Chapter One

The Challenge to Prepare the Next Generation of Faculty

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Improving graduate education, and specifically, strengthening the preparation process for future faculty, has become a significant issue in higher education, of importance to a wide-ranging group of stakeholders. In fact, the growing interest in graduate education and the preparation of the future professoriate has been evident over the past decade and a half in an array of conferences, institutional programs, initiatives by professional organizations, funded research, and print and Web material. A quick review of such recent literature, programs, and research shows that, clearly, there is a movement afoot to address the challenges of preparing the next generation of faculty.

This volume provides a summary and synthesis of key information about this movement. Although there are valuable resources in the research literature and publications describing the activities of various associations, institutions, and organizations, there has been no comprehensive effort to bring those pieces together. This volume fills that gap by gathering in one place ideas from major research studies and action projects that have focused, over the past dozen years or so, on improving graduate education and preparing the future professoriate.

This chapter first examines factors that together have contributed to the growing interest in improving graduate education.

Employers, leaders of foundations and government agencies, graduate deans, and doctoral students have added their voices to a call for examining the quality of the graduate experience and its success in preparing students for their future roles as professionals. Then, the chapter turns to the specific interest of this book—graduate education as preparation for an academic career. We make a case for why it is critical at this moment in the history of American higher education to ensure that graduate education is appropriately preparing students who are pursuing paths to the professoriate. In this chapter, we hope to convince readers of the importance of considering strategies for enriching the preparation of future faculty.

Factors Contributing to Interest in Improving Graduate Education

We have identified four of the main factors contributing to the increased recent focus on graduate education: the teaching assistant role, the academic labor market, graduate student attrition rates, and researchers' interest in expanding conceptions of faculty career stages.

The Teaching Assistant Role

Although interest in strengthening graduate education as preparation for a faculty career has gained considerable momentum in the past two decades, signs of concern appeared much earlier. After World War II, when universities increased their emphasis on research productivity and scientific excellence, concerns emerged about both the amount of instruction left to teaching assistants, particularly in introductory courses, and the preparation of teaching assistants for providing quality education when their own education was so heavily focused on preparing them as top-flight researchers. Chase (1970) captured this concern about teaching assistants: "There is a growing awareness—spreading from within academia to interested groups outside—that there are many serious problems associated with the utilization of graduate teaching assistants in contemporary American higher education" (p. 2). Another comment during this period was even more succinct: "It

is sometimes wryly noted that college teaching is the only profession requiring no formal training of its practitioners" (Nowlis, Clark, & Rock, 1968, p. iii).

In the spirit of these remarks, over the past two decades the public at large has expressed greater interest in the nature and quality of the undergraduate learning experience as well as the outcomes of that experience. Such public interest, evident in newspapers and legislatures, has contributed to growing attention on the part of university administrators to the quality of teaching provided by teaching assistants who work with large numbers of undergraduate classes.

In response to such concerns, beginning in the 1970s and continuing into the 1980s and 1990s, universities developed increasingly credible programs for preparing graduate students to teach. Originally, such programs focused primarily on initial training designed to prepare those graduate students who had immediate roles as teaching assistants (TAs). Then, over time, many institutions and departments began providing graduate teaching assistants with ongoing training that reflected the recognition that they needed different kinds of information and preparation at different times in their development as teachers.

As faculty developers and TA supervisors gave more attention to preparing teaching assistants, The Pew Charitable Trusts helped build a cross-institutional dialogue about these issues by sponsoring several national conferences on the training and employment of teaching assistants, the first occurring in 1986. Some of these conferences resulted in published proceedings (Chism & Warner, 1987; Lewis, 1993; Nyquist, Abbott, Wulff, & Sprague, 1991). During that same period, the *Journal of Graduate Teaching Assistant Development,* published by New Forums Press, was initiated and complete volumes were written specifically on the issues of TA preparation (for example, Allen & Rueter, 1990; Andrews, 1985; Marincovich, Prostko, & Stout, 1998; Nyquist, Abbott, & Wulff, 1989; Nyquist & Wulff, 1996). Simultaneously, various researchers (among them, Abbott, Wulff, & Szego, 1989; Darling & Dewey, 1989; Nyquist & Sprague, 1992, 1998; Sprague & Nyquist, 1989, 1991; Staton & Darling, 1989) also turned their attention to questions of teaching assistant development, thus contributing to an emerging research base to guide professional practice.

