

**‘Becoming a Robin’: Recommendations for Joining the Ranks of Exemplary
Ph.D. Programs in Education**

Report of the Ad hoc Ph.D. Committee
School of Teaching and Learning
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1. Committee Charge and Working Assumptions

In autumn, 2001, the Committee was charged with developing a plan to: (i) increase recruitment of doctoral students in the School of Teaching and Learning, and (ii) enhance the quality of life of doctoral students (including orientation, opportunities to engage in research, publication, presentations, etc.). These charges were given in the context of a perceived decline in the number of prospective students, and the number of minority students in particular, applying to enter a Ph.D. program in the School.

The full Committee met on 5 occasions over the 2001-2002 academic year and subgroups of the Committee met on numerous other occasions. At the outset, we decided to interpret “recruitment” broadly to include not only activities directed at attracting applicants to our programs, but also activities between our notification of their admission and their acceptance of us as a choice for doctoral study. We also noted the two charges of the Committee were related and that recommendations for improvement could not readily be categorized into one or the other. Hence, we decided to address the needs of students and of the School by recommending practices at each stage of the doctoral student experience: recruiting students, encouraging students to accept offers of admission, enhancing their transition into doctoral study, supporting students in their program through to graduation, and enhancing their quality of life in the program. In this regard, we subscribed to a view of doctoral education as a socialization process where students make transitions through a series of developmental stages in the acquisition of their roles as academics and professionals (Weidman, Twale, & Stein, 2001).

A working premise of the Committee was that there was a plethora of strategies that might be employed to increase recruitment and enhance the quality of life of doctoral students. Given scarce resources, we wanted to be highly strategic in making recommendations by only targeting strategies for which there was sufficient basis for believing they would have a meaningful impact on recruitment and retention.

To this end, we conducted a number of investigations. We examined enrollment trends of doctoral students in the School of Teaching and Learning; we conducted a search of ERIC for literature on factors likely to influence the recruitment and retention of doctoral students and reviewed relevant research; we empirically derived a prototypical model of the “ideal” Ph.D. experience and examined the extent to which the Ph.D. experience in the School fit this model; we surveyed doctoral students and asked them about their experiences and perceptions; and we met with Dr. Robert Ransom, Director of the Office of Diversity and Outreach, to discuss his experience and perspective on recruitment and retention of doctoral students of color.

The Committee noted that several program areas in the School already have in place, or are planning, various recruitment initiatives. For example, one program area is considering: initiating direct e-mail to recently graduated students who now hold faculty positions at relevant universities, to ask them to refer prospective students to us; revising their website to make it more friendly to prospective students; and using the College Diversity conference as a recruitment tool for prospective students. Another program area has developed a highly innovative CD that is sent out to students accepted into their program with the aim of encouraging their enrollment. The view of the Committee is that its recommendations should not supplant the initiatives of individual program areas. Some program needs require a school-level response, and some are best implemented at a local program-area level.

2. Trends in Ph.D. Student Enrollment in the School

Figures 1 through 4 show trends in enrollment of Ph.D. students in the School of Teaching and Learning over the last 6 years (section-level data are available on request). These enrollment statistics were calculated from data supplied by the Office of Academic Services. For all graphs, the Committee gave most weight to data from the last 4 years. We considered statistics for 1997 and 1998 to be less reliable because of organizational restructuring in the College and other issues of data integrity.

Figure 1 shows trends in the number of students applying to, and showing initial interest in, our Ph.D. program. Since 1999, there has been a general increase in the number of students applying to undertake a Ph.D. With the exception of the year 2000, there also appears to have been an increase in the number of students showing initial interest in pursuing a Ph.D.--students who commenced the application process but, for whatever reason, did not complete their application.

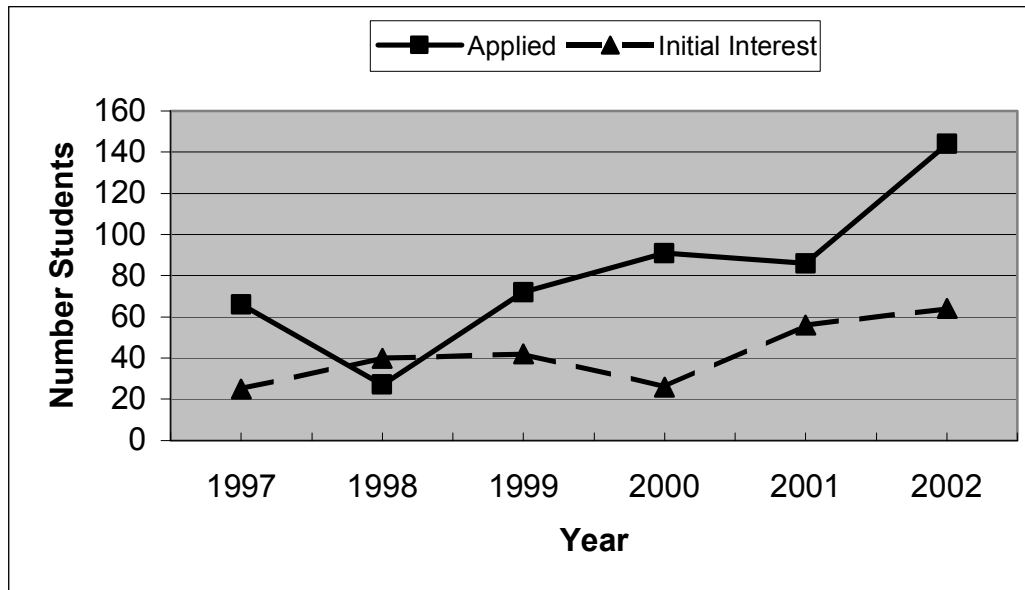


Figure 1. Number of students applying to, and showing initial interest in, a Ph.D. program in the School of Teaching and Learning, 1997-2002.^{1 2} [Source: Office of Academic Services]

Figure 2 shows trends in the number of students admitted into a Ph.D. program as a percentage of those applying. For the most part, admission rates have been declining over the last several years. This might be construed as a strengthening of the quality of applicants admitted to our program, assuming the applicant pool has not changed over the years. Limits on the number of admissions in some programs (e.g., Foreign and Second Language) also contributed to this trend.

¹ Numbers of students applying to enter a Ph.D. program includes those who were admitted and paid fees, admitted and did not pay, conditionally admitted, transfer admitted, never enrolled, and denied admission.

