

Welcome to the National Research Council's

2006 Assessment of Research Doctorate Programs Admitted-to-Candidacy Doctoral Student Questionnaire

This questionnaire is part of the National Research Council's **2006 Assessment of Research Doctoral Programs**. The National Research Council (NRC) is the operating arm of the National Academy of Sciences, an institution that conducts studies on issues relevant to questions of importance to educational, scientific and technological policy. Its reports are highly respected and have important impact on national and institutional policymakers.

This is the first NRC assessment of doctoral programs in over ten years. The study is an effort to gather data about doctoral programs nationwide and provide data that will be helpful to students, faculty, administrators and those who make educational policy.

For the first time, the assessment is including a survey of doctoral students. By completing this questionnaire, you provide information that will: (1) bring a student perspective to the study; (2) permit a statistical description of the advanced doctoral students in your field, and (3) help the NRC identify the multiple dimensions of successful graduate programs.

Further information about the assessment may be found at www7.nationalacademies.org/resdoc/index.html. This site also has a list of Frequently Asked Questions and contains an Email link for submitting questions you might have about the study or the questionnaire.

As a graduate student, this is an important opportunity for you to be heard on issues related to graduate education, both in your program and in general. If you and your fellow students respond at a high rate, the results will provide important information about and to your program that will help facilitate change in graduate education at the program level.

Your responses to this online questionnaire will be entered directly into our database and treated as completely confidential by the NRC. Your individual answers will not be shared with faculty or administrators of your doctoral program. Any data, including race/ethnicity and gender, that is not currently available to the public will only be used in aggregated form that cannot be used to discern the identity of any survey participant in any report or presentation concerning the survey or in the public use file that will be made available to the public at the conclusion of this study. The link between your name and the data you provide will be removed prior to the publication of the public use file. In the case of questions with an open-ended response, comments will be reported only in an anonymous form that does not disclose the identity of the respondent.

Your participation is voluntary. You may refuse to answer any question or discontinue participation at any point. There is no personal risk to you in responding to this questionnaire since your identity will be known only to the National Research Council and Mathematica Policy Research. No information concerning respondents will be given to your institution. If you have any questions related to the study or this questionnaire, please send an email to **NRC-Assessment@mathematica-mpr.com**

Please click here to indicate your informed consent to participate in this study ☐

Part A. Education

The questions in this section are designed to collect information on your education and how you have been financially supported during your doctoral program.

A1. When did you first enroll in this doctoral program?

Month Year

A2. When were you admitted to candidacy for the doctorate?

Month Year

A2a. Please record your primary area of specialization. Then, using the drop down list, please select the field that comes closest to describing or including your primary area of specialization.

**Primary Area
of Specialization:** _____

(Drop down Taxonomy list – including subfields) _____

A2b. Please record any additional areas of specialization you currently have. Then, using the drop down list, please select the field that comes closest to describing or including that additional area of specialization.

IF NONE: MARK THIS BOX: ☐

1. Area of Specialization: _____

(Drop down list of Taxonomy fields and subfields)

2. Area of Specialization: _____

(Drop down list of Taxonomy fields and subfields)

3. Area of Specialization: _____

(Drop down list of Taxonomy fields and subfields)

A3. When do you expect to be awarded your doctorate?

Month Year

A4. Before entering this doctorate program, had you already completed a master's degree in:*Mark Yes or No for Each*

	Yes	No
a. Your current field?.....	<input type="checkbox"/>	<input type="checkbox"/>
b. Another field - specify:.....	<input type="checkbox"/>	<input type="checkbox"/>

A5. While studying for your doctorate, will you also receive any of the following as part of a joint, concurrent, or combined degree program:*Mark Yes or No for Each*

	Yes	No
a. Professional doctorate (e.g., MD, DDS, OD, JD)?.....	<input type="checkbox"/>	<input type="checkbox"/>
b. Professional master's degree (e.g., MBA, MPA, MPH, PSM)?.....	<input type="checkbox"/>	<input type="checkbox"/>
c. Master's degree in your current doctoral program?.....	<input type="checkbox"/>	<input type="checkbox"/>
d. Master's degree in a different field?.....	<input type="checkbox"/>	<input type="checkbox"/>

*Ask A6 if any "yes" responses to A4 or A5c or A5d***A6. Did you write a master's thesis?**

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No

A7. While studying for the doctorate, will you receive a certificate in another field or skill area?

