MENTORING
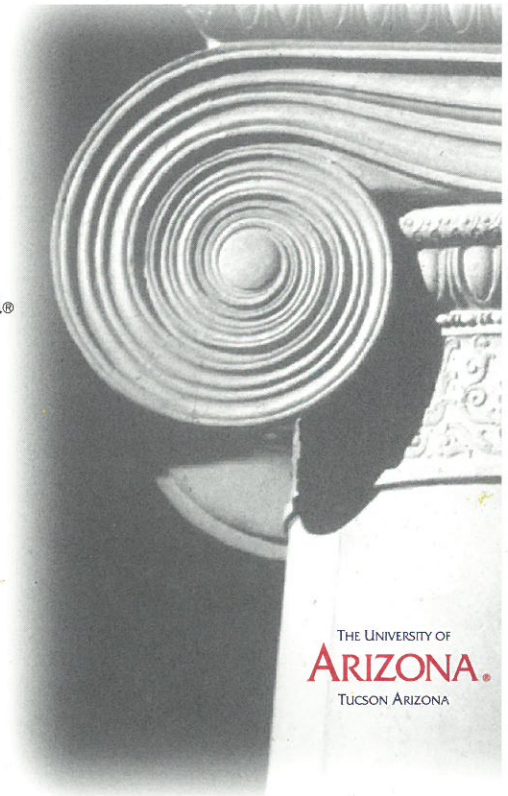
The Faculty–
Graduate Student
Relationship

A Position Paper
of the Graduate Council
of The University of Arizona®

INTRODUCTION

Mentoring is an essential part of graduate education. In fact, in many ways, mentoring is the "heart" of graduate education. The mentor is responsible for ensuring that the student becomes sophisticated in a discipline or field of study, is challenged intellectually, learns how to think critically, and aspires to create new knowledge. In addition, the mentor is responsible for assisting the student in developing the interpersonal skills needed to succeed in the discipline. Mentoring is distinct from advising because it involves a personal relationship. This relationship includes faculty acting as close, trusted, experienced guides and advocates. The nature of the mentoring relationship is different for each student and depends on background (e.g., age, gender, ethnicity, culture), experience, and personal needs. It recognizes that graduate school includes socialization to the values, norms, practices, and attitudes of a discipline. Mentoring gradually transforms the student into a colleague. It produces opportunity and growth for both the mentor and the student.

The task of the mentor is multifaceted. "Mentors are **advisors**, people with career experience willing to share their knowledge; **supporters**, people who give emotional and moral encouragement; **tutors**, people who give specific feedback on one's performance; **masters**, in the sense of employers to whom one is apprenticed; **sponsors**, sources of information about and aid in obtaining opportunities; **models**, of identity, of the kind of person one should be to be an academic." (Zelditch, M., 1990, "Mentor Roles," Proceedings of the 32nd Annual Meeting of the Western Association of Graduate Schools). These characteristics of mentors combine to provide a broad-based nurturing of the professional and personal development of the graduate student.

The Graduate Council expects that each entering graduate student will be assigned, or will choose, a mentor soon after arrival at The University of Arizona. Early stages of a program of study require many decisions on the part of the student, so it is important that the counsel of a mentor be available from the very beginning. The mentor is expected to interact with the student on a regular basis, providing the guidance, advice, and intellectual challenge necessary for the student to complete his or her program. It should be recognized that the specific mentor and the role of that mentor may change over time. Thus, a student may have more than one mentor during the course of a degree program. In practice, a student may have more than one mentor at any one time. That is, although the student may choose a single faculty member as the primary mentor, other individuals may play significant mentoring roles for the student. Having multiple mentors is desirable.

Mentoring is essential to student retention and the quality of the student's program of study. The Graduate Council expects that each degree-granting unit will have in place a well-defined and active mentoring program, and that it will be reviewed on a regular basis to ensure its effectiveness. New faculty members should be instructed about the mentoring process during their departmental orientation. Recognizing that mentoring is such an essential part of faculty responsibility, the Graduate Council expects that it will be considered in all faculty merit evaluations and tenure-promotion decisions. Further, the Graduate Council acknowledges that although this position paper is geared mainly toward the mentoring of graduate students, faculty responsibilities for post-graduate mentoring (i.e., for postdoctoral students) should follow many of the same principles.