² Numbers of students showing initial interest in a Ph.D. include those whose application files were incomplete, those students who never enrolled or who withdrew their applications, or whose applications were classified as a 'deadfile.'

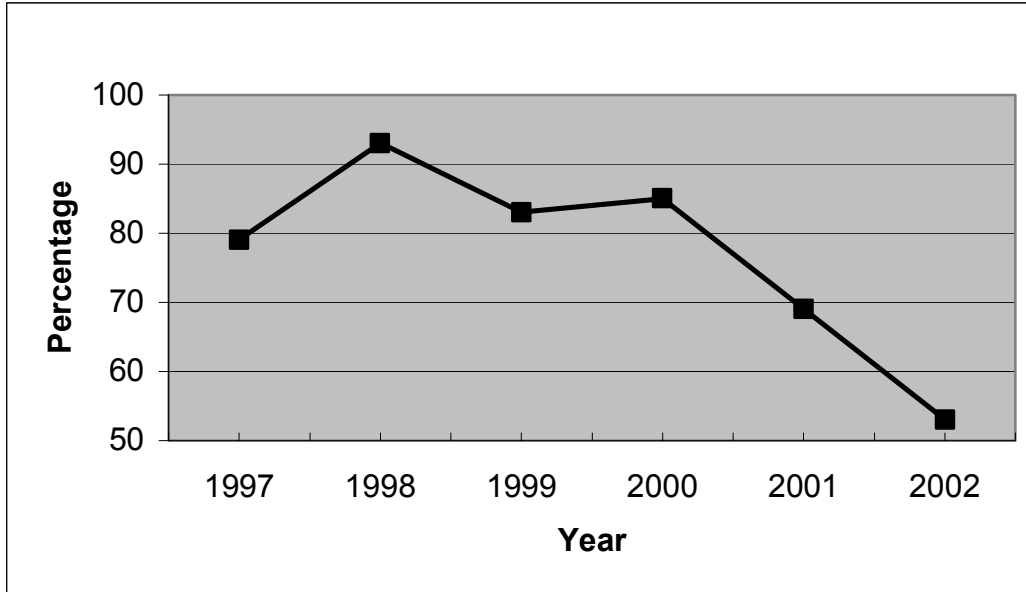


Figure 2. Percentage of applicants who were admitted into a Ph.D. program in the School of Teaching and Learning, 1997-2002.³ [Source: Office of Academic Services]

Figure 3 shows trends in the number of students who accepted offers of admission to a Ph.D. program as a percentage of those who were offered a place. Since 1999, 60 to 70 percent of students have accepted offers to undertake a Ph.D. in the School. We do not know how these acceptance rates compare with those from benchmark institutions, but they would seem to be cause for some concern.

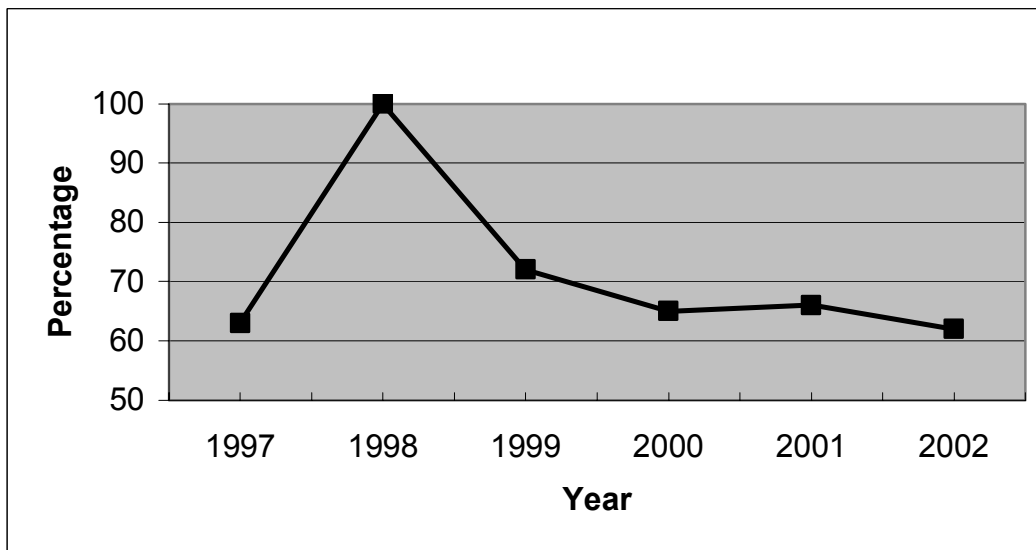


Figure 3. Percentage of applicants who were admitted into a Ph.D. program in the School of Teaching and Learning who accepted, 1997-2002.⁴ [Source: Office of Academic Services]

³ Numbers of students admitted into the Ph.D. program includes those who were admitted and paid fees, admitted and did not pay, conditionally admitted, transfer admitted, and never enrolled.

⁴ Numbers of students who accepted offers of admission into the Ph.D. program include those who were admitted and paid fees, conditionally admitted, and transfer admitted.

Figure 4 shows trends in the number of minority students applying to undertake Ph.D. study in the School. A number of students do not identify their ethnicity on their applications so the numbers shown underestimate the actual numbers of minorities. There was a decrease in the number of minority students applying to our program over the three years 1999-2001; however, numbers of minority applicants and admissions increased sharply in 2002.

