REPORT

Survey of Faculty Interaction with Undergraduate Students

West Campus Council Research and Evaluation Committee and Institutional Research and Planning CORNELL UNIVERSITY

Study Protocol

The purpose of the *Survey of Faculty Interaction with Undergraduate Students* (hereafter, the "Faculty Survey") was to understand the nature and frequency of faculty members' out-of-class interactions with undergraduate students, the factors that support or inhibit these interactions, and the impacts of these interactions for faculty members.

The population frame for this study included 1,850 Cornell faculty members. In order to have as broad a representation as possible, we *did not exclude:* instructors and lecturers, faculty on leave, faculty based in graduate colleges, or faculty

66 This survey is a good idea. It is not clear to me just what it will lead to, but I hope that it focuses on encouraging [out-of-class interactions], as well as integration of undergraduate teaching and research. 99

66 I hope that after the half hour I have spent on [this survey], you are able to make useful deductions to help our students. And us too, I guess!! 99 based outside of Ithaca. Before the initiation of the formal study, fifty faculty members were randomly selected to take part in a pilot version of the survey; nineteen of those selected participated in the pilot and contributed significantly to the instrument development. The remaining 1,800 faculty were asked to participate in the final study through emailed invitations and, in many cases, emailed reminders. Data were collected online in February and March of 2004.

Out of the 1,800 faculty members asked to participate, 1,107 completed the survey, for a response rate of 61.6%. Participation rates varied by rank, with 60% each of full and associate professors and 69% of assistant professors responding. Women were slightly more likely to respond than men (65% versus 60%). There were substantial differences in response rates by college, with relatively low response rates in the graduate colleges, such as 45% in the Johnson Graduate School of Management. Across the seven undergraduate colleges, responses rates ranged from 56% (AAP and Hotel) to 72% (Human Ecology).

Measuring Out-of-class Interactions

Two questions on the Faculty Survey are at the heart of our measurement of out-of-class interactions. The first of these two items asked specifically about involvement in university roles which entail significant out-of-class contact with undergraduates:

Q1. In which of the following roles have you been involved with undergraduate students at Cornell? Mark all roles that apply.

The fourteen roles explicitly listed on the instrument ranged from serving as an undergraduate academic advisor to participating in the New Student Book Project to living within an undergraduate dorm as a Faculty-in-Residence. (See Figure 1 on page 2 for a complete listing of roles.) This item also invited faculty to write-in roles otherwise not listed.

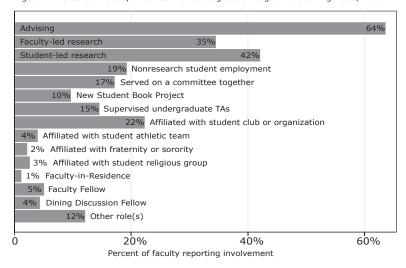
The second of our core items asked about a range of outof-class activities that faculty may engage in with undergraduates whether or not they are involved in positions or roles that imply out-of-class interactions. Specifically, this question asked:

Q6. During the 2003 Fall Term, how often were you involved in the following specific out-of class activities with undergraduate students? [...]

Among the ten activities listed in the instrument were: visiting a café with undergraduates, hosting undergraduates at home, and participating in an extracurricular presentation or workshop with undergraduate students. (See Figure 3 on page 3 for a complete listing of activities.) In addition to the ten activities listed in the survey, respondents could add other activities in three provided blanks.

For each of these domains (university roles and activities), respondents were asked whether or not they were involved in each of the listed roles/activities during the fall 2003 term and, if so, how often. Frequency was measured as "once or twice a term," "once or twice a month," "once a week," and "several times a week or more."

Figure 1. Percent of Faculty Involved with Undergrads through the Following Roles, F'03



- 66 Advising is not just 'important' but a core part of being a CU faculty member. 99
- 66 It is important to me to feel a part of the university, not just part of my department or research program. 99
- 66 I have given back as my professors did for me. 99
- 66 I advise about 25 ugrads about what classes to take, what satisfies degree requirements, etc. This is a complete waste of my time and could be much better handled by a single person or office. 99

University Roles with Out-of-Class Interaction

Nearly two-thirds of participating faculty reported that they had served as undergraduate academic advisors in the fall of 2003 (see Figure 1). This percentage is 75% among tenured or tenure-track faculty in the seven undergraduate colleges.

Among advisors, the mean number of advisees was thirteen, with ten percent having had twenty-five or more advisees. Eighty-six percent of faculty advisors said that they were involved with advising because it was a "departmental assignment." For most faculty, however, this was not the only reason marked. A majority—52%— also indicated that they participated in academic advising because "As an undergraduate, I benefited from this type of interaction with faculty." Many open-ended comments regarding advising evoked a sense of 'doing the right thing', whether in terms of a sense of role obligations or more generally "to make a positive difference in the student experience."