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No

A8. While in your program, how many research presentations (including poster presentations) have you made at:

Number
If None: Enter Zero

a. Research conferences on your campus (including other units of a multi-campus system)?.....	<input type="checkbox"/>	<input type="checkbox"/>
b. At regional, national, or international meetings?.....	<input type="checkbox"/>	<input type="checkbox"/>

A9. Have you received travel funds for research presentations at regional, national, or international meetings?

- ☐ Yes
☐ No (*skip to A11*)

Ask A10 if A9 = yes

A10. From which of the following sources have you received travel funds for research presentations?

IF NOT KNOWN: MARK THIS BOX: ☐

Mark up to three

- ☐ National Fellowship
☐ Traineeship
☐ Professional Society
☐ Graduate program
☐ University or school/college
☐ Extramural grant
☐ Other – Specify source: _____

A11. How many research publications have you authored or coauthored before and during your doctoral studies (include pieces accepted for publication but not yet published)?

	Before Doctoral Studies	During Doctoral Studies
a. Refereed articles.....	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
b. Book chapters.....	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
c. Book reviews.....	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
d. Books or edited volumes.....	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

If None: Mark Here

☐
☐

A12. Which of the following have been your largest sources of financial support during your doctoral program?

Mark up to three sources

- ☐ National Fellowship/Scholarship
- ☐ Institutional Fellowship/Stipend
- ☐ Traineeship
- ☐ Teaching assistantship (TA)
- ☐ Research assistantship (RA)
- ☐ Other assistantship (e.g., general assistantship)
- ☐ Internship, clinical residency
- ☐ Personal earnings during graduate school (other than sources listed above)
- ☐ Loans (from any source)
- ☐ Personal savings
- ☐ Spouse's, partner's, or family earnings or savings
- ☐ Employer's reimbursement/assistance
- ☐ Foreign (non-U.S.)
- ☐ Other – Specify source: _____

Ask A13 if any of the first 7 categories in A12 are checked

A13. If you had a fellowship, scholarship, traineeship, or assistantship, with what degree of support did it provide you?

Mark one only

- ☐ Full
- ☐ Partial

Part B: Postgraduation Plans

The questions in this section are designed to collect information on your career plans and whether and how they have changed over time.

B1. When you entered your doctoral program, what were your primary and secondary career goals?

Mark One in Each Column
Primary Secondary

- | | | |
|--|--------------------------|--------------------------|
| a. Research and development..... | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Teaching..... | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Management or administration..... | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Professional services to individuals..... | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Other – Specify goal:..... | <input type="checkbox"/> | <input type="checkbox"/> |

If No Secondary Career Goals: Mark this Box

☐

B2. At this time, what are your primary and secondary career goals?

Mark One in Each Column
Primary Secondary

- | | | |
|--|--------------------------|--------------------------|
| a. Research and development..... | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Teaching..... | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Management or administration..... | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Professional services to individuals..... | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Other - specify:..... | <input type="checkbox"/> | <input type="checkbox"/> |

If No Secondary Career Goal: Mark this Box

☐

B3. Do you feel supported by your advisor in your current career goals?

- ☐ Yes
☐ No
☐ Not Certain

B4. When you entered your doctoral program, for what type of employer did you believe you would work when you graduated?