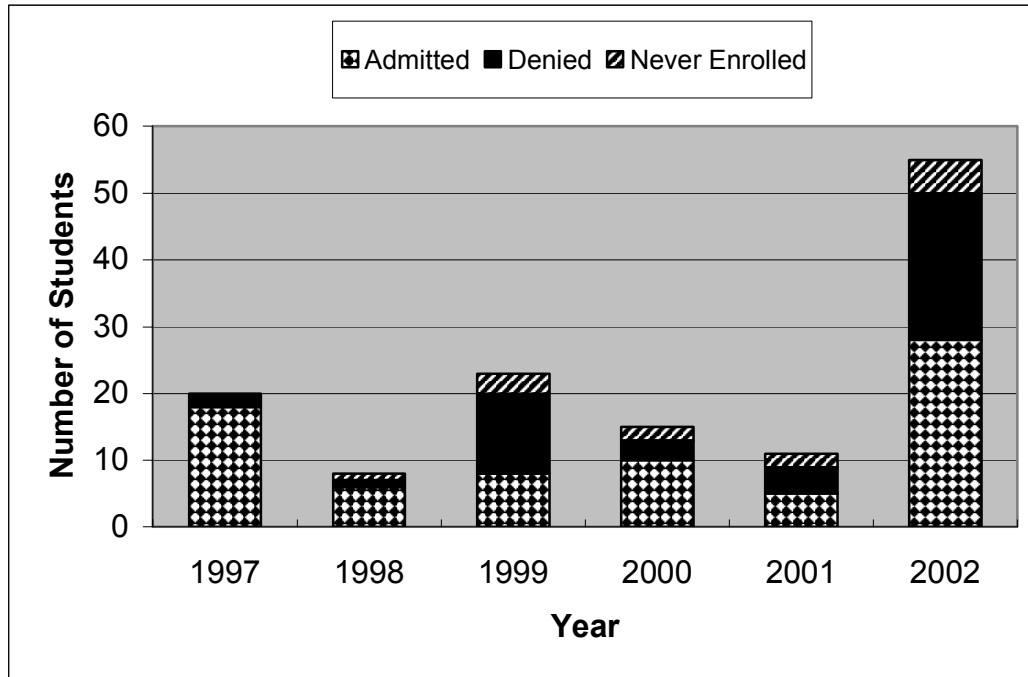


Figure 4. Number of minority students admitted, denied, and never enrolled in a Ph.D. program in the School of Teaching and Learning, 1997-2002.⁵ [Source: Office of Academic Services]

In summary ... the data show little evidence of a decline in Ph.D. enrollments or of a decline in the quality of applicants. To the contrary, over the last 4 years, there has been an overall increase in the number of students applying to enter a Ph.D. program in the School. As indicated, the declining trend in acceptance rates might be regarded as a healthy trend in that it suggests a strengthening of the quality of applicants admitted. However, we are losing 30% to 40% of admitted applicants, either because they have chosen to attend other universities or because they have decided not to pursue doctoral study. During the period 1999-2001, there was a decline in the number of minority students applying to enter our Ph.D. program but this trend ended abruptly in 2002, the last year for which we have data available, with a dramatic increase in numbers of minority applicants and admissions.

⁵ Minority students are those who identified themselves as Black (non-Hispanic), American Indian, Alaskan native, Asian, Pacific Islander, or Hispanic.

3. Review of Literature on Recruitment and Retention

Our review of the literature showed that the demographics of doctoral students are changing (Beeler, 1993; Dinham & Scott 1999; Pooch & Love 2001). Doctoral students are increasingly older. For example, their average age rose from 31.7 years in 1968 to 33.9 years in 1993. Older students (i.e., older than 24 years) now make up more than two-thirds of the advanced degree population compared to half this population ten years ago. Doctoral students are also taking longer to complete their degrees; doctoral students in 1967 took 8.2 years to complete their degrees compared with 9.8 years in 1986. It should also be noted that proportionally more doctoral students are women and minorities.

Dinham and Scott (1999) reported some specific trends with respect to gender. On average, female students took one to two years longer to complete their degrees than the male students. Female students were also less likely to be married than male students but were more likely to have parenting responsibilities. On the average, female students completed their degrees in their 40s, whereas male students completed the degree in their 30s.

The older, mature doctoral candidate is perceived in the literature as approaching the doctoral endeavor from a different perspective than the younger student. The older population is more concerned with a number of different life activities including work, family, and healthy lifestyle, in addition to graduate school. She or he is concerned with fitting into the institution (as is the younger student), but the older student gives considerable thought to how to fit the degree program into her or his life. For older students, fitting doctoral studies into one's life is more important (and more difficult) than adjusting one's life to fit a program. Family, work, health, stress etc. are "givens" in the pursuit of doctoral study, and are not necessarily seen as intrusive "extras."

With respect to recruitment, surveys and interviews with doctoral students conducted by the Association of American Universities Committee on Graduate Education (1998), Dinham and Scott (1999), Pooch (2000; Pooch & Love, 2001), and Webb (1996) have identified the following factors as important in influencing students' choices of a program and/or institution (not in order of importance):

- location of the institution (quality of life, proximity to family);
- reputation of the institution, program and faculty (academic accreditations, rankings, etc.);
- flexibility of the program and class schedules;
- financial assistance (availability of grants, fellowships, graduate assistantships);
- facilities and services (technology, library resources, graduate student services);
- positive encounters with faculty via campus visits and unsolicited contact;
- completion time.

A recurrent theme in the literature (see especially King, 1994; Wagener, 1991) is the role or recommended role of faculty in the recruitment process. Candidates are looking to be treated humanely in the process of interacting with institution to make their choices. The personal touch of faculty and staff inviting potential candidates to campus, and communicating with them via

phone calls and e-mails, both solicited and unsolicited, are seen as very influential in the decision making process by students. Often it was the friendly nature of departments and faculty responding to potential candidates' inquiries that lead the candidates to choose a particular institution.

Discussion of strategies regarding retention of doctoral students is not abundant in the literature. Most of the retention strategies revolve around funding, faculty mentoring, and cohort support as it pertains to the retention of minority students. The most cited reasons for individuals not completing their doctorate or as major factors hindering the undertaking of the doctorate were:

- financial difficulties;
- strains on family life (marriage, supporting others, health, caring for children);
- difficulty of holding down a job necessary to support themselves and others.

In Dinham and Scott's (1999) survey, it was found that the demands of the doctorate necessitated changes in the personal lives and circumstances of 91% of the respondents. Most of the major changes revolved around personal and family life, work changes, and changes to life outside of family.

In summary ... prospective doctoral students are increasingly looking for programs that will enable them to balance the demands of doctoral study with the demands of their home and personal lives. They appreciate and respond well to personal contact from faculty or others in the institution when making decisions about which offers of admission to accept. Peer and institutional support, as well as financial support, are important for retaining students and supporting them through to completion of their degrees, especially for minority students.

4. Prototypical Model of the 'Ideal' Ph.D. Experience

4.1 Development of model

Since the revolutionary work of Eleanor Rosch in the 1970s, it has been widely accepted that one way of representing a concept is by representing a prototype, or best example of a concept. The prototype (unlike an atypical example) has most of the conceptually important features, whereas an atypical example has some or few of these features. For example, a robin is a prototypical bird because it has most of features of birds (it can fly, it lives in a nest, it sings, it has wings, and it lays eggs), whereas a chicken is an atypical bird because it has only few features of birds (it has wings, and it lays eggs). Research has demonstrated the viability of prototype models for a variety of concepts, and the Committee decided that it might be possible to develop a prototype model for the concept "an ideal Ph.D. program."