The next two most prevalent roles involved the supervision of a research project, either faculty-directed or a student-conceived project (as through an honors thesis or an independent study). Thirty-five percent of faculty reported supervising undergraduates working on a faculty research project, and a slightly higher percentage reported supervising a student research project. These relationships were not confined to the undergraduate colleges. An assistant professor in the Vet School wrote,

All my interaction with undergraduates has been having them work in my research lab. I have had many students work in my lab each semester and in the summers. It is a wonderful, rewarding experience—they are enthusiastic, motivated and so excited about research that it helps remind me why I love what I do. I had one student tell me that working in my lab (honors thesis her senior year) changed her perspective on Cornell from just being here to feeling like she belonged and had a great university experience because being part of the lab made her feel like she was part of a family. I was honored that she felt that way and hope that I contribute positively to the Cornell experience of many more undergrads in the future!

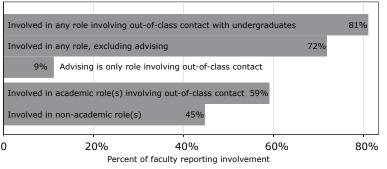
More than twenty-percent of responding faculty indicated that they were affiliated with a student club or organization. Twelve percent of faculty respondents listed other roles involving significant undergraduate contact. These include serving as DUS or departmental chair; coordinating undergraduate honors, fellowship, mentoring or research programs; or serving on a university committee which deals with undergraduates, such as the Committee on Academic Status. Faculty also employ students privately, such as for babysitting.

Aggregating across the diverse roles, eight out of ten responding faculty were engaged in some sort of role involving out-of-class interaction with undergraduates (see Figure 2). These percentages are slightly higher within undergraduate colleges and among tenured or

tenure-track faculty. While a minority of faculty were involved in any given role other than advising, it remains the case that a substantial majority of responding faculty were involved in some sort of university role entailing out-of-class interaction even if we exclude undergraduate advising.

The most common roles involving out-of-class contact are academic in nature (see Figure 2), such as student-led or faculty-led research, supervision of undergraduate TAs, and involvement in the New Student Book Project. "Non-academic" roles in Figure 2 include affiliation with a student organization, service on a committee with undergraduates, or involvement in one of the three "Fellow" programs associated with campus residences.

Figure 2. Percent of Faculty Involved with Undergrads in the Following Types of Roles, F'03

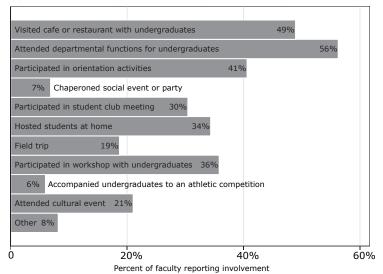


Out-of-Class Activities

Outside of formal university roles, there are many opportunities for faculty to have other kinds of out-of-class interactions with undergraduates. For example, about half of responding faculty reported having visited a café or restaurant with undergraduates in the fall of 2003, and about a third hosted undergraduates in their own home (see Figure 3).

Departments sometimes organize functions (such as "Pizza with the Profs") and 56% of responding faculty indicated that they participated in those types of events in fall of 2003. Four-in-ten participated in some sort of orientation activities that semester.





66It's nice to take your undergraduates out for coffee to discuss high falutin' intellectual stuff, but a middle-aged male professor having coffee with an undergrad female would, or could, raise eyebrows, and both would likely be acutely aware of the potential awkwardness throughout the coffee hour. 99

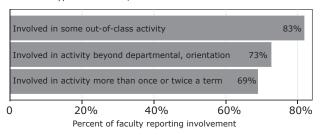
66 Students seem reluctant to have such interactions. Although I try to be informal and casual, the culture seems to make them wary or hesitant about getting together away from class. 99

66I taught a course that met on Monday nights at 7:30. I regularly announced that students were welcome to join my wife and me for dinner at the Law School caféteria. I often got the same 2 or 3 students and only occasionally—by talking-it-up—got as many as 6 students. This was a senior-level course with approx 100 students. 99

66The few times that I have looked into taking part in acting as a faculty host at dinner, it was clear that the organizers made no accommodations for faculty bringing their little kids. 99

Looking across all of the listed activities, 83% reported engaging in at least one out-of-class activity with undergraduates (see Figure 4). This figure is slightly higher in the undergraduate colleges and is also higher among instructional staff of the tenure track: 86% of repondents in the undergraduate colleges and 92% of instructors and lecturers engaged in at least one of the listed activities. Further, most faculty (73%) are engaged in activities beyond departmental functions and orientation (see Figure 4).

Figure 4. Percent of Faculty Involved with Undergrads in the Following Types of Activities, F'03



Respondents were also asked about the frequency of occurrence of these activities. The modal frequency for any given individual activity was "once or twice a term" (see Table 1).

While few faculty engage in any single activity with a high frequency, it is clear that a majority of faculty—69%— were doing some collection of out-of-class activities adding up to *more than* once or twice a term (see Figure 4).