Mark one only

EDUCATION

- ☐ U.S. 4-year college or university other than medical school
- ☐ U.S. medical school (including university-affiliated hospital or medical center)
- ☐ U.S. university-affiliated research institute
- ☐ U.S. community college or technical institute
- ☐ U.S. preschool, elementary, middle, secondary school or school system
- ☐ Non-U.S. educational institution

GOVERNMENT (other than education institution)

- ☐ Foreign government
- ☐ U.S. federal government
- ☐ U.S. state government
- ☐ U.S. local government

PRIVATE SECTOR (other than education institution)

- ☐ Not-for-profit institution
- ☐ U. S. based industry or business (for profit)
- ☐ Non-U.S. based industry or business (for profit)

OTHER

- ☐ Self-employed
 - ☐ Other – Specify sector:
-

B5. At this time, for what type of employer do you expect to work when you graduate?

Mark one only

EDUCATION

- ☐ U.S. 4-year college or university other than medical school
- ☐ U.S. medical school (including university-affiliated hospital or medical center)
- ☐ U.S. university-affiliated research institute
- ☐ U.S. community college or technical institute
- ☐ U.S. preschool, elementary, middle, secondary school or school system
- ☐ Non-U.S. educational institution

GOVERNMENT (other than education institution)

- ☐ Foreign government
- ☐ U.S. federal government
- ☐ U.S. state government
- ☐ U.S. local government

PRIVATE SECTOR (other than education institution)

- ☐ Not-for-profit institution
- ☐ Industry or business (for profit)
- ☐ Non-U.S. based industry or business (for profit)

OTHER

- ☐ Self-employed
 - ☐ Other – Specify sector:
-

Part C: Program Characteristics

We are interested in the characteristics of your program and your perception of the program's quality.

- C1. Did your institution or graduate program provide you with an orientation when you matriculated?

☐ Yes
☐ No

- C2. When you entered your doctoral program, did the program provide you with written expectations (e.g., a handbook) about academic progress?

☐ Yes
☐ No

- C3. During your doctoral program, have you or will you participate in formal (e.g., school- or program-sponsored class or seminar) or informal (e.g., individual conversations with mentor) instruction, practice or professional development training in:

Mark one for each activity

	Formal Only	Informal Only	Both Formal and Informal	Neither
a. Oral communication and presentation skills?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Speaking to nonacademic audiences?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Writing proposals for funding?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Preparing articles for publication?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Working in collaborative groups?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Conducting independent research/scholarship?..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Project management?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Research/professional ethics?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Teaching/pedagogy?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Supervision and evaluation?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. Preparation for job interviews?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

C4. During your doctoral program have you, or do you, expect to:

Mark Yes or No for each

	Yes	No
a. Mentor or tutor a high school student?.....	<input type="checkbox"/>	<input type="checkbox"/>
b. Mentor or tutor an undergraduate student?.....	<input type="checkbox"/>	<input type="checkbox"/>
c. Mentor or tutor a graduate student?.....	<input type="checkbox"/>	<input type="checkbox"/>
d. Grade papers for undergraduate or graduate courses?.....	<input type="checkbox"/>	<input type="checkbox"/>
e. Lead discussion sections of undergraduate or graduate courses?..	<input type="checkbox"/>	<input type="checkbox"/>
f. Lead laboratory sections of undergraduate or graduate courses?...	<input type="checkbox"/>	<input type="checkbox"/>
g. Guest lecture in undergraduate or graduate courses?.....	<input type="checkbox"/>	<input type="checkbox"/>
h. Teach a course based on a previously set curriculum?.....	<input type="checkbox"/>	<input type="checkbox"/>
i. Teach a course based on a curriculum you developed?.....	<input type="checkbox"/>	<input type="checkbox"/>

C5. Other than course grades, does your program provide an annual or more frequent assessment of your academic progress? (examples: a letter from the program, a meeting with your dissertation committee)

- ☐ Yes
☐ No (*skip to C7*)

Ask C6 if C5 = Yes

C6. Are these assessments helpful?