To test our assumption, the Committee implemented a 4-step procedure to generate a prototypical model of the ideal Ph.D. program:

Step 1. Several members of the Committee independently generated lists of approximately 5 characteristics that, in their view, distinguished the best doctoral programs in education. Respondents were asked to base their responses either on their personal experiences (e.g., their own doctoral experience) or on their ideal model, whichever better fits the descriptor “best.” Respondents were also asked to list 3 to 5 characteristics that, in their view, make graduate programs not so attractive. The results from this step showed a high degree of agreement among respondents, suggesting that it would be possible to derive a prototypical model.

Step 2. Based on these responses, three members of the Committee created a list of 16 uniquely occurring features that characterized the ideal doctoral program. This involved dividing the characteristics mentioned in the previous responses into their constituent features.

Step 3. This list was converted into a questionnaire and sent to randomly selected samples of 7 faculty in the School of Teaching and Learning and 3 doctoral students who were in the final stages of their program (one from each section). Faculty and students were asked to rate the features in terms of “how important you think they are in contributing to the ideal Ph.D. experience.” A 6-point Likert scale accompanied each feature on the questionnaire, with 0 indicating that the feature in question was “Unimportant” for a Ph. D. program, and 5 indicating that the feature in question was “Very Important.” The goal of the survey was to select those features that were reliably regarded as central for a Ph. D. program. Faculty and students were also asked, in an open-ended question, if there was anything else they would like to suggest as an important feature of an ideal doctoral program. However, few respondents suggested additional features and there were no commonalities among them.

Step 4. We calculated the means of the ratings separately for faculty and for students. Means for faculty and students were sufficiently similar to warrant working with combined means. Moreover, ratings were consistently high for all features (most were 4s and 5s); indeed, all but three features had mean ratings of 4.0 and above, again suggesting a high degree of confidence in the relevance of the features to our model of the ideal Ph.D. experience. We omitted the three features with mean ratings less than 4.0 leaving us with the top 13 desirable features of a doctoral program.

The outcome of this procedure is the list of 13 features shown in Table 1. These features constitute our prototypical model.

4.2 Evaluating the “goodness-of-fit” of the School program to the ideal model

To evaluate how well the doctoral program in the School of Teaching and Learning meets the criteria identified in our prototypical model, the final list of 13 features was included in a questionnaire and sent to all faculty and doctoral students in the School. Faculty and students were asked to “assist us in determining the presence or absence of each of these features in our doctoral program in the School of Teaching and Learning” (see Appendices A and B). This time, a 5-point Likert scale accompanied each feature on the questionnaire, with 1 indicating that the feature was “Completely Absent” and 5 indicating that the feature was “Abundantly Present.”

Table 1. Features characterizing a prototypical model of “the ideal Ph.D. program” (not in order of importance)

- 1. The cognitive apprenticeship or mentoring afforded by opportunities to work closely with faculty on research and scholarship**
 - 2. Having a critical mass of full-time doctoral students.**
 - 3. Faculty and staff with a range of disciplinary perspectives.**
 - 4. A well-funded research environment with a common and readily identifiable mission.**
 - 5. Common spaces where faculty and graduate students mix.**
 - 6. Flexible course program.**
 - 7. Opportunities to gain research and teaching experience through a range of associateships.**
 - 8. A community of inquiry that includes faculty and students.**
 - 9. Ready access to computers and other technology.**
 - 10. Ongoing/regular financial support for students.**
 - 11. A research culture/ethos.**
 - 12. A community of doctoral students and collaboration among them.**
 - 13. Caring and supportive faculty.**
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The questionnaire was circulated to faculty via the faculty listserv and to students via individual students' e-mail addresses, obtained from section and/or program area faculty and staff, as well as the graduate student listservs. We also solicited responses from students by distributing the questionnaire in several doctoral seminars. The list for students was included with other open-ended questions (described in the next section). Faculty and students were able to submit their responses anonymously

Thirty-two faculty responded to the survey: 10 from LLC, 8 from MSaT, and 11 from ITL, and 3 with joint appointments (2 representing MSaT and ITL, 1 representing LLC and ITL). Sixty-five students responded: 31 from LLC, 24 from MSaT, and 9 from ITL (one student did not identify his/her section). Forty-five students identified their position in the program as ‘pre-generals’ and 15 identified their position as ‘post-generals’ (5 did not identify their position). Pre-generals respondents came from all three sections, and post-generals came from two sections (LLC, MSaT).

Responses were tabulated separately for faculty and doctoral students and are shown in Figure 5 (section-level data are available on request). The results exhibit several important tendencies. First, there was almost complete agreement between faculty and students on the degree to which features of the model were perceived as present in our Ph. D. program. Second, the majority of features were considered to be near the midpoint of the scale; there were few features that were either above or below the midpoint. Furthermore, analysis of the distribution of responses indicated that the means that are close to the midpoint of the scale do not reflect bimodality (i.e. with some participants believing that features in question are present and others believing that they are absent), but rather a true tendency for respondents to select the midpoint. We note that the midpoint of the scale is when a participant is uncertain about the presence of particular features. Therefore, it is of some concern that the majority of faculty and students are not sure whether such features as *a strong research ethos* (#11), *a community of doctoral students and collaboration among them* (#12), *the cognitive apprenticeship or mentoring afforded by opportunities to work closely with faculty on research and scholarship* (#1), *a community of inquiry that includes faculty and students* (#8) are present in our Ph. D. program. Those features with means below the midpoint, indicating that they were perceived as absent from our doctoral program, were: *a well-funded research environment with a common and readily identifiable mission* (#4) and *common spaces where faculty and graduate students mix* (#5). Only 3 of the 13 prototypical features showed means above the midpoint, indicating that they were perceived as present in our doctoral program: *faculty and staff with a range of disciplinary perspectives* (#3), *flexible course program* (#6), and *caring and supportive faculty* (#13). Students, and to a lesser extent faculty, perceived the feature *ready access to computers and other technology* (#9) as present to a moderate extent.