Table 1. Frequency of Participation among Faculty Involved in the Following Activities, F'03

| | Percent of faculty engaged in out-of-class activities who participated | | | | | |
|-----------------------------|--|-----------------------------|---------------------------|--|--|--|
| Activity | Once or twice a term | Once or twice a month | Once a week or more | | | |
| Visited café or restaurant | 63 | 22 | 15 | | | |
| Attended dept. functions | 81 | 15 | 4 | | | |
| Participated in orientation | 94 | 4 | 1 | | | |
| Chaperoned social event | 87 | 11 | 1 | | | |
| Participated club meeting | 67 | 21 | 12 | | | |
| Hosted students at home | 90 | 8 | 2 | | | |
| Field trip | 84 | 11 | 5 | | | |
| Participated in workshop | 89 | 9 | 2 | | | |
| Accompanied to athletic | 72 | 16 | 11 | | | |
| Attended cultural event | 84 | 13 | 2 | | | |
| Other | 39 | 19 | 42 | | | |

Faculty listed a wide array of activities in the opportunity provided by "Other, please list." Several respondents mentioned hiking and socializing informally through the laboratory setting. Others talk with students while commuting by bus or by foot through Collegetown, voluntarily teach classes like Tai Chi or Taekwondo, or see students regularly at sporting facilities including the Equestrian Center.

Demographics of Involvement

Table 2 portrays some of the subgroup differences in three measures of faculty involvement in out-of-class activities. All three measures are simple dichotomous measures: participation (versus not) in academic roles, nonacademic roles, and out-of-class activities other than those organized through orientation and/or by the department.

The relationship between subgroup and faculty involvement varies by the kind of activity.

Assistant professors were more frequently involved than senior faculty in academic roles, but were less often involved in nonacademic roles. Those off the tenure-track tended to participate more heavily than those on the tenure track in out-of-class activities above and beyond formal role obligations.

A slightly larger percentage of women faculty than men faculty were engaged in academic roles with undergraduates, and women were also slightly more likely to be involved in other activities outside the classroom.

College differences appear to be substantial, with graduate colleges showing far lower rates of engagement with undergraduates as we might expect. (It is notable that at least one-in-five responding faculty in the professional schools were involved with undergraduates at all.)

Among the undergraduate colleges, engagement with undergraduates appears to be somewhat lower in the College of Arts and Sciences and higher in the College of Human Ecology than it is in other colleges. (These differences do not account for disciplinary differences in the nature of faculty engagement with students in the classroom or in the utility of undergraduates as research assistants.)

Faculty who were parents of preschool-aged children were slightly less likely to participate in out-of-class activities with undergraduates. These younger parents were not, however, less likely than others to be engaged in academic roles—and were only slightly less likely to be engaged in non-academic roles—involving out-of-class contact.

Table 2. Percent of Responding Faculty Involved with Undergraduates through Academic Roles, non-Academic Roles, and Other Out-of-Class Activities, by Subgroups

| | Percent of Faculty Involved in | | | | | |
|---------------------|--------------------------------|-------------------------------|--|--|--|--|
| | <u>Univers</u> | sity Role | Out-of-Class Activity Other than Departmental and Orientation ³ | | | |
| Group | Academic Role(s) ¹ | Nonacad. Role(s) ² | | | | |
| Overall | 59 | 45 | 73 | | | |
| Title | | | | | | |
| Instructor | 57 | 43 | 75 | | | |
| Lecturer | 47 | 53 | 81 | | | |
| Senior Lecturer | 47 | 58 | 88 | | | |
| Assistant Professor | 68 | 40 | 70 | | | |
| Associate Professor | 62 | 45 | 76 | | | |
| Professor | 59 | 43 | 68 | | | |
| Sex | | | | | | |
| Women | 62 | 44 | 76 | | | |
| Men | 58 | 45 | 71 | | | |
| College | | | | | | |
| ALS | 65 | 53 | 74 | | | |
| AAP | 70 | 63 | 89 | | | |
| Arts | 53 | 41 | 73 | | | |
| Engineering | 66 | 39 | 74 | | | |
| Hotel | 73 | 57 | 93 | | | |
| Hum Ec | 79 | 60 | 88 | | | |
| ILR | 71 | 57 | 86 | | | |
| Centers (Endowed) | 71 | 76 | 94 | | | |
| JGSM | 20 | 24 | 21 | | | |
| Law | 32 | 21 | 50 | | | |
| Vet | 37 | 21 | 45 | | | |
| Parenthood Status | | | | | | |
| No children | 58 | 40 | 75 | | | |
| Youngest child <5 | 64 | 41 | 67 | | | |
| Youngest 5-12 | 62 | 51 | 77 | | | |
| Youngest 13-17 | 61 | 49 | 69 | | | |
| Youngest 18-23 | 56 | 39 | 72 | | | |
| Youngest over 23 | 57 | 49 | 75 | | | |

Notes:

- Academic roles include supervising faculty-led or student-led research, participating in the New Student Book Project and supervising undergraduate TAs.
- Nonacademic roles include serving on a campus committee with an undergraduate, being affiliated with a student organization of any kind, and serving in one of the Faculty in Residence, Faculty Fellow and Dining Discussion Fellow programs.
- ³ Activities include visiting a café, hosting students at home, chaperoning a social event, going on a field trip, participating in a workshop with undergraduates, and accompanying an undergraduate to a cultural event or an athletic competition.

Disciplinary Differences in Involvement

Among responding Cornell faculty members, there are differences by discipline in the prevalence of various forms of out-of-class interaction between professors and undergraduates, with responding faculty in the Fine & Applied Arts being the most likely to participate in academic roles, nonacademic roles, and in other kinds of out-of-class activities with undergraduates (see notes for Table 2 for definitions of those roles and activities). For example, 93% of the 141 responding faculty in Fine & Applied Arts had participated in some kind of out-of-class activity, such as visiting a café with students or hosting students at home, in the fall of 2003, as compared to 73% for the faculty as a whole (see Table 3).