The network of faculty developers, TA supervisors and trainers, foundation leaders, and researchers interested in teaching assistant training and development has been a major factor in the movement to improve the graduate experience, and specifically to prepare graduate students appropriately as future faculty. Indeed, once institutions had initial and ongoing training for TAs in place, they had a base from which to expand efforts to prepare graduate students for their future careers as teachers, not only for their immediate assignments as TAs. In addition, teaching assistant conferences that were held every other year in the late 1980s and early 1990s are now incorporated into discussions and presentations about TA development specifically and preparing future faculty more broadly at many disciplinary and professional conferences.

Labor Market Issues

Besides the growing interest in TA preparation on many campuses, job market issues also emerged as a factor in graduate education. Interest in critiquing and reforming graduate education in the 1990s was likely stimulated by observations, grounded in the tight academic labor market of the 1980s and 1990s, that many doctoral graduates were not being hired into faculty positions. Faculty members and administrative leaders in universities, as well as leaders of scholarly associations and national agencies and foundations, considered what skills and abilities graduate students should master and what kinds of positions they should be prepared to take. Several important reports contributed to an emerging national discussion among relevant stakeholders—including both employers and leaders of government agencies, higher education associations, and foundations—with interests in graduate education. In particular, the Committee on Science, Engineering, and Public Policy published what was called the "COSEPUP Report" (1995), the Association of American Universities published the report of the Committee on Graduate Education (1998), and the National Science Board published a report on science and engineering graduate and postdoctoral education (1997). Then, in 2000, as part of the Re-envisioning the Ph.D. Project sponsored by The Pew Charitable Trusts, Nyquist and Woodford published their report entitled *Re-envisioning the Ph.D.: What Concerns Do We Have?* This

report was based on their interviews with stakeholders involved in graduate education, including employers of recent Ph.D. graduates.

The concern was evident throughout these various reports that graduate education in its traditional form was not adequately fulfilling its responsibility to employers, not fully adapting to changing national needs, and not sufficiently preparing graduate students for the world in which they would work. Among the key themes that emerged in a number of the reports were calls for better preparation of graduate students for a range of professional career possibilities (both academic and other), more interdisciplinary work in graduate study, the inclusion of a greater diversity of students, and attention to the length of time required to complete doctoral work. In a frequently quoted sentence in their report entitled *At Cross Purposes: What the Experiences of Doctoral Students Reveal About Doctoral Education,* Golde and Dore (2001) summarized the results of their quantitative research on graduate students' views of their experience: "The data from this study show that in today's doctoral programs, there is a three-way mismatch between student goals, training, and actual careers" (p. 5). Nyquist, Austin, Sprague, and Wulff (2001) reached a similar conclusion in their qualitative study that followed graduate students over four years: "Graduate education does not match the needs and demands of the changing academy and broader society" (p. 5).

Graduate Student Attrition Rates

Another important issue fueling attention to what happens during graduate education has been the attrition rate from graduate school. Based on a thorough review of research, Lovitts (2001) noted that, since the early 1960s, the rate of attrition from doctoral programs in the United States has been estimated consistently at approximately 50 percent. Furthermore, she explained, the rate of attrition for women, while difficult to pin down, is even higher than the overall rate. Not surprisingly, such a high rate concerns academic leaders as well as others interested in the quality and impact of graduate education. Among the questions that arise are why students leave and whether the graduate experience could be changed in ways that would affect the attrition rate. In particular, higher education leaders, faculty, and researchers worry whether

graduate students who are especially promising as future professors are choosing to stay or leave.

In response to such concerns and questions, researchers as well as deans and administrators in graduate programs are seeking ways to understand and address the high rate of student attrition. For example, Lovitts (2001) conducted a fascinating study that explored the reasons individuals depart from graduate school. A summary of some of the findings from that study is provided in Chapter Six. Noting such research on graduate attrition, Karen Klomparens, dean of the graduate school at Michigan State University and one of the authors in this volume, has focused on the conflicts experienced by graduate students that seem to arise fairly regularly and may contribute to decisions to leave. As illustrated by these authors who contributed to this volume, as the 1990s continued, concerns about dropout and its sources constituted one important factor contributing to the growing interest in research and programs designed to help improve the graduate experience.