- ☐ Yes
☐ No

C7. Have you begun your doctoral dissertation research?

- ☐ Yes
☐ No (*skip to C10*)

Ask C8 if C7 = Yes

C8. Have you received timely feedback on this research?

- ☐ Yes
☐ No (*skip to C10*)

Ask C9 if C8 = Yes

C9. Has this feedback been helpful?

- ☐ Yes
☐ No

C10. Are there one or more faculty members at your institution whom you consider as mentors, either in your program or external to it?

- A **mentor** is an individual from whom you seek advice about your education, career development or other matters of concern to you as a graduate student

Mark Yes or No for each

	Yes	No
a. I have a mentor in my program.....	<input type="checkbox"/>	<input type="checkbox"/>
b. I have a mentor external to my program.....	<input type="checkbox"/>	<input type="checkbox"/>

C11. Do you have access to career advice?

- ☐ Yes
☐ No (skip to C16)

Ask C12 if C11 = Yes

C12. Have you taken advantage of the opportunity for career advice?

- ☐ Yes
☐ No (skip to C16)

Ask C13 and C14 if C12 = Yes

C13. Who has provided the advice?

Mark all that apply

- ☐ An individual who serves as both advisor and mentor
☐ Advisor
☐ Mentor
☐ Graduate program director/coordinator
☐ Program staff
☐ University-wide career office
☐ Other – Specify who advised you:

C14. Does the advice cover a variety of employment sectors (e.g., employment outside of academic institutions)?

- ☐ Yes
☐ No
☐ Don't Know

C15. Which source of career advice did you find most helpful?

Mark one only

- ☐ An individual who serves as both advisor and mentor
☐ Advisor
☐ Mentor
☐ Graduate program director/coordinator
☐ Program staff
☐ University-wide career office
☐ Other – Specify most helpful source:
-

C16. On a scale of 1 to 5 where 1 is distant and 5 is interactive, how would you characterize your overall relationship with:

Mark one for each category

	Highly Interactive, Supportive		Neutral		Distant, Antagonistic or Hostile
	5	4	3	2	1
a. your faculty advisor?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. the faculty in your program?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

C17. On a scale of 1 to 5, how supportive are students in your program of one another?

Mark one only

- ☐ 5 Very supportive
☐ 4
☐ 3 Somewhat supportive
☐ 2
☐ 1 Not supportive

C18. Does your program encourage students to interact with faculty outside of your program?

- ☐ Yes
☐ No

C19. Thinking about your doctoral program, how satisfied are you with the quality of the:*Mark one for each category*

	Very Satisfied	Somewhat Satisfied	Not Satisfied
a. Teaching by the faculty?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. The dissertation supervision?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Your research experience in the program?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Your program's curriculum?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. The <u>overall</u> quality of the program?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

C20. How much do you feel you have benefited from the:*Mark one for each category*

	A Lot	Some	Not At All
a. Intellectual environment of your program?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Intellectual environment of your institution?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

C21. How satisfied are you with the quality of program-sponsored activities designed to promote social interaction of students with faculty and with other students?

- ☐ Very satisfied
☐ Somewhat satisfied
☐ Not satisfied

C22. How much do you feel you belong to your program?

- ☐ A lot
☐ Some
☐ Not at all

C23. In the space below, please provide any additional comments you would like to make about your doctoral program, its characteristics or quality:

Part D: Resources

We are interested in your perception of the adequacy of the resources available to you for your graduate work and dissertation research.