Faculty in the psychological, developmental and social sciences also tend to be more involved than the overall faculty, though this varies greatly by college. For example, 85% of faculty in these "soft science" disciplines within the contract colleges have participated in an out-of-class activity with undergraduates, as compared to 62% of faculty working in those fields within the endowed colleges (Table 3).

Differences by discipline in Table 3 probably partly reflect differences in the nature of appointments (such as extension responsibilities and teaching loads) as well as differences in location. For example, while all of the responding faculty outside of the biological disciplines are based in Ithaca, 7% of those grouped in "Biology" and 10% of those grouped in "Applied Biology" are based in Geneva where extensive contact with students is difficult.

Disciplinary differences may also reflect differences in pedagogical approaches (such as lectures versus studio classes), self-selection of more and less social individuals to particular fields, discipline-based cultures, and even the specific physical environments of different departments or those required by different disciplines. One senior lecturer in Human Ecology proposed that Cornell "Get rid of those clumsy chairs. Arrange seating in circles [...]to create a more nurturing, interactive and engaged environment in which teaching and learning can take place."

Respondents' perceptions of the role of departmental support for out-of-class interaction are considered in the next section and discussed further on page 8.

Table 3. Percent of Responding Faculty Involved with Undergraduates through Academic Roles, Nonacademic Roles, and Other Out-of-Class Activities, by Discipline and College

| | Cornell Overall | | | Endowed | | | (| Contract | | |
|-----------------------------|------------------|------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--|
| Discipline | Academic Role(s) | Nonacad. Role(s) | Other Activity | Academic Roles | Nonacad. Roles | Other Activity | Academic Roles | Nonacad. Roles | Other Activity | |
| Fine & Applied Arts (n=141) | 74 | 72 | 93 | 71 | 70 | 91 | 81 | 77 | 96 | |
| Humanities (n=284) | 48 | 45 | 79 | 47 | 44 | 79 | 1 | 1 | 1 | |
| Psych & Soc Sci (n=301) | 74 | 50 | 76 | 69 | 34 | 62 | 78 | 60 | 85 | |
| Math & Phys Sci (n=211) | 47 | 27 | 71 | 43 | 22 | 68 | 63 | 46 | 85 | |
| Biology (n=140) | 70 | 49 | 71 | 84 | 52 | 73 | 64 | 48 | 70 | |
| Applied Biology (n=335) | 50 | 39 | 59 | 1 | 1 | 1 | 50 | 39 | 59 | |
| Engineering (n=248) | 70 | 45 | 73 | 68 | 43 | 74 | 88 | 56 | 69 | |
| Professional (n=159) | 44 | 37 | 57 | 44 | 37 | 57 | 1 | 1 | 1 | |
| Total | 59 | 45 | 73 | 56 | 42 | 73 | 63 | 49 | 72 | |

66 [My department] is a relatively small, tightly-knit community with its own building. I regularly interact with dozens of undergraduates in hallways, offices [and our] library. 99

66 We teach in a studio format, which gives us a great deal of time with our undergraduates. We aet to know them well enough to make end of day and evening interactions pleasant and natural. However, this form of teaching is intensive and often we feel we need to spend out of class hours on personal or research issues. It would be hard to do much more. 99

66 My out-of-class interactions with undergraduates are intensive. They center on the students' written work. 99

GI feel that the University and my College use my department as a profit center with large student-to-faculty ratios. This makes meaningful interactions with students difficult. 99

Notes:

Percents in **bold** are greater than overall, total percent involvement for that category of role or activity. See Table 2, page 4 for definitions of academic roles, nonacademic roles, and other activities.

¹ Fewer than twenty faculty in this category.

Perceptions Regarding Out-of-Class Interactions

The longest single question on the survey instrument included fourteen different attitudinal items which may influence engagement in out-of-class interactions. The stem begins:

Q10. To what extent do you agree or disagree with the following statements about out-of-class interaction with undergraduate students:

For each of the fourteen items that followed, respondents were asked to indicate the extent of agreement on a five point scale ranging from "completely disagree" to "completely agree."

The fourteen items can be grouped into five broader categories, as listed on the left side of Table 4: Assignment, Information, Difficulties, No time, and No support.

The percent agreeing to each item is presented in Table 4. More than a third of respondents agreed with three of

those attitudinal statements: 58% of faculty agreed that "Cornell ignores or only minimally rewards faculty efforts at out-of-class interaction with undergraduates;" 43% agreed that "I am primarily involved with graduate students" and 37% agreed that "out-of-class contact with undergraduate students is less important than research or teaching."

The shaded items in Table 4 are those which most strongly correlate with measures of out-of-class interaction. The correlations themselves are in three columns on the right side. Negative correlations indicate that those who agree with the statement are less often engaged in out-of-class interactions. A correlation of zero signifies no relationship.

The stronger correlations—those closer to one in magnitude—are not necessarily those which generate the most agreement. The shaded block of relatively large correlations includes items related to "Assignment", "Information," and "Difficulties."