Activities that are important components of the faculty-graduate student mentoring relationship are discussed below. The Graduate Council recognizes that the importance of each of these activities will vary with discipline, type of degree being pursued, and time as the student progresses through his or her program of study. The activities described here are intended to be suggestions. They represent dimensions of a good mentoring program. However, in the final analysis, the role of the mentor as advisor, supporter, tutor, master, sponsor, and model will be more than the sum of these activities and will be highly individualized.

The activities discussed are divided into three parts. The first considers some of the responsibilities of the faculty member and the department. The second considers some of the responsibilities of the student. And, the third considers formal academic experiences that are relevant to mentoring.

RESPONSIBILITIES OF THE FACULTY MEMBER AND THE DEPARTMENT

Provide a Clear Map. Because graduate school is a new experience for each beginning graduate student, it is uncommon that such a student is familiar with all the requirements for a degree. Therefore, it is important that the mentor provide a clear map for the student at the outset. At least three areas should be considered: (a) the requirements the student must meet, including course work, minors, languages, examinations, and the thesis or dissertation; (b) procedures for certifying to the department and the Graduate College that such requirements have been met; and (c) the time that is considered usual for completing each of the requirements. Based on this map, the graduate student should be able to have reasonable expectations of what should transpire from start to finish and what time course to anticipate.

Provide a Positive Role Model. The role model provided by the faculty member is critical. Faculty members who are mentors of graduate students need to be aware of how important their actions may be to those they are mentoring. The personal and professional behaviors of the faculty member often set standards that the student will emulate. Many career-long attitudes of students are conditioned by the examples provided by mentors in graduate school. Some of these include passion for the discipline, value for new knowledge, pride in the work product, respect for other professionals, adherence to high ethical standards, and an ability to cope with change. Perhaps more than any other factor in the mentoring relationship, the role model provided by the mentor has the most significant and lasting impact on the student. The mentor is often held up as the kind of person the student believes he or she should become.

Provide Enough Time for the Student. Good mentoring takes a great deal of time. Many aspects of mentoring require one-on-one instruction, especially during periods when the student is working on independent projects, a thesis, or a dissertation. Both the faculty member and the department must ensure that sufficient time is allotted for effective mentoring. Spreading time too thin for individual students can render the mentoring process ineffective and inefficient. Thus, the faculty member must limit himself or herself to mentoring a relatively small number of students at any one time. The meaning of "relatively small number" will, of course, differ from discipline to discipline. Whatever a department specifies as an acceptable student/faculty mentoring ratio, that department should be diligent in requiring adherence to that ratio as a guideline in its planning for new student admissions.

Evaluate Student Progress and Performance. Departments should develop realistic expectations for progress and performance and convey these directly to graduate students. These expectations should include norms for progress at all stages of the program of study. Explicit dismissal and appeal procedures should exist for each department and these should be well-publicized. Departments should evaluate the student's performance at the end of each year of the program of study. This should be a formal process designed to best fit the department's circumstances. Self-evaluation by the student is encouraged as a part of this process. In addition, comment by the mentor should be included. Written feedback should be provided to the student along with constructive input for bringing actual and expected performance into accord, if necessary. Departmental procedures should also be in place to supervise and evaluate the teaching experiences of graduate students, whether in preceptorship or in employment as a teaching assistant. The objective of evaluating student progress and performance is to provide meaningful and timely information that will be useful and beneficial. The focus should be on improving the quality of the graduate experience.

Help the Student Develop Expertise in Professional Writing. Because professional writing is central to many aspects of job performance, it is an especially important dimension in most faculty-graduate student mentoring relationships. It takes time to learn to write well and many students come to graduate school without much experience in the types of writing required. The Graduate Council encourages mentors to provide careful, detailed, and encouraging comments to students with regard to writing. In addition, a wide variety of types of writing experiences should be provided for the student during his or her program of study. These might include professional correspondence, manuscripts, abstracts, journal reviews, text for poster sessions, and a thesis or dissertation prospectus. The student should be engaged in writing throughout the program of study so as to be well-prepared before the thesis or dissertation stage. Students should be given opportunities to critique the writing of others, including fellow students, the mentor, and publications in the discipline. The Graduate Council recognizes that clear and concise writing is important in many disciplines that regularly compete for research/scholarship funding. Students should be given practice in the preparation of funding proposals. They should read successful and unsuccessful proposals along with reviews. In many disciplines, it may be desirable that the thesis or dissertation proposal be written in a manner appropriate for submission to a funding agency.

