# *Chapter* 5
# Advising and Computer Access

## Data Highlights

This chapter presents a general overview of advising practices for undergraduate departmental majors. In just over half of BA departments undergraduate mathematics majors are assigned an advisor each year. This percentage is 75% for MA departments, and 67% for PhD departments. Again, in about half of all mathematics departments, departmental majors are required to have at least one meeting per year with a department advisor. At PhD mathematics departments, tenured/tenure-eligible faculty are not likely to be involved with undergraduate advising, with only 27% of such faculty having such duties. This is in contrast to MA and BA departments, where 67% and 68% of the tenured/tenure-eligible faculty have advising duties.

Most full-time faculty have a computer or terminal in their office, with a low of 91% at MA schools to a high of 98% at PhD departments of statistics. Most of the remaining faculty have access to a computer or terminal elsewhere on campus. At BA schools, 88% of the mathematics faculty have access to the Internet, and this percentage increases to 90% for MA schools and 94% at PhD schools. PhD statistics departments have 97% of faculty with Internet access.

About half of the PhD mathematics departments have one fte computer systems support staff on the departmental budget, although 12% of PhD departments have at least three such fte staff on their budget.

## Explanation of Tables

This chapter contains five tables which present data on advising practices for departmental majors and faculty computer access.

In Tables AC.1 and AC.2, the percentages in each column within each box total 100%. Each of the row descriptors are meant to be mutually exclusive.

In some institutions, departmental majors are formally identified during the second year and, so, may not be assigned a mathematics department advisor prior to this. "Other" methods of advising majors were not recorded.

In MA and Ph.D departments, the faculty participation in the advising of graduate students was not included in these tables, and, so, the percentage of faculty involved in advising undergraduate majors understates the actual advising duties of faculty.

### Tables AC.1 and AC.2

These tables are an elaboration of Table SAC.25 in chapter 1, *Summary*.

For each type of department, the choices listed in each table within each data box are mutually exclusive, so that the column percentages within each data box add up to 100%, aside from possible rounding errors. Because these are the first such data collected by the CBMS survey on advising practices, it is difficult to assess the implications of these data. The director of the CBMS survey is not aware of any comparable data from other surveys, either in the mathematical sciences or, for that matter, in any other academic discipline. This survey asked about advising practices for departmental majors only; some faculty may advise undergraduates before they declare a formal major or advise graduate students, but these duties were not included in this survey.

**TABLE AC.1**   Percentage of Departments of Mathematics assigning departmental advisors by level of departmental majors, frequency of meetings and type of school. Also percentage of tenured and tenure-eligible faculty assigned to advise departmental majors: Fall 1995.

| Departments | Univ (PhD) | Univ (MA) | Coll (BA) |
|---|---|---|---|
|  | Percentage of departments where | Percentage of departments where | Percentage of departments where |
| Departmental majors are assigned a departmental advisor each year | 67 | 75 | 53 |
| Departmental majors are assigned a departmental advisor in their 1st and 2nd years only | 5 | 5 | 8 |
| Departmental majors are assigned a departmental advisor in their 3rd and 4th years only | 16 | 11 | 35 |
| Other methods are used to advise departmental majors | 12 | 9 | 5 |
| Number of departments | 100%<br>169 | 100%<br>242 | 100%<br>985 |
| Meetings with departmental advisor: |  |  |  |
| No meetings are required | 36 | 45 | 45 |
| There is at least one required | 49 | 48 | 48 |
| There is at least one required meeting in students' 3rd and 4th years only | 16 | 8 | 8 |
| Number of departments | 100%<br>169 | 100%<br>242 | 100%<br>985 |
| Number of tenured and tenure-eligible faculty | 5463 | 4032 | 6613 |
| Percentage of tenured and tenure-eligible faculty assigned to advise undergraduate departmental majors in Fall 1995 | 27 | 67 | 68 |

**TABLE AC.2**  Percentage of Departments of Statistics assigning departmental advisors by level of departmental majors, frequency of meetings and type of school.  Also percentage of tenured and tenure-eligible faculty assigned to advise departmental majors: Fall 1995.

| Departments | Univ (PhD) | Univ (MA) |
|---|---|---|
| | Percentage of departments where | Percentage of departments where |
| Departmental majors are assigned a departmental advisor each year | 61 | 75 |
| Departmental majors are assigned a departmental advisor in their 1st and 2nd years only | 17 | 25 |
| Departmental majors are assigned a departmental advisor in their 3rd and 4th years only | 10 | 0 |
| Other methods are used to advise departmental majors | 13 | 0 |
| Number of departments | 100% 67 | 100% 8 |
| Meetings with departmental advisor: | | |
|    No meetings are required | 41 | 38 |
|    There is at least one required | 59 | 63 |
|    There is at least one required meeting in students' 3rd and 4th years only | 0 | 0 |
| Number of departments | 100% 67 | 100% 8 |
| Number of tenured and tenure-eligible faculty | 820 | 101 |
| Percentage of tenured and tenure-eligible faculty assigned to advise undergraduate departmental majors in Fall 1995 | 13 | 100 |

**Table AC.3**

This table is an elaboration of Table SAC.25 in chapter 1, *Summary*.

Because this is a report on the primary source of advising information, each row total 100%, aside from

rounding errors. In advising on K-12 teaching, it is not surprising that a large percentage of departmental majors are advised by "other" parts of the institution, mostly, it is presumed, in the School of Education.