Table 4. Perceptions Regarding Out-of-Class Interactions with Undergraduates: Agreement and Correlations with Behavior

| | | | Со | rrelation wit | h |
|-----------------|--|--|--------------------------------|----------------------------------|--|
| Perceptions reg | arding interaction with undergraduates | Percent of who "Generally Agree" or "Completely Agree" | Engaged in an academic role | Engaged in a nonacademic role | Engaged in some activity other than dept/orientation |
| Assignment | I am primarily involved with graduate students. | 43% | -0.24 | -0.23 | -0.26 |
| Information | I am not familiar with opportunities for out-of-class involvement. | 14% | -0.23 | -0.28 | -0.28 |
| | I have not received adequate orientation for participating in out-of-class roles with undergraduate students | 20% | -0.14 | -0.12 | -0.15 |
| Difficulties | I find it difficult to facilitate a meaningful informal exchange with students (e.g., contact that goes beyond "small talk") | 14% | -0.18 | -0.18 | -0.16 |
| | It is difficult to see students in person; they prefer to communicate via e-mail or the Internet | 23% | -0.14 | -0.14 | -0.13 |
| | In my personal view, out-class contact with undergraduate students is less important [] than research or teaching. | 37% | -0.07 | -0.12 | -0.20 |
| | I have offered opportunities for out-of-class interaction but students have not taken me up on them | 13% | -0.02 | 0.02 | 0.01 |
| No time | My teaching obligations leave little or no time for out-of-class contact with students. | 21% | -0.06 | -0.10 | -0.07 |
| | My research obligations leave little or no time for out-of-class contact with students. | 30% | -0.03 | -0.13 | -0.14 |
| | My family and/or personal responsibilities leave little or no time for out-of-class contact with students. | 34% | -0.01 | -0.09 | -0.11 |
| | My travel and consulting responsibilities leave little or no time for out- of-class contact with students. | 14% | -0.03 | -0.11 | -0.06 |
| No support | My department is not supportive of this type of involvement | 16% | -0.03 | -0.06 | -0.11 |
| | Faculty peers would assess my professional performance negatively if I spent too much time [] with undergraduates | 28% | 0.05 | 0.00 | -0.04 |
| | Cornell ignores or only minimally rewards faculty efforts at out-of-class interaction with undergraduates | 58% | 0.12 | 0.06 | 0.02 |

Note: Bold text indicates a correlation of greater than .10 in magnitude. All bold correlations are "statistically significant" at p < .05.

The single attitude most strongly associated with out-of-class interactions with undergraduate students is "I am primarily involved with graduate students." While this factor is particularly relevant to the faculty from the professional schools who responded to the Faculty Survey, it is also the case that 38% of faculty in the undergraduate colleges agreed their primary domain is in graduate training. (The proportion is slightly larger—42%—when the population is narrowed to tenured or tenure-track faculty in those colleges.)

Faculty members' perceptions of how informed they are about opportunities for involvement are also fairly strongly related to the extent of interaction with undergraduates. For example, 77% of responding faculty who were familiar with opportunities for out-of-class interaction had engaged

- 66 I would like to do more; haven't quite figured out how to make it happen. 99
- 66 I have tried to hold office hours in classrooms that are supposed to be available in the undergraduate dorms, but I can never seem to find a room. It is never clear whom to contact and I always get the run-around. 99
- that participation in undergrad life was never represented to me (by faculty and administrators) as something that I would want to be involved in as junior faculty. But, if not then, when? 99
- 66 Our department should set up more opportunities for faculty members to interact with undergraduates outside the classroom. 99

in some sort of out-of-class activity with undergraduates beyond departmental/orientation functions. This compares to only 50% engaging in these activities among those faculty who felt that they were *not* familar with opportunities for out-of-class involvement. We might expect those who participate in university roles to gain more extensive awareness of further opportunities for out-of-class interactions as a result of their experience, but open-ended comments lend support to the idea that some faculty remain unaware of how to become involved (see inset, left).

Fourteen percent of faculty reported that they found it difficult to go beyond small talk with undergraduates, and twenty-three percent of faculty found that students prefer to communicate only via email (see Table 4). Faculty who reported these difficulties in managing the interpersonal aspects of interactions with undergraduates were substantially less likely to be involved in roles or activities entailing out-of-class interactions (see also inset, right).

Four items in this series of attitudinal items related to time availability, touching upon the potentially competing demands of 1) teaching obligations, 2) research obligations, 3) family and personal responsibilities, and 4) travel and consulting responsibilities. While a substantial fraction of faculty reported that they agreed that one or more of these domains "leaves little or no time for out-of class contact with students" these measures of time availability were only weakly associated with survey measures of extent of involvement in out-of-class interactions.

Still, faculty repeatedly mentioned time pressures in openended responses. One faculty member suggested that the survey's measurement may be inadequate:

It is not my research *on* my teaching that is the problem, it's the *combination* of both, along with my other professional activities (I've been active in my professional organizations and university governance). The personal time that remains I either need for my sanity or for being with my family.

A number of faculty emphasized that the instrument seemed to overlook the time commitment of sometimes substantial administrative and committee responsibilities and the important role of extension work for many faculty.

A full professor in CALS summarized:

In a slightly more ideal world I would be delighted to spend more of these kind of out-of-class time with undergrads. The actual world I live in is already excruciatingly overloaded with work and there is no time left over for "extras."

