. With respect to graduate education, mentoring is primarily an informal activity that occurs based on happenstance and personal inclinations.

What is troubling with the sporadic, informal nature of academic mentoring is that research indicates that these relationships are extremely important to graduate students (Wright & Wright, 1987). Most recipients of graduate degrees identify as the most significant aspect of their professional development (i.e., finishing their degrees and gaining academic employment) is their relationship with a faculty member (Blackwell, 1981; Shalonda & Schweitzer, 1999). Further, collaborating with a mentor is consistently equated with a higher level of academic productivity both before and after gaining, specifically, a doctoral degree (Wright & Wright, 1987).

However, academic mentoring also has certain limitations. For example, Ehrich et al. (2004), in their review of formal mentoring programs in education and elsewhere, found that mentoring relationship can be, at times, detrimental to the mentor and/or the mentee. Among the problems are “a lack of time for mentoring, poor planning of the mentoring process, unsuccessful matching of mentors and mentees, a lack of understanding about the mentoring process, and lack of access to mentors from minority groups” (Long, 1997, as cited in Ehrich et al. 2004, p. 520), sexual harassment by mentors (Feinstein, 1988), and dependency by mentees (Busch, 1985). Thus, graduate students and new academics may be paired in informal or formal mentorship relationships which actually may work to the disadvantage of the parties involved.

A second assumption has been that mentoring occurs naturally and with enthusiasm (Wunsch, 1994). However, Boyle and Boice (1998) note that oftentimes “natural” mentoring of new teachers tends to be irregular and short-lived (Boice, 1990, as cited in Boyle & Boice, 1998; Diehl & Simpson, 1989, as cited in Boyle & Boice, 1998) with three unfavorable results. The first is that, in graduate school, many students go un-mentored, even if they desire mentoring (Cronan-Hillix, Gensheimer, Cronan-Hillix, & Davidson, 1986 as cited in Boyle & Boice, 1998; Knox & McGovern, 1988, as cited in Boyle & Boice, 1998). Second, mentoring becomes less likely once recent graduates are employed in academic positions (Sands, Parson, & Duane, 1991, as cited in Boyle & Boice, 1998). Third, and importantly,

as greater numbers of women and minorities enter the professoriate (Crouse, 2001; Furchtgott-Roth & Stolba, 1999) they are less likely to find spontaneous supports that can assist them with their unique set of issues. The issue of changing demographics with respect to faculty and students is particularly noteworthy due to the fundamental changes this growing diversity will bring to the educational process and mentoring relationships, in particular (Girves et al., 2005).

Currently, nationwide, college enrollments stand at approximately 11.0% African American, 8.7% Latino, 6.1% Asian American, 1.0% American Indian, and 73.1% white (Antonio, 2002). These trends in the student body are not reflected in the composition of higher education faculty. In fact, diversifying the higher education professoriate has been difficult due to a small and decreasing pool of minority Ph.D. candidates. Minority faculty often cite poor mentoring relationships and the problems associated with being the only faculty or graduate student of color in predominantly white institutions, as reasons for the low numbers. Tenure also remains difficult to attain due to a lack of scholarly recognition for work that focuses on ethnic minority populations (Antonio, 2002).

Statistics on diversity, however, mask other forms of difference as well, such as different learning styles, cultural and class backgrounds of students, gender issues, and sexual orientation. All play a part in the types of instruction and advising graduate students receive. As Jones (2002) points out, the disjuncture between the professoriate and the student body leads to elevated levels of stress in the graduate school experience. This poses unique challenges for both institutions and the faculty working and mentoring these students. Faculty may not be aware of particular experiences of graduate students and fail to understand unique challenges they faced in attaining a higher education. In terms of racial diversity, for example, white faculty still represent approximately 88% of all fulltime faculty. They may or may not have had the support structures and experiences of the newer generation of students and are often loathe to self-disclosure. For international or culturally/racially diverse students or professors, issues of communication, acculturation, and isolation arise repeatedly during their career development (Rastogi, Fitzpatrick, Feng, & Shi, 1999). “Not receiving instrumental mentoring may translate into significant and cumulative professional disadvantage,” according to Moody (2004, p. 48). Revisions to graduate education need to be particularly sensitive to these issues of diversity. Informal and formal mentorship programs in academia can play a crucial role in retaining minority students and assuring successful employment outcomes. By incorporating mentoring processes to promote a scholarship of teaching and