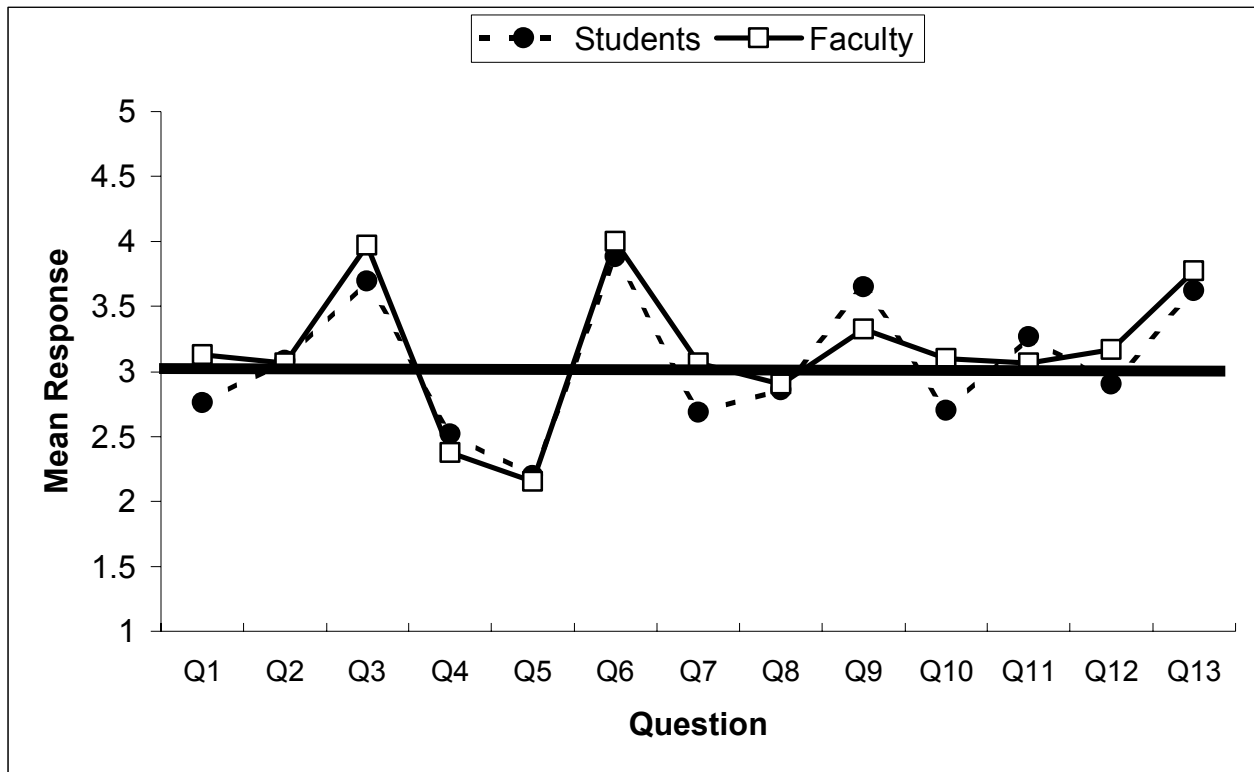


Figure 5. Mean responses of faculty and doctoral students regarding the extent to which features identified in our prototypical model of the ideal Ph.D. program are present/absent in the School of Teaching and Learning.

In summary ... our Ph. D. program is not exactly a ‘robin’ as perceived by faculty and students, with most of important features of an ideal Ph. D. program receiving mean ratings at or below the midpoint. [One Committee member remarked that if an exemplar Ph.D. program is the equivalent a robin, our Ph.D. program might be regarded as “a chicken at best.”] Faculty appear to be doing a good job nurturing students, and providing for flexibility in course options and a range of student interests. Most points of departure from the prototypical model of the ideal Ph.D. program were in research-related areas with manifest needs for more research-related funding to support doctoral students, development of a community of inquiry among doctoral students and faculty, and provision of more opportunities for mentoring in research and scholarship.

5. Survey of the Quality of Student Experiences

The Committee also solicited students’ qualitative responses to a questionnaire asking about their decision to attend The Ohio State University, their entry into the doctoral program in the School of Teaching and Learning, and their perceptions of the strengths and weaknesses of the program (see Appendix B). The questionnaire was circulated along with the feature questionnaire to students via students’ e-mail addresses, obtained from section and/or program area faculty and staff, as well as through the graduate student listservs. We also solicited responses by distributing the questionnaire to students in several doctoral seminars. Students were able to submit their responses anonymously.

As indicated in the previous section, 65 students responded: 31 from LLC, 24 from MSaT, and 9 from ITL (one student did not identify his/her section). Forty-five students identified their position in the program as ‘pre-generals’ and 15 identified their position as ‘post-generals’ (5 did not identify their position). Pre-generals respondents came from all three sections, and post-generals came from two sections (LLC, MSaT). The following summarizes responses from all 65 respondents (section-level data are available on request).

Question 1: What influenced your decision to attend The Ohio State University? Did you consider any other universities? If so, how many? Were you admitted to another university?

In response to the first part of this question, “What influenced your decision to attend The Ohio State University?,” answers fell into three general categories: (1) the reputation of the program, (2) the proximity of the College to where students lived, and (3) financial considerations. Responses were equally divided among these three categories.

Approximately one-half of the respondents had applied to, or considered, programs at other institutions. Of those who did consider going elsewhere, most considered three to eight other programs. One student considered only one or two other programs, while another considered 30 others. Those who applied elsewhere reported being admitted to the following institutions: University of Georgia, Boston College, Columbia, New York University, University of Pennsylvania, University of Illinois at Urbana-Champaign, University of Arizona at Tucson, University of Florida, University of Dayton, and University of Cincinnati.

Students who applied to other programs considered many factors in the application process. As would be expected, these students comprised international students, those who came into the School to work with certain faculty, those who came for the financial support that was offered, and those who were drawn to us because of our reputation in the field.

Among the approximately one-half of students who applied only to OSU, for them the choice had much to do with proximity, accessibility, and current work and home situations. Making the experience a quality one for these students might be quite different than working to make the experience a quality one for the other half of the respondents who applied to other universities.

Question 2: After being accepted into the Ph.D. program and before beginning course work, were you contacted by any particular offices at the university? If so, by whom and what kinds of assistance did they offer?

Approximately one-half of the respondents reported being contacted by offices at OSU; the other half reported that they were not contacted or they could not remember being contacted. Those who reported being contacted said it came from student organizations, the admissions office, the Graduate School, a section head, their prospective advisor, the financial-aid office, the International Education Office (OIE), the College, the Athletic Department, or the housing office.

We emphasize the finding that approximately half of the students reported that they were not contacted by OSU offices after admission and prior to starting their program. One student reported that she or he received “lots of mailings [but] nothing personal.” Several others reported that they were the ones who initiated contact with a person at OSU (and that this did draw a response from someone in the program).