The survey instrument included an item tapping research productivity and another relating to teaching load. The relationships between these measures of time-intensive commitments and out-of-class interaction with undergraduates are more directly examined on page 9.

- of I taught a calculus class last year and was not very comfortable with the non-math interaction students tried to have with me during office hours. They were always telling me about their personal lives and I am no psychiatrist but only a mathematician.
- 66 I am able to do the chit-chat stuff with a group of students, but I don't enjoy it and I'm not sure how much they get out of it. 99
- 66 I never thought I'd say this, but I prefer interactions via email because appointments require that I stay in my office past 5 p.m. 99
- 66 Undergraduates themselves barely know how to interact among faculty outside the classroom (and many, it seems, are uninterested in doing so anyway). 99
- 66 I find it difficult to develop meaningful relationships with this many UG advisees in the reasonable amount of time I can devote to this activity. 99

As mentioned above, a majority of faculty members agreed with the statement "Cornell ignores or only minimally rewards faculty efforts at out-of-class interaction with undergraduates." Unlike the other attitudinal measures in this series, the correlation between agreement with this item and involvement in out-of-class interaction is *positive*. That is, faculty who *agrea* that there are few institutional rewards are *more likely* to have actually had out-of-class interactions in the fall of 2003. Perhaps the most plausible interpretation of this correlation is that faculty who participate in out-of-class interactions may, as a consequence, develop the perception that their efforts in that area are not adequately rewarded. Many faculty wrote about the [in]appropriateness of Cornell further encouraging interaction with undergraduates in their open-ended responses (see inset, below).

While perceptions of a lack of support from Cornell did not appear to suppress involvement, the correlations in Table 4 suggest that departmental contexts may be somewhat more salient. A comment from one assistant professor in the College of Arts and Sciences highlights that departmental cultures may be palpably different: "I am in two departments. One (science/engineering) rewards research involvement with undergraduate students and the other (humanities/social science) views it quite suspiciously." An assistant professor in AAP wrote, "My department does not recognize out-of-class interaction as valuable. I have chosen to continue, nonetheless, as I think it is rewarding for both students and myself." Another assistant professor added, "Even if I thought I had time for both, I think a lot of undergrad interaction would give my colleagues the impression I wasn't concentrating enough on research."

- 66The faculty reward system is for research *only*. There isn't recognition—merit salary increases—for good teaching, let alone advising. Clearly, the administration has virtually no interest really in providing incentives to the average faculty member for seriously paying attention to the quality of the undergraduate experience in the classroom let alone out of it. 99
- 66 Cornell and my department do push hard for involvement with undergraduates, but do not really reward such involvement. Consequently, the issue is set up in a fashion that makes the faculty feel guilty for doing what it is institutionally enjoined to do—i.e., publish and become famous. 99
- 66 Research is the only thing that leads to promotion and tenure. Even meeting students in small groups beyond class time is a professional risk because that time could be used writing. 99
- 66 Although I enjoy student interactions, I would recommend to other faculty members that they limit out-of-class interaction in favor of other professional activities. While student interaction isn't discouraged, it doesn't appear to rewarded either. 99
- 66 Many departments at Cornell, including my own, provide no incentive and many disincentives for contact with undergraudates, in any form. The Cornell administration has employed only ineffective strategies to encourage this type of contact. 99
- 66 The institution does occasionally recognize such activities, if very selectively. Needless to say, they carry very little weight with tenure and promotion committees, as is appropriate. 99
- 66 Frankly, out-of-classroom contact beyond advising and independent studies with undergraduates should not be considered an important faculty activity. [...] Distracting faculty from their core mission with requirements or even incentives (other than time off from other obligations) would be a terrible mistake. 99

Teaching and Involvement

Faculty who were not teaching undergraduates in the fall of 2003 were less likely to have been involved in any sort of out-of-class interaction with undergraduates. About half of the respondents to the Faculty Survey taught no undergraduate courses that semester. Among those, only 43% participated in academic roles, 31% in nonacademic roles and 59% in other activities. (Narrowing the group to those who were not on leave during the fall semester adds 4-5 percentage points to each of those figures.) These percentages compare to 80%, 55%, and 83%, respectively, among faculty who had taught at least one undergraduate course.

The correlations between class sizes and involvement in out-of-class activities are small (less than .08 in magnitude) but suggest that instructors of large courses are more likely to have been involved in academic roles but are less likely to have participated in other kinds of out-of-class activities (see definitions at the bottom of Table 2, page 4).

Scholarly Productivity and Involvement

In open-ended comments, many faculty described a direct trade-off between time spent with students and time spent actively engaged in research. Remarkably, in these data, the correlation between research productivity and participation in out-of-class interactions is fairly small and not always in the direction suggested by those sorts of comments.

In illustration of this, Table 5 displays the mean number of published articles, reviews, books and presentations made over the previous two years for tenured and tenure-track faculty who are and are not involved in academic roles, nonacademic roles and other activities involving out-of-class interactions with undergraduates.