D1. Thinking about your graduate education and dissertation research, please rate the adequacy of the support that has been available to you in each of the following areas:

Mark one for each category

	Excellent	Good	Fair	Poor	Not Applicable	Don't Know
a. Computer resources?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Other research, laboratory, clinical or studio facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Library resources?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Your on campus personal work space?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Space available for social interaction among students in your program (e.g., coffee nook, lunch room)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. University-provided housing or housing support?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. University-provided child care facilities or child care support?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. University recreational/athletic facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Healthcare and/or health services provided by your program or university?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

D2. In the space below, please provide any additional comments you would like to make about program or university resources available to you:

Part E: Background Information**E1. Are you:**

- ☐ Male
☐ Female

E2. What is your marital status?*Mark one only*

- ☐ Married
☐ Living in a marriage-like relationship
☐ Widowed
☐ Divorced
☐ Separated
☐ Never married

E3. Not including yourself or your spouse/partner, how many dependents do you have—that is, how many others receive at least one half of their financial support from you?*If No Dependents: Mark this box:* ☐**Number**

- | | |
|-----------------------------------|---|
| a. 5 years of age or younger..... | <input type="checkbox"/> <input type="checkbox"/> |
| b. 6 to 18 years..... | <input type="checkbox"/> <input type="checkbox"/> |
| c. 19 years or older..... | <input type="checkbox"/> <input type="checkbox"/> |

E4. Including children, elderly parents or others, as appropriate, for how many people are you a primary caregiver?Number: ☐☐**E5. What is the highest educational attainment of your mother and father (or guardian)?***Mark one for each*

- | | Mother | Father |
|---|--------------------------|--------------------------|
| a. Less than high/secondary school graduation..... | <input type="checkbox"/> | <input type="checkbox"/> |
| b. High/secondary school graduate..... | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Some college..... | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Bachelor's degree..... | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Master's degree (e.g., MA, MS, MBS, MSW, etc.)..... | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Professional degree (e.g., JD, LLB, D.Min, MD, DDS, etc.)..... | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Doctoral degree..... | <input type="checkbox"/> | <input type="checkbox"/> |
| h. Not applicable..... | <input type="checkbox"/> | <input type="checkbox"/> |

E6. In what year were you born?

Year of Birth:

E7. What is your citizenship status?

Mark one only

U.S. Citizen

☐ Since birth

☐ Naturalized

Non-U.S. Citizen

☐ With a Permanent U.S. Resident Visa ("Green Card")

☐ With a Temporary U.S. Visa

E8. Are you Hispanic (or Latino)?

☐ Yes

☐ No (*skip to E10*)

E9. Which of the following best describes your Hispanic origin or descent?

Mark one only

☐ Mexican or Chicano

☐ Puerto Rican

☐ Cuban

☐ Other Hispanic – Specify Hispanic descent:

E10. What is your racial background?

Mark all that apply

☐ American Indian or Alaska Native

☐ Native Hawaiian or other Pacific Islander

☐ Asian

☐ Black or African-American

☐ White

Thank you for your time!

Admitted to Candidacy Student Questionnaire Question Rationale

General Rationale for Questionnaire

The data collected from the student questionnaire will provide important information for prospective students seeking to compare programs within a field; academic administrators seeking to examine program quality within a field, within an institution, or across institutions; and education policy researchers seeking to explore changes or potential changes in doctoral education and their implications.

Since this is the first time a student questionnaire has been administered as part of the Assessment of Doctoral Programs, its administration will be limited to five fields: English, economics, chemical engineering, physics, and neuroscience/neurobiology.

Part A. Education

The questions in this section are designed to collect information on your area of research, your educational progress and financial support.

Time to Degree: Questions 1-3 obtain data on when you enrolled, what your research specialty is, when you were admitted to candidacy and when you expect to complete. In combination with completion data provided by programs, these data will provide a picture of how students progress through their programs.

Post-Baccalaureate Credentials: Questions 4-8 obtain data on the master's and other degrees and certificates you may have obtained before or en route to the doctorate. This information provides a fuller picture of the post-baccalaureate credentials that students in a given program obtain in order to matriculate into a program or to prepare themselves for their career.