Expanding Conceptions of Faculty Career Stages

The fourth factor pushing educators to reassess what was being done in graduate education was the increasing recognition of the graduate experience as a significant stage in preparation for a faculty career. Beginning in the late 1970s and continuing to the present, researchers of faculty work were realizing that the faculty career begins with the socialization process that occurs during the graduate experience. Previously, research on faculty development had conceptualized the start of the academic career as the first academic appointment. Influenced by theoretical literature on socialization, researchers such as Anderson and Seashore Louis (1991), Austin (2002a), Bess (1978), Golde and Dore (2001), Tierney and Rhoads (1994), and Weidman, Twale, and Stein (2001) turned to examination of the graduate experience as the initial career stage. Some of the research highlighted in this volume resulted in conclusions pertaining specifically to the role of graduate education as a socialization process. Of particular importance, some of this research on how graduate education functions as an initial career stage and a socialization experience has identified concerns that graduate students themselves have about the doctoral experience.

Thus, a significant body of work is now available that provides theoretical perspectives and research-based findings to inform dialogues about graduate education, efforts to improve its quality, and strategies to prepare future faculty more effectively.

In sum, a number of reasons and factors percolated decades ago, gained momentum throughout the 1980s and 1990s, and continue into the present to make the issue of the quality of graduate education, and ideas to improve or reform it, topics of considerable interest to institutional administrators, faculty members, association and foundation leaders, employers, researchers, and graduate students themselves. Calls for reform in graduate education are coming from many directions.

Graduate Education as Preparation for Academic Careers

Although graduate education prepares students for many career options, this book focuses specifically on graduate education as preparation for academic careers. The preparation of the faculty of the future is one of the most significant responsibilities of universities, requiring the best efforts of faculty members and academic leaders. Higher education in the United States is undergoing major change, often described in terms such as "revolution," "reshaping," and "cultural change," making this responsibility particularly challenging. As Yolanda Moses, former president of the American Association for Higher Education (AAHE) observed, the American higher education system is "in the throes of major transformational change" (2001, p. 7).

New faculty today are entering an academic workplace that is changing rapidly and dramatically. The forces affecting higher education are well-known: public skepticism and demands for accountability, the need for fiscal constraint, increasing public expectations for institutional involvement in economic development, the rise of the information society and new technologies, the increasing diversity of students, new kinds of educational institutions, and increasing emphasis on learning outcomes. Because of these pressures on higher education institutions and the changes within them, faculty members must be prepared with a range of abilities and skills. Although faculty members have long needed a number of these

abilities and skills, the next generation of faculty must expand their preparation to include new areas of expertise in the context of the changes occurring in higher education (Austin, 2002b).

What will be expected of future faculty? The list of necessary skills and abilities highlights the need for thorough and thoughtful graduate school preparation. The next generation of faculty members must have command of a range of research abilities, appreciation for a variety of ways of knowing, and awareness of the ethical responsibilities researchers will encounter. Faced with a diverse array of students, they must understand how teaching and learning processes occur, and they must be effective teachers. They must know how to use technology in their teaching and understand the meaning and practice of engagement and service appropriate for their institutional type. Faculty members must be effective in communicating to diverse audiences, including government and foundation leaders, members of the community, parents and students, institutional leaders and colleagues. Furthermore, they must know how to work effectively, comfortably, and collaboratively with various groups both inside and outside the academy. The next generation of faculty also must understand how to be responsible institutional citizens, comprehending the challenges facing higher education and the implications of these challenges for their roles in the academy and as academics in society. Boyer (1990), for instance, in his now widely cited treatise, suggested, "for America's colleges and universities to remain vital a new vision of scholarship is required. What we are faced with, today, is the need to clarify campus missions and relate the work of the academy more directly to the realities of contemporary life" (p. 13). Others, such as Richlin (1993), who wrote about new approaches to scholarship, followed through with suggestions for helping educators think about the role of graduate education in preparing students for faculty roles in a changing academy.

The next generation of faculty members needs more than simply an expanded set of abilities and skills. These new faculty members also must be prepared for a variety of faculty appointments (Austin, 2002b; Finkelstein & Schuster, 2001; Finkelstein, Seal, & Schuster, 1998), including part-time, contract, and term appointments as well as tenure-stream and full-time appointments. In fact, scholars increasingly are appointed into term and part-time appointments rather than traditional full-time tenure-stream

positions. Furthermore, although they are trained in research universities, new faculty members ultimately find employment in a range of institutional types, including community colleges, comprehensive institutions, and liberal arts colleges. The specific expectations for faculty work—including the balance of teaching, research, and service responsibilities, the kind of interactions that are customary with students, and the roles of a faculty member in the academic community and in society—vary by institutional type. A graduate student who has observed faculty work and roles in the research university should not expect this model to be the norm in other types of institutions.