learning, graduate education can better prepare the future professoriate for dealing with the challenges of an increasingly diverse student body.

Using Mentoring to Promote a Scholarship of Teaching and Learning

In a critical analysis of 93 empirical studies of how educators learn to teach in new and better ways, Wideen, Mayer-Smith, and Moon (1998) noted little evidence that merely receiving information about teaching and learning was a highly effective approach. What emerged as a more productive path in learning how to teach was the designing of programs that built upon the beliefs of beginning teachers. At the core of this approach, lies the epistemological stance that learning how to teach is a deeply personal activity in which the individual concerned has to deal with his or her prior beliefs in light of expectations from a university, a school, and society in the context of teaching. According to Boehrer and Sarkisian (1985, as cited in Boyle & Boice, 1998), new teachers benefited more from personal guidance, including mentoring, than from tutelage in teaching skills. Well-designed and implemented mentorship programs can provide a suitable environment for intimate reflection, discussion, debate, and experimentation with regard to teaching and learning that build upon beliefs of teachers as well as on skills.

When mentoring promotes a scholarship of teaching and learning, it provides a vital connection between professors and their graduate students. It allows both future and current faculty to develop their teaching skills, to engage in research, and to interact with students and the material in a dynamic manner. It also introduces students to the best values of the university. Good teachers engage their students and draw them into the material. Often these teachers act as informal mentors, providing discipline-specific information and general life knowledge. They imbue students with the excitement of learning and can instill a passion for knowledge that will pass on the cycle of research and teaching into the next generation. Many academicians entered university life themselves due to the enthusiasm and example of a university teacher. For an academician, mentorship can provide an ongoing forum to engage in debate and discussion about research, teaching, and the more general nature of scholarship (Iowa State University Center for Teaching Excellence, 1999).

Kreber and Cranton (2000) suggest a conceptual path to expanding mentoring to promote a scholarship of teaching and learning. In this model, graduate students are viewed as adult learners who

are mentored on various levels including as individuals, as peers, or as participants in formal programs. An important component is that reflection and knowledge transmission be central to the mission. Three types of reflection form the core in this process: (a) content reflection, (b) process reflection, and (c) premise reflection. Content reflection refers to the technical aspects of a course that may include developing teaching materials, preparing lectures, or facilitating discussions. For example, this may include

- knowing how to develop teaching materials such as overheads
- knowing how to facilitate discussion
- knowing a variety of instructional methods
- knowing how to organize or sequence instruction
- knowing how to prepare a lecture
- being able to write learning objectives
- knowing how to construct good tests (Kreber & Cranton, 2000, p. 479)

Process reflection includes strategies used to convey information such as knowledge about learning styles, facilitating collaboration, and providing constructive feedback. This is often characterized by

- knowing how to motivate students with different learning styles
- knowing when to use various teaching materials
- being able to give an interesting lecture
- knowing how to facilitate collaboration among students
- being able to assist students overcome learning issues
- being able to encourage students to think critically
- being aware of pedagogical techniques that develop learning skills
- knowing when and how to provide useful feedback

Premise reflection is the third step of this process. It is at this point that teachers ask themselves why they are teaching a certain way and engaging in critical reflection on the larger goals of the discipline and program steps may include the following:

- judging the quality of course goals
- explaining how a course fits into an existing program of study

- articulating how a course fits a student's learning skills (Kreber & Cranton, 2000, p. 480)

Kreber and Cranton's model explicitly illustrates that, through the growth of a scholarship of teaching and learning, the conceptual isolation of teaching from the primary work of a discipline and of a department is reduced. As an individual's knowledge base increases, the isolation so common to teachers (e.g., Schulman, 1993) decreases, and is accompanied by increased integration of knowledge, as well as interaction around pedagogical and disciplinary issues. The experiences of peers facilitate dialogue and serve to support faculty and graduate students' growth as scholars. These experiences can be integrated into the learning experiences of students who plan to enter academic positions as well as passed on to faculty who wish to improve their teaching.