**TABLE AC.3** Percentage of Departments of Mathematics and Departments of Statistics having various primary sources of advising information for departmental majors by type of school: Fall 95.

| Topic | Total no. / percentage of departments | Percentage of departments | | | | |
|---|---|---|---|---|---|---|
| | | Departmental advisor | Career services office | Outside speakers | Club for majors | Other |
| **Math Depts** | | | | | | |
| Univ (PhD) | 169 | | | | | |
| Non-teaching careers | 100% | 51 | 46 | 0 | 0 | 4 |
| K-12 teaching | 100% | 62 | 15 | 0 | 0 | 23 |
| Graduate school | 100% | 86 | 1 | 0 | 1 | 12 |
| Univ (MA) | 242 | | | | | |
| Non-teaching careers | 100% | 67 | 23 | 4 | 5 | 1 |
| K-12 teaching | 100% | 71 | 10 | 0 | 0 | 19 |
| Graduate school | 100% | 90 | 2 | 0 | 0 | 8 |
| College (BA) | 985 | | | | | |
| Non-teaching careers | 100% | 46 | 51 | 0 | 3 | 1 |
| K-12 teaching | 100% | 80 | 5 | 0 | 1 | 14 |
| Graduate school | 100% | 97 | 1 | 1 | 1 | 1 |
| **Stat Depts** | | | | | | |
| Univ (PhD) | 67 | | | | | |
| Non-teaching careers | 100% | 75 | 21 | 0 | 0 | 4 |
| K-12 teaching | 100% | 41 | 41 | 0 | 0 | 18 |
| Graduate school | 100% | 100 | 0 | 0 | 0 | 0 |
| Univ (MA) | 8 | | | | | |
| Non-teaching careers | 100% | 50 | 50 | 0 | 0 | 0 |
| K-12 teaching | 100% | 50 | 50 | 0 | 0 | 0 |
| Graduate school | 100% | 100 | 0 | 0 | 0 | 0 |

**Table AC.4**

This table is an elaboration of Table SAC.26 in chapter 1, *Summary*.

The first two figures within each box give the percentage of faculty with access to a computer in their office, or if not there, then somewhere on campus and are mutually exclusive. For example, 92% of the mathematics faculty in PhD mathematics departments have a computer or terminal in their office (and possibly have access elsewhere as well) and of the remaining 8% of the faculty, half (4%) have access not in their office but elsewhere on campus. The figures show that almost all faculty have some kind of access, and that a lesser, but still large, percentage of faculty have access to the Internet. There is little difference in availability of computers or access to the Internet across the different types of departments. Again, this material was not collected in past CBMS surveys.

**TABLE AC.4**  Percentage of Departments of Mathematics and Departments of Statistics having computers or terminals available to and access to Internet for full-time faculty by type of school: Fall 1995.

|  | Number of full-time faculty | Percentage of full-time faculty |
|---|---|---|
| **Math Depts** | | |
| Univ (PhD) | 6221 | 100% |
| Have a computer or terminal in office | | 92 |
| Have access to a computer or terminal elsewhere on campus | | 4 |
| Have access to Internet | | 94 |
| Univ (MA) | 4765 | 100% |
| Have a computer or terminal in office | | 91 |
| Have access to a computer or terminal elsewhere on campus | | 8 |
| Have access to Internet | | 90 |
| Coll (BA) | 7262 | 100% |
| Have a computer or terminal in office | | 93 |
| Have access to a computer or terminal elsewhere on campus | | 6 |
| Have access to Internet | | 88 |
| **Stat Depts** | | |
| **Univ** (PhD) | 876 | 100% |
| Have a computer or terminal in office | | 98 |
| Have access to a computer or terminal elsewhere on campus | | 0 |
| Have access to Internet | | 97 |
| Univ (MA) | 112 | 100% |
| Have a computer or terminal in office | | 94 |
| Have access to a computer or terminal elsewhere on campus | | 0 |
| Have access to Internet | | 94 |

**Table AC. 5**
   This table is an elaboration of Table SAC.27 in chapter 1, *Summary.*
   These figures are for departmental computer support staff and are fte figures. Departments may well have support staff for their computer systems that are based outside the department. This survey did not collect information on such support staff, only those staff who were departmental support staff, that is, funded from the departmental budget.

**TABLE AC.5**  Percentage of Departments of Mathematics and Departments of Statistics having departmental computer systems support staff by type of school: Fall 1995.

| Number of FTE computer systems support staff | Univ (PhD) | | Univ (MA) | | Coll (BA) | |
|---|---|---|---|---|---|---|
| | Number of departments | Percentage of departments | Number of departments | Percentage of departments | Number of departments | Percentage of departments |
| Math Depts | 169 | 100% | 242 | 100% | 985 | 100% |
| 0 | | 34 | | 70 | | 85 |
| 1 | | 48 | | 22 | | 14 |
| 2 | | 7 | | 1 | | 1 |
| 3 or more | | 12 | | 6 | | 0 |
| Stat Depts | 67 | 100% | 8 | 100% | | |
| 0 | | 19 | | 50 | | |
| 1 | | 60 | | 50 | | |
| 2 | | 13 | | 0 | | |
| 3 or more | | 8 | | 0 | | |