Question 3: How smooth would you say your transition was (or is) into becoming a member of the OSU academic community? What helped your transition? What obstacles were there to your transition?

Approximately two-thirds of the respondents reported that their transition into the program was smooth or somewhat smooth, whereas about a third reported that it was a difficult transition. Among those who reported it to be difficult transition, there were a range of comments: one wrote that being in the program part-time made him or her feel “disconnected;” others complained of not having a place to talk, of lacking help from the sections/program areas, and of computer-related problems. One foreign student reported receiving help from the OIE but not from their section or program area.

Clearly, whereas some students felt very welcome and a part of the OSU academic community, some felt their transition into the academic community was difficult. Taken together, responses to questions 2 and 3 signify recognition of the value of having someone, even just one person, let students know they are not alone. Some students cited a single phone call from an advisor, a single informal tour of the building by another doctoral student, or general interactions with groups of other students as making a positive impact on their transition.

Formal support programs were often mentioned as helpful, again reinforcing the notion that the quality of interpersonal relationships plays an important part in the doctoral students' ratings of their experiences. Specific programs mentioned included MSaTers, the Office of Diversity and Outreach, ITL's Pro-seminar, the Office of International Education, and cultural groups in the community outside the university.

Question 4: Overall, what do you see as the strengths of your doctoral program?

The vast majority of respondents reported that a major strength of the program was the knowledgeable, skilled, and dedicated faculty. Students noted that available professors were helpful, well qualified, and dedicated. Other reported strengths included flexible coursework and interdisciplinary course options, the reputation of the College/program/faculty, and the opportunity to collaborate on research projects. Three respondents reported that the program had no strengths.

Question 5: What are areas for improvement?

Respondents were most vocal in making suggestions for improving the programs. The most common comment was that there were not enough faculty to support doctoral students. Time and time again, respondents reported that the sections/program areas needed more faculty. Other comments suggested that there were a variety of communication problems. Still other respondents called for a more diverse faculty, more contact with doctoral students who were at different points in the program, more mentoring, better faculty, more community building among students, more classes offered each quarter, more coursework in research methods, stronger orientation programs, better sequencing of entry courses, and more opportunities to work more with faculty on research.

Question 6: Any other general comments?

Less than one-half of respondents offered additional comments. A few respondents made the case that part-timers were missing out on what the programs offered. Several reported that they liked their program, liked the seminar format, and found the faculty helpful. One suggested that the School build on-line discussion groups and create websites for interaction. Another wanted each program to include "an international point of view." One respondent found her or his section to be understaffed, and another found it "too sterile."

In summary ... a consistent theme in students' responses to the survey is that relationships play a crucial role in recruiting students, supporting their transition into the program, and enhancing the quality of their experience. School faculty members are doing a fairly good job in terms of helping students but we can do better. Again and again, students made reference to relationships in response to our questions about the quality of their doctoral student experiences. Specific areas identified as needing attention were making personal contact with students during the recruiting process (once students are admitted into the program), providing formal and informal support systems to aid their transition into doctoral study, fostering community among doctoral students, and mentoring students around research and scholarship. Responses to questions concerning strengths as well as areas for improvement all indicated that it was interpersonal relationships among students and faculty that were a priority for our students in terms of making their experiences meaningful.

6. Office of Diversity and Outreach

Members of the Committee met with Dr. Robert Ransom, Director of the Office of Diversity and Outreach, to discuss his experience and perspective on recruitment and retention of doctoral students of color. Dr. Ransom noted that the OSU College of Education has a good reputation as far as recruitment of students of color is concerned. Based on his experience, in his judgment, the factors that are important in the recruitment and retention of students of color are:

- developing personal contacts and relationships with prospective students;
- providing a supportive environment to ensure successful enrollment and completion; and
- provision of financial assistance.

As a means of developing personal contacts and relationships with prospective students, Dr. Ransom described how his office visits several historically Black colleges and universities each year to actively recruit students. He noted, however, that this was not necessarily the best way of recruiting *doctoral* students; these recruitment fairs target undergraduate students who are interested mostly in pursuing master's degree. Nevertheless, visits to these recruitment fairs have proven beneficial in recruiting faculty and instructors from these colleges and universities who are interested in pursuing doctoral degrees. OSU College alumni, who are now faculty of color at other colleges and universities, might also be a good resource for referring prospective doctoral students of color to us.

As a means of providing a supportive environment to ensure successful enrollment and completion, Dr. Ransom described Project PROFS (Providing Research Opportunities for Future Scholars). This is a 3-year academic, cultural, and professional development program for new Ph.D. students of color. It serves cohorts of 5-10 students. This appears to be a very effective means of supporting students of color; the key to its success seems to be provision of a supportive environment to nurture relationships among students within the cohort as well as relationship between students and faculty. It supports an apprenticeship into research and scholarship' for students of color. Unfortunately, funding for this program might end in June, 2003.

Students of color not only need cultural support, they also need support for their research interests. PROFS help forge connections between student and faculty with similar research interests; hence, it is also beneficial to make more visible the research interests of faculty generally. Web pages and pro-seminars can serve this function, though pro-seminars do not afford the cross-year mentoring that PROFS communities provide.

In summary ... strategies for addressing the needs of minority students are not that different from those that might usefully be applied with all students; however, they may need to be implemented more intensively and more sensitively with minority students. Again, personal contacts and relationships were found to be important in the recruitment process, and peer and institutional support, as well as financial support, were seen to be important in nurturing students through to completion of their degrees.

8. Discussion

From the Committee's findings, we can identify strengths and weaknesses of the doctoral program in the School of Teaching and Learning with respect to the five stages of the doctoral student experience outlined in our introduction. It is evident the School is doing a creditable job recruiting students to apply to our doctoral program (though more is almost always desirable), and a good job supporting students in their program through to graduation. On the latter point, we note that responses from students to our quantitative and qualitative surveys converged on the finding that our "knowledgeable, skilled, and dedicated" faculty are perceived as doing a good job nurturing students, and providing for flexibility in course options and a range of student interests.