Some of the strongest most collaborative mentoring relationships occur between individuals who are sharing the same experiences (McGuire & Reger, 2003). Both Jones (2002) and McGuire and Reger (2003) suggest that active learning such as collaboration, discussion, experiential learning and project oriented work allow students to mentor each other. What is important is that neither formal nor informal learning occurs in isolation.

There are multiple means by which mentoring relationships can be strengthened through promoting a scholarship of teaching and learning. For example, mentors can help their partners articulate their goals and objectives as teachers, explore the learning styles and needs of the student population, review course assignments and desired learning outcomes, discuss teaching methodologies, and assess student progress. They can also assist and collaborate with their partners to help them achieve their personal and professional goals as future teachers, scholars, and practitioners. According to Settles, Sherif-Trask, Koivunen, and Madey (2003), some practical and usually successful mentoring experiences are

- discussing graduate and training programs or the job market
- sponsoring students and faculty at professional meetings
- co-authoring together
- writing proposals for research, teaching and program support together
- reviewing manuscripts and resumes prior to their formal submission
- conferencing about teaching portfolio materials
- helping select submission possibilities

- encouraging broader job or training applications
- encouraging collaborations with colleagues at other institutions
- sitting around telling tales of the past that may enlighten the future

With respect to pedagogical training, most graduate programs do not train students in assembling the necessary components to build their teaching expertise. The use of portfolios, reflective journaling, and dialogues about teaching techniques with like-minded colleagues could build the repertoire of budding faculty members. Given the importance put on building a research agenda of publications and grants, these kinds of activities (and gathering knowledge about them) are placed at the low spectrum of importance for many. However, depending on the type of institution where they ultimately find employment, it is precisely knowledge about these aspects of faculty life that may be just as useful to graduate students, as knowing how to obtain a research grant.

As graduate students move through various phases of their professional development, they acquire personal teaching and learning styles through experience and by drawing on the expertise of others. Departments need to assess the effectiveness of all aspects of their graduate programs, and subsequently revise their curricula for preparing practitioners and scholars. Incorporating informal and formal opportunities for mentoring and promoting a scholarship of teaching and learning allow graduate students to acquire the necessary skills to become stronger teachers and researchers.

Formal Mentoring Programs and the Promotion of a Scholarship of Teaching and Learning

In a meta review of over three hundred research-based articles, Ehrich et al. (2004) found "that mentoring has enormous potential to bring about learning, personal growth, and development for professions" (p. 536). They go on to suggest that it is necessary for administrators and other planners "to be aware of the growing body of research literature on mentoring, the need for program support at various levels, the importance of mentor training, the careful selection and matching of participants, and the need for ongoing evaluations" (p. 536). Their review indicates the primacy that academic institutions need to place on promoting a scholarship of teaching and learning environment through mentoring activities.

