

*Best practices for integrating first-year students into graduate programs include an approach that fosters collegiality and mentoring, based on program structure.*

## Best Practices for Enculturation: Collegiality, Mentoring, and Structure

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American doctoral programs remain the premier training ground for the world's future scientists and scholars (Clark, 1995). Every year, thousands of students enter graduate school with hopes of bright careers; many aspire toward careers as professors and scientists (Boyle, 1996). All of these prospective scholars must begin as first-year graduate students. These students go through a *cultural learning* or enculturation process in which they learn to act as productive members of their graduate departments (Corcoran and Clark, 1984). Organizational influences, embodied by procedures and practices, may either facilitate or hinder the enculturation process (Van Maanen and Schein, 1979).

Based on our empirical examinations of graduate education and our knowledge of the graduate education literature, we highlight the best practices for facilitating enculturation. When we examined exemplary departments, particularly their organizational cultures and program structures, we found that exemplary departments distinguished themselves in three ways: They foster collegiality among the first-year students; they support both mentoring and collegial, professional relationships between the first-year students and faculty; and they provide the first-year students with a clear sense of the program structure and faculty expectations.

We begin with a brief description of the study from which our data are taken. Afterwards, we examine how the research on graduate education corresponds to the best practices we identified.

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## Methods

**Department effectiveness ratings.** To identify exemplary departments, we relied on the National Research Council (1995; NRC) effectiveness ratings. The NRC periodically rates doctoral programs' effectiveness in training research scholars and scientists on a scale from 0 (not effective) to 5 (extremely effective). The effectiveness ratings of the departments included in this study had a range of 1.29, with a mean of 3.17 and a standard deviation of .44.

**Participants.** We interviewed sixty-six students and faculty from a large, public research university. We interviewed thirty-six domestic first-year students from ten graduate departments. From each of these ten departments, we interviewed one graduate director and two advanced graduate students for a total of thirty interviews with senior department members. The ten departments represented departments across the physical/life sciences, social sciences, and humanities.

**Interview Procedures.** The first-year graduate students were interviewed three times during their first year; within the first few weeks of entry, near the end of their first semester, and during their second semester of graduate school. The interviews covered a range of topics. We report the data that relate to their perceptions of the departmental cultures into which they had entered, the social and professional relationships they were forming, and the first-year requirements. Each interview took approximately one hour.

At the completion of the thirty-six new graduate students' first year, we interviewed the directors and advanced graduate students from the ten departments. The directors and advanced students answered questions regarding issues pertinent to the early experiences of graduate students; specifically, departmental policies, practices, and program requirements. Each interview lasted approximately one hour, depending on the length of the respondents' answers. (For the full interview protocol, see Boyle, 1996.)

## The Best Practices for Enculturating Graduate Students

The exemplary graduate departments we studied shared some common elements: They fostered a sense of collegiality among the incoming students, nurtured the formation of mentoring relationships between the students and faculty, and provided program structure to help coach students toward their primary role as research scientists and scholars. First, however, these departments welcomed their students with a structured orientation that complemented the university-wide orientation.

**Orientation.** At this large public research university, campus-wide orientations are held for graduate students. The departments that excel at enculturating graduate students supplement the general orientation with a departmentally sponsored orientation. These departments realize that it is the departmental culture, not necessarily the university culture, to which their incoming students will need to adjust. The graduate directors are very clear about the purposes for

sponsoring departmental orientations. One director says, “[The orientation provides] specific and concrete information about what to do to get adjusted, [it] sends a message to students about the importance of fitting in.” Another says, “[I sponsor] an orientation meeting before classes start with only the incoming class. We tell them what it’s like to be in the department, what to do if they need help. We try to make it as clear as possible what is expected of them.”

These smaller orientations serve a variety of purposes. They acquaint the students to the norms and requirements of that particular department. They also introduce the incoming graduate students to key members of the department, not only the faculty but also the support staff and the advanced graduate students. Finally, these orientations educate the students about the bureaucracy of the university and assist new students in negotiating the registration and financial aid processes.

**Collegiality.** Past research has linked collegiality with academic development. Students’ interactions with other students in the graduate program are found to relate positively to academic achievement and career development (Blackwell, 1987; Hartnett, 1976). Environments that hinder peer interactions, such as competitive academic climates where there is an emphasis on grade achievement, were negatively related to scholarly socialization (Katz and Hartnett, 1976).