However, the School needs to do a much better job in the areas of encouraging students to accept offers of admission to the doctoral program, enhancing their transition into doctoral study, and enhancing their quality of life in the program. We note, in particular, that we are losing 30% to 40% of admitted applicants; approximately half of admitted applicants do not appear to have been personally contacted by OSU offices after admission and prior to starting their program; and a third of enrolled students feel that their transition into the academic community was difficult. In terms of quality of life and the overall tenor of our doctoral program, most points of departure from the prototypical model of the ideal Ph.D. program were in research-related areas with manifest needs for more research-related funding to support doctoral students, development of a community of inquiry among doctoral students and faculty, and provision of more opportunities for mentoring in research and scholarship. As indicated earlier, if an exemplar program is the equivalent of a robin, our Ph.D. program might be described as "a chicken at best."

Moreover, there is a high degree of congruence among findings as to what we can do to address these weaknesses. Major themes emerging from our review of the literature and our quantitative and qualitative surveys were: personal contact from faculty or others in the School is a major factor influencing students' decisions to accept offers; peer or institutional (e.g., MSATers, Office of Diversity and Outreach, IEO) support greatly helps new students' transition into their doctoral studies; and having some form of community of inquiry around research and scholarship is important in enhancing the quality of life of doctoral students.

With respect to establishing communities of inquiry, we are hesitant to prescribe a model for all sections/program areas. We note, however, that a variant of the PROFS model might be applied to supporting new Ph.D. students. A variant of PROFS, provided it is perceived by students as viable and beneficial given their busy schedules, might be a very helpful means of fostering research communities/communities of learners for all Ph.D. students.

The Committee took it as a "given" that late or ambiguous notification of financial support for prospective Ph.D. students was a definite impediment to recruitment. The importance of financial assistance for doctoral students emerged in almost every area the Committee examined. Indeed, the single most important activity for building the research culture necessary to join the ranks of exemplary Ph.D. programs is seeking large, programmatic research grants that extend over several years. Such grants provide long-term research-related funding for associateships, foster a research ethos, and help build communities of inquiry that support students' apprenticeship into research and scholarship.

9. Recommendations

1. *How do we recruit more students to apply to our Ph.D. program?*

- 1.1 *Highlight the backgrounds and research interests of faculty in all brochures, web sites, and recruitment booths, and provide opportunities for personal contact with faculty (e-mail addresses and/or phone numbers). In addition, describe the reputation of the institution and program, the flexibility of the program and class schedules, availability of financial assistance, and facilities and services.
- 1.2 *Encourage prospective students to visit campus and, during the visit, allow them to interact with current doctoral students. Prospective students in this early stage of role acquisition are looking to see how current role incumbents interact and how faculty interact with the current role incumbents.

2. *How do we encourage students to accept offers of admission to our Ph.D. program?*

- 2.1 ***Faculty are advised to e-mail or phone students who have been admitted to the Ph.D. program to address questions of funding, program, resources, etc. Offer to put prospective students in contact with current doctoral students in their program areas.
- 2.2 ***Give early notification of guaranteed financial support, preferably multi-year support, for PhD students applying to the School. Known resource pools from which the School could make timely and guaranteed offers of support include:
 - i) *A fixed allocation from the School's annual rate specials budget to be set aside for support of Ph.D. students.* There is a higher degree of certainty about this budget and a conservative allocation of money for support of Ph.D. students would allow offers to be made at almost any time in the year. The Committee noted that making provision for even a small number of prospective students (e.g., 3) would make a dramatic improvement in current procedures.
 - ii) *University Fellowships.* Applications from Ph.D. students are due January 1. The School needs to notify prospective Ph.D. students of these Fellowships, via web sites and other informational material, and remind them to apply before the deadline.
 - iii) *Undergraduate course teaching.* Some sections of the School have undergraduate courses that can be taught by Ph.D. students (e.g., EDU T&L 460, 467, 633, 668, 669). Some sections of the School run multiple sections every quarter. These courses constitute a resource pool from which offers to Ph.D. students can be made. With re-engagement in undergraduate education, and experience with these courses, the School should be able to make firmer projections of enrollments in these courses and, hence, of the opportunities for doctoral students.
 - iv) *Field supervision of M.Ed. cohorts.* As with undergraduate course teaching, field supervision can be undertaken by Ph.D. students and should be thought of as another resource pool.

- v) *Multi-year research grants from federal and state agencies and private foundations.* Large grants provide opportunities to support Graduate Research Associates on a long-term basis.
- vi) *Research Training Grants from the Spencer Foundation.* Several benchmark institutions are able to make early guarantees of financial support for doctoral students because they have been awarded block ‘Research Training Grants’ from the Spencer Foundation. These grants are by invitation only and no new proposals are being sought at this time. However, this opportunity should be monitored as a source of funding in the future.

3. *How do we enhance students’ transition into doctoral study?*

- 3.1 ***Advisors should call students on arrival or otherwise arrange for early contact, arrange for an informal tour of the building(s) and facilities (including computer facilities and technology support), and help the new student make connections with other doctoral students. Admitting students when their designated advisor is off-quarter can cause difficulties in students’ transitions into their programs, and alternative arrangements need to be made in these circumstances.
- 3.2 ***Sections/program areas should provide a formal support structure for new students. Sections/program areas might wish to use existing support systems (e.g., MSaTers, Office of Diversity and Outreach programs, ITL’s Pro-seminar, Office of International Education programs) or create new structures tailored to particular areas (such as the research communities/communities of inquiry described in 5.4)

4. *How do we best support doctoral students in their program through to graduation?*

- 4.1 **Continue to provide opportunities for students to engage with faculty and coursework representing a range of disciplinary perspectives.
- 4.2 **Continue to provide programs with flexible course options.
- 4.3 **Faculty and staff to continue to provide a caring and supportive environment for students.

5. *How do we enhance students’ quality of life in our doctoral program?*

- 5.1 **Encourage students to consider full-time enrollment in the Ph.D. program, personal, financial, and family needs permitting. Where this is not possible, be proactive in keeping part-time students engaged in the research culture and activities of the School.
- 5.2 ***Provide more research-related funding to support doctoral students, preferably groups of students working around a common theme or mission. Providing opportunities for students to collaborate on research and scholarship in a collegial environment, and actively recruiting students to these opportunities, enables the cognitive apprenticeship and mentoring necessary for inculcation of the norms and values appropriate to their soon-to-be-acquired roles as scholars and colleagues.

- 5.3 **Provide attractive, comfortable communal spaces in each building where faculty and graduate students can mix.
- 5.4 ***Sections/program areas need to foster formal research communities/communities of inquiry in ways that meets the needs of students in their respective areas. These communities might be groups of students working around a common theme or mission relevant to a funded research project (as in 5.2 above), or they might be communities of inquiry along the lines of the PROFS model. These research communities/communities of inquiry need to provide a supportive environment to nurture relationships among students within and across cohorts, to forge connections between student and faculty with common research interests, and to support students' apprenticeship into research and scholarship.