Reading across the first row of Table 5: faculty who are involved in academic roles involving out-of-class interaction have published *more* articles in the past two years than faculty who are not involved in these roles, though this difference is small (a mean of 5.2 articles versus 4.8 articles, t=1.2). This weak relationship is reversed when looking at nonacademic university roles, such that those who are not

Table 5. Mean Number of Articles, Books, Reviews, and Presentations Among Tenured and Tenure-Track Faculty, by Out-of-Class Involvement with Undergraduates

| | Academic Roles | | Nonacac Role | | Other Ac | ctivity | |
|---------------------------|----------------|----------|-----------------|----------|--------------|----------|---------|
| Scholarly Productivity | Not Involved | Involved | Not Involved | Involved | Not Involved | Involved | Overall |
| Articles | 4.8 | 5.2 | 5.2 | 4.9 | 5.0 | 5.1 | 5.0 |
| Reviews | 1.5 | 1.8 | 1.6 | 1.8 | 1.3 | 1.8 | 1.7 |
| Books | 0.9 | 0.8 | 0.8 | 0.9 | 0.7 | 0.9 | 0.8 |
| Presentations | 6.8 | 6.9 | 7.1 | 6.5 | 6.3 | 6.8 | 6.7 |

Note: See Table 2, page 4 for definitions of academic roles, nonacademic roles, and other activities.

involved have a slightly higher production of articles (5.2 versus 4.9, t=1.1). And, finally, there is almost no difference in the number of articles produced in the last two years between those faculty who have engaged in some sort of other out-of-class activity with undergraduates and those who have not (5.1 versus 5.0, t=0.4).

Further analyses (not shown) of these relationships within discipline similarly provide little cross-sectional evidence that participation in these roles or activities is associated with lower levels of scholarly productivity.

Forty-three percent of faculty participating in this survey had some sort of external funding. Here too, differences were small in involvement rates for those who had grants and those who did not. Those with grants were slightly *more* likely to be involved in academic roles (64% versus 58%), slightly *less* likely to be involved in nonacademic roles (40% versus 45%) and equally likely to have participated in some other out-of-class activity with undergraduates in the fall of 2003.

While the observed relationship between scholarly productivity and involvement with undergraduates seems weak, faculty members' *perceptions of their own interests*| support the idea that faculty who are interested in research are less inclined to spend time with undergraduates. Specifically, the Faculty Survey included the following item:

Q.13 How would you characterize your interests at present - equally divided between research and teaching or inclining more toward one than the other? (Include extension and outreach activities within teaching.)

On a five point scale, sixteen percent of faculty characterized their own interests as "heavily towards research" and another 33% indicated that they were "interested in both [but] lean toward research." Twenty-seven percent identified with the middle category of "Equally interested in teaching and research."

The correlation between responses to this item and participation in nonacademic roles (0.22) and other out-of-class activities (0.21) suggests that faculty who self-identify as leaning towards research are less inclined to engage in non-obligatory interactions with undergraduates.

And while there is little overall relationship between involvement in academic roles and this measure of inclination towards research versus teaching, there are still notable differences between those who identified on the extreme end and other faculty: only 54% of those who lean "heavily" towards research participated in an academic role involving out-of-class contact with undergraduates, as compared to 61% of faculty who identified elsewhere on the teaching-research continuum.

66 I believe that out of class interaction greatly enriches the undergraduate experience. Also, it enriches my life. I find the informal contact I have very rewarding. Years later some students still stay in touch or visit and even their parents have expressed great appreciation for my efforts. 99

66 Supervising undergraduate students in research projects has been among the most rewarding activities I have experienced in my long career at Cornell. 99

Goday's students yearn for faculty interaction, a marked and welcomed change from just a few years ago. I have trained well over 100 students in research in recent years. Many have become long time professional friends. Most are a part of my extended family. The relationships are great and the benefits flow both ways. [...] Undergraduate students have remarkably contributed to my professional productivity, and are great ambassadors for Cornell. This helps me as much as it helps them. It is a great synergism... a win-win. 99

66 One of the best parts of being a faculty member. 99

66 Interacting with undergraduates is, on the whole, inspiring and rejuvenating... 99

The Impacts of Involvement for Faculty

Faculty were asked "For each of the following, please indicate the level of impact you have experienced as a result of your out-of-class interactions with undergraduate students." Nine items, illustrated in Figure 5, followed the prompt.

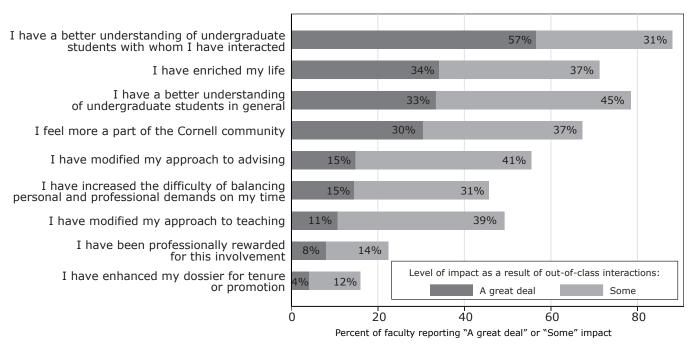
Most (57%) faculty reported that their out-of-class interactions have had "a great deal" of impact on their understanding of the students with whom they have interacted, and a third reported that level of impact on their understanding of undergraduate students in general. Many faculty also felt that relationships with undergraduates strengthened their ties to the Cornell community.