The identified best practices foster collegiality among the first-year students — for example, placing students in communal offices. If the incoming class is less than ten students, best practices dictate they all be assigned to the same office. If the incoming class is larger, groups of five to eight students can share several offices. These communal offices serve as places where students can informally socialize, have lunch together, and interact over homework problems and course requirements. Placing the students together in small groups fosters group interaction and aids the students’ social integration into their new department — a task that has been speculated to be the most important task of the first year (Tinto, 1993). One graduate director identified their department’s policy of assigning incoming students to communal offices as a way to help students feel like they are a part of the department, saying, “We do a good job [of making the students feel connected to the department] by putting the students together in courses and offices.”

Collegiality is beneficial not only within but also between the graduate classes. The best practices identified here encourage interaction between first-year and advanced graduate students by assigning each incoming student to an advanced student. The advanced graduate students help new students navigate the bureaucratic process of registration, serve as informal advisors for course decisions, and provide emotional and social support for what may prove to be the most taxing year of graduate school. These relationships often extend past the early experiences and may evolve into informal mentoring roles that aid students in choosing advisors and deciding on research and writing projects. The students appreciated this assistance, especially with fulfilling aversive bureaucratic tasks.

The results of these efforts at collegiality seem to be paying off for the departments. The first-year students report feeling a part of the department and quickly identify a sense of camaraderie with their classmates. One says, "It is a large department but [there is] a lot of camaraderie among first years." Another says, "[I have been] impressed with the camaraderie among students, impressed how quickly these people who have never known each other become a family."

**Mentoring.** Mentorship may be the most important variable related to academic and career success for graduate students. Graduate research assistants who had intense professional interactions with supervisors evidenced greater research productivity compared with their peers (Malaney, 1988). Graduate students who reported having a number of faculty as "colleagues" and being treated like a "junior colleague" by one's advisor made better progress toward their degree (Berg and Ferber, 1983; Girves and Wemmerus, 1988). On the other hand, students who did not finish their dissertation list poor working relationships with their advisors or committee as one of the two most frequent reasons for terminating their graduate schooling; the other reason is financial difficulties (Jacks, Chubin, Porter, and Connolly, 1983).

Mentoring is most often thought important later in graduate school, when students are immersed in individual research and scholarship. The foundations for mentoring relationships, however, are being formed during the early years, when students are completing coursework. Consequently, the best departments in our study provided ample opportunities for students to get to know faculty in professional and social settings. The quality of mentoring relationships is not based solely on common research and scholarly interests but can be predicted on regularly scheduled, mutually beneficial professional interactions (Boyle and Boice, in press). We identified three best practices utilized by departments to foster mentorship.

First, assign incoming students to academic advisors. The role of these temporary advisors is to help students choose their courses during the first year of graduate education. This gives the students a definitive faculty contact with whom they can ask questions regarding courses. In most cases, students spend the majority of their time on coursework during the first year of graduate school (Boyle, 1996), so course-related, not research-related, counsel is most relevant.

Second, provide a structured protocol for students to obtain research advisors after the new graduate students have arrived on campus. Before this time, students may know about the research interests of the faculty, but rarely will students have any information about faculty's supervisory styles. By waiting to assign research advisors, future advisors and advisees can learn about each other in important ways that will greatly influence the quality of the mentoring.

One department provided a structured protocol for students to decide upon research advisors. One first-year student describes it this way: "[I learned about my research advisor] because students initiate [interactions and] the department requires you to talk to [i.e., interview] at least three faculty to decide who to work with."

These interviews not only covered research interests but also provided opportunities for the faculty and students to determine whether their expectations and work habits were complementary. Faculty also sponsored open house events where the new students could talk with the advanced graduate students, thus providing opportunities for new students to learn how the advisors function as supervisors and mentors. The smaller departments could replace these open houses with events where advanced graduate students discuss their current research and scholarly activities, their advisors, and the methods of working with the advisors.

What does this accomplish for the students and the department? It allows students and faculty to get to know each other before committing to a long, close working relationship, and may prevent unsuccessful completion of degree requirements due to incompatible advising relationships (Jacks, Chubin, Porter, and Connolly, 1983).

Students given the opportunity to request research advisors after arrival on campus all identified both common research interests and compatible working styles as important factors in choosing research advisors. Two first-year students described their reasons for choosing their advisor. The first student commented, “[I] like the research he’s doing. [Plus I] like his personality and he does care about students, will push you along and help you get [research] skills.” The second student said, “[I chose him] initially based on his research work, then from talking with graduate students who work with him. [I also] really like the other graduate students [in his laboratory].”