Key

Asterisks prefacing each recommendation represent the Committee's degree of confidence that its implementation will have a positive, meaningful impact based on the warrant for the recommendation in the Committee's findings.

- * moderate
- ** high
- *** very high

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APPENDIX A

E-mail to faculty

The School of Teaching and Learning has a Ph.D. Committee looking into the quality of the doctoral student experience in the School with a view toward improving the experience and recruiting additional doctoral students. The Committee requests your assistance in determining the quality of life of students in our doctoral programs and identifying factors that would best support our efforts to recruit students in the future.

The 13 features listed in the attachment have been judged by a sample of your peers to be very important in a doctoral program. Please assist us in determining the presence or absence of each of these features in our doctoral program in the School of Teaching and Learning.

Please **complete and print a hard copy** of the attached questionnaire and return it to one of the section offices listed below **by April 26**. The surveys are anonymous.

LLC: 200b Ramseyer office (Carol)
MSaT: 249 Arps office (Helen)
ITL: 210a Arps office (Dawn)
Technology Education: 1100 Kinnear Road office (Eileen)

Thank you for your assistance!

The Ph.D. Committee
(Chris Andersen, Diana Erchick, Tom O'Brien, Anita Roychoudhury, Vladimir Sloutsky,
William Jones, Trish Bandre, Doug Owens, Ian Wilkinson)

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**Ph. D. Committee
Faculty Questionnaire**

Please identify your section: ___ ITL ___ LLC ___ MSaT

- a. The cognitive apprenticeship or mentoring afforded by opportunities to work closely with faculty on research and scholarship.
Completely absent = 1 2 3 4 5 = Abundantly present
____: Your rating
- b. Having a critical mass of full-time doctoral students.
Completely absent = 1 2 3 4 5 = Abundantly present
____: Your rating
- c. Faculty and staff with a range of disciplinary perspectives.
Completely absent = 1 2 3 4 5 = Abundantly present
____: Your rating
- d. A well-funded research environment with a common and readily identifiable mission.
Completely absent = 1 2 3 4 5 = Abundantly present
____: Your rating
- e. Common spaces where faculty and graduate students mix.
Completely absent = 1 2 3 4 5 = Abundantly present
____: Your rating
- f. Flexible course program.
Completely absent = 1 2 3 4 5 = Abundantly present
____: Your rating
- g. Opportunities to gain research and teaching experience through a range of associateships.
Completely absent = 1 2 3 4 5 = Abundantly present
____: Your rating
- h. A community of inquiry that includes faculty and students.
Completely absent = 1 2 3 4 5 = Abundantly present
____: Your rating
- i. Ready access to computers and other technology.
Completely absent = 1 2 3 4 5 = Abundantly present
____: Your rating
- j. Ongoing/regular financial support for students.
Completely absent = 1 2 3 4 5 = Abundantly present
____: Your rating
- k. A research culture/ethos.
Completely absent = 1 2 3 4 5 = Abundantly present
____: Your rating
- l. A community of doctoral students and collaboration among them.
Completely absent = 1 2 3 4 5 = Abundantly present
____: Your rating
- m. Caring and supportive faculty.
Completely absent = 1 2 3 4 5 = Abundantly present
____: Your rating

APPENDIX B

E-mail to students

Dear Doctoral Student in {section}:

The School of Teaching and Learning has a special Ph.D. Committee looking into the quality of the doctoral student experience in the School with a view toward improving the experience and recruiting additional doctoral students. The Committee requests your assistance in determining the quality of life of students in our doctoral programs and identifying factors that would best support our efforts to recruit students in the future.

Please **complete and print a hard copy** of the attached questionnaire, **staple the pages together**, and return the questionnaire to one of the section offices listed below **by April 26**. The surveys are anonymous.

LLC: 200b Ramseyer office (Carol)
MSaT: 249 Arps office (Helen)
ITL: 210a Arps office (Dawn)
Technology Education: 1100 Kinnear Road office (Eileen)

A final copy of our report will be made available. Thank you for your assistance!

The Ph.D. Committee
(Chris Andersen, Diana Erchick, Tom O'Brien, Anita Roychoudhury, Vladimir Sloutsky,
William Jones, Trish Bandre, Doug Owens, Ian Wilkinson)

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5. This section of the survey lists 13 features that have been judged by a sample of your peers to be very important in a doctoral program. Please assist us in determining the presence or absence of each of these features in your doctoral program in the School of Teaching and Learning.

a. The cognitive apprenticeship or mentoring afforded by opportunities to work closely with faculty on research and scholarship.

Completely absent = 1 2 3 4 5 = Abundantly present

____: Your rating

b. Having a critical mass of full-time doctoral students.

Completely absent = 1 2 3 4 5 = Abundantly present

____: Your rating

c. Faculty and staff with a range of disciplinary perspectives.

Completely absent = 1 2 3 4 5 = Abundantly present

____: Your rating

d. A well-funded research environment with a common and readily identifiable mission.

Completely absent = 1 2 3 4 5 = Abundantly present

____: Your rating

e. Common spaces where faculty and graduate students mix.

Completely absent = 1 2 3 4 5 = Abundantly present

____: Your rating

f. Flexible course program.

Completely absent = 1 2 3 4 5 = Abundantly present

____: Your rating

g. Opportunities to gain research and teaching experience through a range of associateships.

Completely absent = 1 2 3 4 5 = Abundantly present

____: Your rating

h. A community of inquiry that includes faculty and students.

Completely absent = 1 2 3 4 5 = Abundantly present

____: Your rating

i. Ready access to computers and other technology.

Completely absent = 1 2 3 4 5 = Abundantly present

____: Your rating

j. Ongoing/regular financial support for students.

Completely absent = 1 2 3 4 5 = Abundantly present

____: Your rating

k. A research culture/ethos.

Completely absent = 1 2 3 4 5 = Abundantly present

____: Your rating

l. A community of doctoral students and collaboration among them.

Completely absent = 1 2 3 4 5 = Abundantly present

____: Your rating

m. Caring and supportive faculty.

Completely absent = 1 2 3 4 5 = Abundantly present

____: Your rating

Please return the questionnaire in hard copy to a section office

THANK YOU!