It may be argued that, given the changing expectations for faculty work and the range of types of faculty positions, it is no longer adequate or appropriate for current faculty members to prepare graduate students as "clones" of themselves. Gaff, Pruitt-Logan, and Weibl (2000) suggested that, although the nineteenth-century model of graduate education grounded in German models of research and scientific discovery is widespread, "it is inadequate for the challenges confronting the professoriate of the twenty-first century." They argued that "a mismatch exists between doctoral education and the needs of colleges and universities that employ new Ph.D.'s" (p. 3).

In a recent address to a national higher education association, Austin (2002b, p. 128) summarized the challenge for those preparing the future professoriate:

> Various pressures and expectations external to and within higher education are creating a time of significant change. The changes within the academy have a direct impact on the work and lives of faculty members. New expectations require the next generation of faculty members to have a range of abilities, skills, knowledge, and understanding that goes beyond what entering faculty members typically have needed. The preparation of the next generation of faculty members cannot be "business as usual."

In addition to contextual changes that affect the nature of faculty work, there is a very practical reason for thinking seriously about the preparation of the next group of professors. Universities and colleges are moving into a period when they will be hiring in significant numbers. Finkelstein and Schuster (2001) have pointed

out: "The number of retirements, and accordingly, the need for replacements, is increasing rapidly. . . . The continuing aging of the faculty—now it seems, the highest average ever—means huge numbers of retirements looming, leaving wide open the prospect for an even more rapid makeover" (p. 7).

In sum, institutions of higher education are facing new challenges and significant transformation. Faculty work is changing—the expectations, the kinds of appointments, the necessary skills and abilities. Large numbers of retirements will require extensive hiring in the near future. At the same time that the new generation of faculty members must be prepared to enter a changing context, many analysts and observers remain concerned about shortcomings in the current preparation of graduate students for their future work.

In response to these challenges facing higher education institutions and changes in faculty work, various programs and projects have been designed and supported by foundations to address issues in graduate education and improve the preparation of future faculty. Such programs include Preparing Future Faculty (PFF), which is in place at many institutions, Re-envisioning the Ph.D. (sponsored by The Pew Charitable Trusts and hosted at the University of Washington), the Responsive PhD Initiative (a program of the Woodrow Wilson Foundation), and the Carnegie Initiative on the Doctorate to create Stewards of the Discipline. In addition, as noted earlier, many universities have implemented new programs designed to prepare graduate students more successfully not only for their current teaching assistantship positions but also for their future professional roles. As evidence, the Re-envisioning the Ph.D. Web site contains a list of several hundred "Promising Practices" in place at universities committed to enhancing graduate education as preparation for future careers.

Efforts are under way to enhance the preparation of future faculty, and lessons can be learned from the efforts made to date. To continue to address the changes in the academy and the need for new faculty members, university leaders, professors, and leaders of professional associations and foundations must think practically and critically about the paths to the professoriate and strategies for enriching the preparation of future faculty. This book addresses that responsibility.

Conclusion

The thesis of this book is that, given the changing context in higher education, creative attention should be directed to the preparation of the next generation of faculty members. This book provides useful information, resources, lessons, and recommendations for academic leaders and faculty members who are committed to doing their best to prepare the future professoriate. Six chapters provide summaries of major research studies that shed light on aspects of graduate education and the experiences of graduate students, with particular attention to findings that pertain to the role of graduate education in preparing future faculty. Then, six chapters summarize major national initiatives designed to improve graduate education and enrich the preparation of the future professoriate. In the final chapter, we synthesize and compare the findings from the research studies, highlight lessons learned from initiatives to improve the preparation of aspiring faculty members, and suggest future directions of importance in this work. We hope that graduate deans, department chairs, faculty advisors, teaching assistant supervisors, instructional/faculty developers, foundation leaders, and graduate students themselves will find useful this presentation, synthesis, and analysis of the research and initiatives to enrich the preparation of future faculty.

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