Help the Student Develop Expertise in Oral Communication. Just as writing expertise is important, so is expertise in oral communication. Mentors are encouraged to provide opportunities for the graduate student to develop oral communication proficiency in a variety of contexts. These might include presentations in situations such as course seminars, journal groups, laboratory meetings, departmental colloquia, and professional conferences. Opportunities for the student to make presentations to the lay public are also encouraged. The development of oral communication competence in teaching environments is particularly important and is viewed by the Graduate Council as one of the most significant points of focus for the mentor's efforts. Whether or not the student becomes engaged in an academic career, the precise use of oral language in instructional settings will likely have a major impact on career success.

Engage the Student Beyond the Classroom, Laboratory, and Studio. The student encounters enormous time demands in graduate school and there is a natural tendency to focus on the academic tasks at hand. The Graduate Council believes, however, that it is important for the mentor to ensure that the student engages in other relevant activities during the program of study. The student should be encouraged to become involved in departmental and university-wide affairs and to participate in local, regional, and national professional associations. The mentor should keep the student apprised of travel funds available through training grants, research grants, departmental resources, and Graduate College resources. The mentor should also foster the student's participation in computer conferencing networks and distance education experiences.

Emphasize the Important Role of Teaching. The Graduate Council advocates that the mentor stress the important role of teaching in the academic enterprise. The student should be provided with opportunities to teach, develop course materials and lectures, reflect on the process of teaching, and receive feedback. Whenever possible, the student should be engaged in a close preceptorship experience with the mentor to learn first-hand the full scope of the teaching endeavor. It is important that the student be exposed to what makes outstanding teachers in his or her discipline. The Graduate Council places a high value on teaching, the teaching process, and conveying such value to graduate students, many of whom will carry on this important function as a part of their own careers.

Create and Foster an Ethos of Collegiality. Recognizing that graduate education is, in part, a process of socialization, departments should

create and foster a sense of community, cooperation, and caring among students and between students and faculty. This can be accomplished through practices that emphasize the unitary nature of the department and the broader unitary nature of the university as a community. The department should attempt to provide a common working space for its graduate students. The department may want to establish a formal student/faculty support group for students preparing papers or other activities for presentations, providing for review, rehearsal, and feedback. A graduate student organization might be formed within the department to provide a formal voice for student-driven issues or initiatives. In addition, students might be encouraged to be active in the Graduate and Professional Student Council of The University of Arizona. Mentors and departments should encourage social functions that foster collegiality. Collegiality is best communicated through example. Thus, cooperation and support among faculty members may be the best mechanism to promote the same among students and between students and faculty.

Value Diversity. In the process of developing mentoring programs, departments need to recognize the changing composition of the graduate student population toward greater diversity. Special attention should be paid to the mentoring of students from underrepresented groups. Departments should be sensitive to student differences in relation to socialization and experience with research. They should also take into account cultural, linguistic, and national differences among students. And, they should address the unique problems faced by minority students. Many students will be the first in their families to attend graduate school. Thus, they may have very little background in the culture of graduate education.

Provide Ethical Guidance. The student should be provided with strong ethical guidance on a wide variety of topics. These include, among others, appropriate crediting of scholarly contributions, determination of authorship on presentations and manuscripts, intellectual property rights, ownership of data, plagiarism, patent considerations, human and animal subject protections, and issues of confidentiality. Certain federal funding agencies require that students supported on training grants be given formal course work in ethics. Some departments now have such course work in place and other departments might benefit by emulating these efforts.

Consider Career Opportunities. Mentors need to advise students of career options available to them. Most disciplines present with several options. Opportunities should be considered for employment in both academic and nonacademic sectors of society. In addition, opportunities should be considered for further advanced study. The job market has changed in recent years in several disciplines and perceptions and realities need to be in accord for the student to make informed decisions about career paths. The Graduate Council urges departments to examine these issues and discuss them with graduate students.

RESPONSIBILITIES OF THE GRADUATE STUDENT

Take Charge of Program of Study. The graduate student is an active participant in the mentoring relationship. The student should keep in mind the responsibilities of the mentor and the department discussed above and at the same time take final responsibility for tailoring his or her program of study. Thus, while seeking guidance from a mentor, the student should make sure the program of study meets his or her needs. The student should keep track of requirements and deadlines. In particular, the student should be well-informed about the policies and procedures found in the Graduate College Catalog. He or she should be self-motivated and take initiative to capitalize on educational opportunities. It is important that the student strive to be as independent as possible, though recognizing that independence will increase over the course of the program of study. The student should consult often with student peers who have gone through various stages of a program of study and seek opinions about the pros and cons of the various options available.