About a third of faculty also reported that interacting with undergraduates had "a great deal" of impact on enriching their own lives. Another 37% report that these interactions have had "some" impact towards life enrichment. Many open-ended comments (only a few of which are illustrated left) detailed the ways in which interactions with undergraduates led to meaningful relationships, both professional and personal, that endure over time. Many accounts are moving:

Last summer, I attended a beautiful wedding of my former undergraduate students. I had a chance to work with them very closely. It was a humbling experience when both parents attributed the success of the newly wed, in part to me.

Accounts of professional rewards were less common. For example, only 4% of faculty report that their interactions with undergraduates have had "a great deal" of impact on enhacing their tenure and promotion dossier, and 8% report that their interactions have had such a high level of impact on professional rewards.

Figure 5. Percent of Faculty Reporting Substantial Impacts of Out-of-Class Interactions with Undergraduates



Summary of Findings

In contacting all professors, instructors, and lecturers affiliated with Cornell University in the fall of 2003, the *Faculty Survey* was an ambitious attempt to portray the landscape of faculty-undergraduate interactions outside of class across the university. Respondents included faculty in graduate colleges and faculty based in Geneva. Over 60% of faculty participated in the survey, and the data suggest considerable variation in their characteristics, experiences, and opinions. Nearly a quarter of all respondents took the time to draft optional, open-ended responses to the survey; the overall impression left from reading these comments is that responding faculty were frank regarding both positive and negative aspects of their experiences.

Results from the *Faculty Survey* suggest that a large majority of faculty at Cornell are engaged in some kind of out-of-class interaction. Even excluding undergraduate advising roles, nearly three-quarters of all faculty are involved in a university role which involves some interaction with undergraduates (see Figure 2, page 2). The largest share of these roles were centered on research: half of all responding faculty are engaged with undergraduates in either a faculty-led research project, a student-led research project (such as an undergraduate honors thesis), or both.

In addition to these more formal roles, less structured activities are also common. For example, about half of faculty visited a café with an undergraduate in the fall of 2003, and a third hosted students in their own homes (see Figure 3, page 3). These activities are even more prevalent when estimated among only those faculty appointed in undergraduate colleges and based on the Ithaca campus.

Results from the survey suggest that many faculty consider out-of-class interaction with undergraduates to be an important part of the undergraduate experience. Many engage in these roles out of sense of duty associated with being a faculty member and a beneficiary of such exchanges in the past. Few faculty seem to engage interactions as a response to specific efforts on the part of their department or from the administration to explicitly support or promote these relationships. Indeed, while there are some localized exceptions, faculty generally seem to perceive that such institutional supports are lacking.

When asked "would you prefer to have more, less, or about the same amount of interaction" with undergraduates as compared to amount reported for the fall of 2003, only 2% of respondents indicated that they would prefer to have *less* interaction with undergraduates. Nearly a third of faculty indicated that they would prefer to have *more*.

The real barriers to increased participation can only be hinted at with these survey results. While faculty members have many demands on their time and many respondents indicated that extending themselves further would be unfeasible, available measures of competing time pressures seem to play a fairly small role in explaining the extent of interaction among survey respondents. First, faculty who are involved in roles and activities have levels of scholarly productivity as high or higher than those who are not (see Table 5, page 9). Similarly, perceptions of a time crunch (such as "My research obligations leave little or no time for out-of-class contact with students") do not appear to correlate strongly with the extent of involvement in out-of-class interactions (Table 4, page 6). And parents of young children seem to be generally as involved in these activities as parents of older children and nonparents (see Table 2, page 4). Finally, only 15% of faculty report that out of class interactions with undergraduates have had "a great deal" of impact on their ability to balance "personal and professional demands on my time" (see Figure 5, page 10).

One of the stronger correlates of involvement is the perception of being primarily engaged with graduate students. Further, this perception is widespread: 43% percent of all responding faculty and 37% of responding faculty in one of the seven undergraduate colleges agree with the statement, "I am primarily involved with graduate students" (see Table 4, page 6).

Unfamiliarity with the pathways to becoming more involved in undergraduate life outside of the classroom, and difficulty in establishing interpersonal connections also appear to be important factors in understanding possible barriers to increased interaction (see Table 4, page 6).

Some faculty also emphasized that out-of-class interactions are not the only way to develop mentoring relationships with undergraduates. A full professor in CALS wrote,

Some of us still believe that the primary contribution we make to undergraduates is through teaching and other formal interactions. One doesn't have to be 'best buddies' to have a huge impact on students.

And an assistant professor in Arts and Sciences adds,

I find that my relationships with [...] students grows naturally over the process of our interaction, which generally begins in class. I will often spend many many hours helping, proofreading, counseling, writing letters, etc. [...] The root of these interactions is common academic interest, out of which friendships form. [...] I feel that it more than makes up for my not being very available for faculty dining, etc. [...] In other words, I guess what I am saying here is that, rather than 'official channels', I prefer to find my own way toward these relationships, and feel that this is the best way for me to go about this.

For additional information about this study, contact:

Institutional Research and Planning 440 Day Hall
Cornell University
Ithaca, NY 14853-2801
irpsurvey@cornell.edu, 607-255-7009