Because research has also revealed that not all mentoring is beneficial, attention to formal mentoring programs is important. Ehrich et al. (2004) suggest that

“Potential problems of mentoring are not insurmountable. With careful planning and skillful leadership, most problems can be minimized” (p. 536). They identify several critical factors that optimize the graduate mentoring experience. Among them are that formal mentoring programs require human and financial resources, and that administrators must be willing to commit them as well as time and energy. However, as Girves et al. (2005) point out, while there are some excellent national mentoring programs for graduate students most of these initiatives focus exclusively on the research aspects of faculty life. A notable exception is the PFF (Preparing Future Faculty Program). This national initiative, established in 1993, addresses the mismatch between the education of doctoral students and the needs of colleges and universities that will hire them. Over 300 colleges and universities are currently part of the PFF which operates on a cluster concept. In different geographic areas, one anchor university brings together faculty and students from other affiliated educational institutions in the area for the purpose of professional development. Through the facilities of the PFF, students that belong to various clusters become affiliated with programs and faculty in a variety of institutions. This allows them to observe university life from varying perspectives including teaching, research and service activities. Each program is obligated to present to students a complete scope of faculty roles and obligations (Girves et al., 2005). Current assessments indicate that students who have been affiliated with the PFF achieve greater success in the initial years of academic employment (Girves et al., 2005).

Through the support of the Carnegie Foundation, as well as the American Association for Higher Education, various other programs across the United States are currently promoting a scholarship of teaching and learning through mentoring. For example, over 200 college and university campuses have committed to undertaking efforts of some kind to institutionalize the scholarly side of teaching and learning (Carnegie Foundation, 2005a) while 90 campuses have created 12 collaborating clusters to design, document, and disseminate a scholarship of teaching and learning work related to a variety of topics and issue. In light of the focus of this article on mentoring, the foci of two clusters are of particular interest. The cluster led by Rockhurst University has been concentrating upon mentoring newer scholars of teaching and learning, while the cluster led by Western Washington University is investigating ways to incorporate and sustain student voices in the scholarship of teaching and learning (Carnegie Foundation, 2005b). Both clusters represent current formal efforts on the part of universities to better prepare future academicians by promoting a scholarship of teaching and learning through mentoring.

The discussion above serves as the basis for rethinking graduate education as it is currently conceptualized at many universities. An integral part of this process is mentoring, dialogue, collaboration, and reflection. If scholarly teaching and learning is to advance, academics must address teaching issues and make their findings available to colleagues (Cunsolo, Elrick, Middleton & Roy, 1996). While many faculty members think of teaching as a combination of content knowledge and enthusiasm, mentoring that promotes a scholarship of teaching and learning and links disciplinary knowledge with pedagogical techniques raises teaching to a higher level that is more responsive to the needs of the classroom and our rapidly changing society.

Conclusion

The purpose of this paper was to suggest that scholars utilize mentoring processes that promote a scholarship of teaching and learning to better prepare their graduate students for the teaching component of their future jobs in academia. This path serves a dual purpose: (a) it improves the preparation of graduate students for their roles as teachers, and (b) it enhances the research productivity of faculty and graduate students involved in a scholarship of teaching and learning.

Kreber (2001) points out that virtually all postsecondary institutions stress that a primary educational goal is to teach students to think creatively and critically, communicate and negotiate effectively, argue reasonably, work collaboratively, and learn independently. Simultaneously, rapid social, economic, and technological changes require that people continue to learn for most of their lives. This raises the concern that by educating students exclusively in their disciplines - in the structure, critique, and advancement of discipline specific knowledge - we may not be preparing them adequately for future success. It also raises the question of whether this is a sufficient foundation for fostering the larger educational goal of fostering lifelong learning. On an institutional level, it is important for both private and public institutions to acknowledge the value of mentoring and to incorporate this dimension of professional responsibilities into every aspect of support and evaluation of faculty. One way of accomplishing this is for colleges and universities to promote a campus climate or culture which values a scholarship of teaching and learning. This can be done through various initiatives such as defining a campus as a “Boyer” institution and by joining in collaborative efforts with other like minded organizations.

To date, we have a very limited dialogue about the critical importance of linking mentoring with a

scholarship of teaching and learning. We hope with this paper to spark and sustain a dialogue about the need for linking pedagogical knowledge with discipline specific knowledge and practices and to emphasize that mentoring processes that promote a scholarship of teaching and learning provide a vehicle for better preparing our future academicians during every step of their journey.

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