Research Opportunity: Questions 9-10 obtain data on the number of research publications you may have written and presentations given. These data provide an indication of the research experiences that students obtain in a program and offer an indicator of the extent to which students are encouraged to develop their own research interests and skills

Financial Support: Questions 11-13 obtain information on the level and type of financial support that students in a program have. This information, in combination with other data on the program and institutional questionnaires, will provide valuable information on financial support.

Part B: Postgraduation Plans

The questions in this section are designed to collect information on the career plans and goals of doctoral students and whether and how they have changed over time.

Career Goals: Questions 1-2 obtain data on career goals both when the respondents entered the program and now. Similarly, questions 4-5 obtain data on the type of employer the respondents expected to work for when they entered their program and now. These questions will provide a picture of the kinds of career goals students in different programs have and how they change over time.

Faculty Support for Career Goals: Question 3 is designed to obtain information on how supportive faculty are of students who seek a variety of career aspirations, particularly those outside of academia.

Part C: Program Characteristics

This section obtains data on program characteristics and the respondent's perception of program quality.

Career Skills: Numerous reports, beginning with the COSEPUP's *Reshaping the Graduate Education of Scientists and Engineers* (1995), have advocated that graduate students learn a variety of career skills in addition to the substance of their discipline. Question 1 will collect data on the opportunity to acquire written and oral communication skills, proposal writing, teamwork, independent research, project management, ethics, pedagogy, and others. Question 2 focuses more specifically on opportunities to acquire teaching skills and experience.

Academic Progress: Questions 3-8 and 14 collect data on how students acquire information about the expectations of their program for academic progress and the kinds and quality of feedback on their progress that they receive.

Mentoring and Career Counseling: The availability of a mentor has been identified as an important key to success in graduate education. Question 9 asks whether respondents have a faculty member they consider a mentor. The availability of career advice—particularly advice that covers the range of potential employment sectors is important potentially for both student retention and career preparation. Questions 10-13 obtain data on the availability and source of career advice for doctoral students. Question 15 also asks respondents about the quality of the relationships they have with their advisors.

Social Integration: Barbara Lovitts' book, *Leaving the Ivy Hall*, identified the degree to which a student feels part of a department as a critical factor in determining whether a student completes a doctoral program. Questions C15, C16, C17, C18, C20, C21, and D1 collect data on the degree to which students feel supported by faculty and peers, have opportunities to interact with faculty and students, and the quality of the interaction.

Program Quality: Questions 19-24 provide respondents with an opportunity to provide their perceptions of program quality (curriculum, research experience, faculty teaching ability, dissertation supervision, and intellectual environment).

Part D: Resources

This section collects data on respondent perceptions of the adequacy of the resources and benefits available for doctoral students.

Education and Research Resources: The availability of adequate resources is important to both the speed and quality of a student's academic progress. Questions 1-4 collect data on respondents' perceptions of the resources available (from the institution or program) to support their education and research. They ask for perceptions of the adequacy of computer resources, research, laboratory, or studio facilities, library resources, and on-campus work-space.

Social Integration: As noted above, the degree to which a student feels part of a department as a critical factor in determining whether a student completes a doctoral program. Question D5, along with other questions, collects data on opportunities for social interaction.

Quality of Life: In addition to financial support and health care benefits, support for doctoral students may also include provision of housing or housing assistance, provision of child care or financial support for child care, and recreational facilities. These pieces of the support package a doctoral student can expect—particularly students with children—may affect the ability of students to matriculate, complete in a timely manner, or complete at all. Questions 6-8 collect data on respondent perceptions of these benefits.

Part E: Background Information

The information collected in this section of the questionnaire will allow analysts to examine the comparative demographics of programs, and also examine how the answers to questions in Parts A-D of the questionnaire may vary across such dimensions as age, gender, race/ethnicity, citizenship status, family background, marital status, and responsibility for dependents. The participation in doctoral education of students from a variety of backgrounds is important to the academic enterprise, the conduct of research, and society in general, so understanding how doctoral education works for students across groups will provide the opportunity to evaluate success to date and areas where further progress is necessary.