Third, provide opportunities for new students to socialize with all the faculty and advanced graduate students. The exemplary departments hosted significantly more social events than the lower-rated departments. These events were as frequent as weekly “happy hours.” The faculty was well represented at these occasions, thus allowing the students and faculty to converse in an informal setting and become acquainted before the choices for research advisors and advisees had to be made. Students were also able to develop secondary mentoring relationships with faculty from whom they were not likely to take courses or work with on research or scholarly writing projects.

When these venues for fostering interaction between the first-year students and their faculty were in place, the students reported positive experiences in their initial adjustment period. One first-year student described it this way: “Professors deal with you, they are available to you, all the staff is more than helpful. Other graduate students from other years are pretty open to you, and professors genuinely are interested in having you look at their research groups.”

**Program Structure.** When program structure was provided for graduate students — that is, short-term goals, structured assignments, and timely feedback — the graduate students completed degree requirements sooner and at higher rates than without such support (Dillon and Malott, 1981; Thomas, 1995). Because recent criticisms of graduate training have focused on the lack of structure that all too often occurs, some have suggested that graduate

departments provide more structured training support and encourage regular meetings between faculty and students (Utley and Weitzman, 1993).

Program structure also promoted early involvement in scholarship in the exemplary departments. The structure was apparent almost immediately with the requirement that student attend research seminars. The research seminars might be weekly dinners hosted by faculty members for the first-year students, or pro-seminars where students listen to presentations by the faculty.

Exemplary departments provided short-term deadlines for getting students involved in research during the summer following the completion of their first year. Departmental procedures also ensured that the students received immediate feedback on their research efforts. How was this accomplished? After students were matched up with research advisors, they began their research and scholarly writing almost immediately. The department set a deadline for the fall semester of the student's second year for them to present the results of their scholarship. This deadline was well publicized and supported through precedent.

These forms of structure help create a culture where students are clear about their duties. Consequently, students complete degree requirements more quickly, and both students and faculty benefit, achieving higher productivity in scholarship and research. One program director explained, "[Students have a requirement to work on] one paper intended to be based on research experience during the first year, [thus] pushing people to get some research experience early." An advanced graduate student states clearly, "The first summer is for research."

Overall, implementation of these best practices seems to foster an open and friendly environment within departments. The office doors of faculty within the exemplary departments were regularly open. The students felt free to meet with their academic and research advisors often. If the faculty members were unable to meet at a particular moment, they scheduled meetings for later times.

Not only did the exemplary departments have higher ratings for training graduate students, they also had higher ratings in terms of faculty scholarship (NRC, 1995). How can these faculty have time for students and still be productive scholars? First, regardless of whether from the humanities, social sciences, or physical/life sciences, thoughtfully planned how to arrange research and scholarship projects to incorporate their graduate students. Even faculty in fields traditionally committed to individual, independent scholarship have made successful efforts to expand their scholarly activities to include their graduate students.

Second, the environments of collegiality, mentoring, and structure that these faculty have developed nurture the faculty as well (Boice, 1993). They, too, have been mentored, first as graduate students and later as new faculty. As they rise through the ranks of academia, they take on the role first of protégé, then as mentor. These faculty have developed their own supportive networks, having made networking a professional priority.

Finally, the exemplary faculty make use of personal structure to sustain their own scholarly productivity, such as graphing their writing times and monitoring scholarship outputs. The departments with the best practices for enculturating graduate also have faculty who engage in similar best practices to support their own career advancement and satisfaction.

## Conclusion

Graduate education is under scrutiny, much of which focuses on the high rates of attrition (Bowen and Rudenstine, 1992; Marcus, 1997). Addressing the high attrition rates requires evaluation of the early year of graduate education. In other field, the early years have been identified as crucial for persistence and career advancement. The best practices we identified — help incoming graduate students adjustment more readily to the culture and academic demands of the graduate department. These best practices also foster mutually beneficial professional relationships and early involvement in scholarship.

Best practices have been widely used in the fields of organizational and human resource development to achieve organizational excellence. Focusing on the experiences of employees within an organization benefits not only its members, but the organization as well. Organizations that offer training and career development opportunities for its members are rewarded with high-productivity and organizational growth (London, 1995). Although a universal set of best practices does not exist (Capelli and Crocker-Heftler, 1996), all best practices are based on a belief or enduring commitment (Fitz-enz, 1997). The success of the departments we have discussed demonstrates that by striving for a culture in which collegiality and mentoring flourish from a basis of program structure, each department can develop its own version of best practices in graduate education.

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