Apprise Mentor of Progress and Problems. Communication with the mentor is essential. The student should keep the mentor fully informed of his or her program status. It is important that the student tell the mentor as soon as problems arise. The student should be honest and open in sharing information. The mentor may have solutions for many of the student's problems or know what resources are available to assist with problems.

Contribute Knowledge. Students tend to see themselves as on the receiving end in the mentoring relationship. It should be remembered, however, that the student has a great deal to offer to the mentor. The student should contribute to the knowledge base of the mentor, peers, and department. The act of contributing will boost self-esteem, gain him or her additional respect, and stimulate the surrounding intellectual environment. Good mentors envision that their students will ultimately surpass them. Thus, good mentors welcome contributions from students and value them as indications of their success as teachers.

Seek Multiple Mentors. It is unlikely that one mentor can fulfill all of the student's needs. Therefore, the student should seek out multiple mentors during his or her program of study. These may be chosen to fulfill different intellectual needs, provide specific training opportunities in various skills (e.g., certain laboratory techniques), and obtain emotional support. The search for appropriate mentors need not be restricted to faculty members. Other graduate students can provide significant mentoring experiences. Postdoctoral students, in particular, are often a rich resource for mentoring activities.

Change the Relationship if Necessary. For one reason or another, not every faculty-student mentoring relationship will be the best match. If the student believes the mentoring relationship is not satisfactory, then it may be appropriate to terminate the relationship and find another primary mentor. Or, in the case where the student may change the area of emphasis in the program of study, it may be beneficial, or even necessary, to seek another primary mentor. There are perfectly good reasons for the student not to spend an entire program of study under a single mentor. When a change in mentors may seem appropriate, the student should discuss it with the primary mentor and those who might assume the role as new primary mentor.

FORMAL ACADEMIC EXPERIENCES

Certain formal academic experiences fit well into the faculty-graduate student mentoring relationship. Four are briefly discussed here as examples that mentors and departments may find useful in the mentoring process.

Introduction to the Discipline. The introduction-to-the-discipline, or core, course is usually designed to bring together all first-year graduate students on a regular basis. Typically it entails meeting at least once a week with one or two faculty members who supervise the course. A wide variety of activities may take place within such a course. Students may discuss with faculty the appropriate journals within the discipline and obtain insights concerning the evaluation and reporting of published literature. Students may make oral presentations, followed by critiques from faculty and other students. They may engage in generic discussions about various subdivisions of the discipline. Or, they may be involved in other activities that provide a broad understanding of the discipline.

Independent Study or Tutorial. An independent study or tutorial is designed to foster faculty-student interaction and to guarantee that the student obtains a breadth of knowledge in a variety of areas within his or her discipline. Several independent studies may be completed prior to the preliminary examination. The student typically meets with the faculty member on a regular basis. Such meetings may be used for in-depth discussions of designated topics. Independent studies may involve reading assignments, library work, or other relevant activities.

Presentation Seminar or Colloquium. It is important in the preparation of students for professional activities that they gain experience in giving presentations of their own work in front of general audiences. Toward this end, it is a requirement in many departments that each doctoral student (and, in some cases, master's student) give at least one seminar each year after the first year in residence. The goal is to provide the student with an opportunity to learn how to present material publicly. As such, the seminar presentation prepares the student for presentations at professional meetings, job interviews, or other speaking situations in the discipline. Student seminars also foster collegiality.

Laboratory Rotation. In certain disciplines, the laboratory rotation is an important formal academic experience. In a laboratory rotation, the student spends an extended period of time conducting research in the laboratory of a designated mentor. The typical student will rotate through several laboratories during the course of a program of study, giving him or her a breadth of experience and providing information that may be useful in the task of choosing a thesis or dissertation director. The laboratory rotation is an important mechanism because it provides the student with hands-on experience and the opportunity to interact with several faculty members within the discipline.

SUMMARY

The Graduate Council believes that every department should have in place a structured mentoring program and that this program should include an appropriate infrastructure (e.g., practices, procedures, courses) to integrate students into the discipline fully. Strong mentoring increases student satisfaction, improves student retention, decreases the time-to-degree, and produces a higher-quality graduate. Mentoring is at the heart of graduate education. The Graduate Council urges that it be encouraged, practiced, and fostered at The University of Arizona.