In 1999-2000, approximately 2.7 million students were enrolled in graduate and first-professional programs in colleges and universities in the United States. Using data from the 1999-2000 National Postsecondary Student Aid Study (NPSAS:2000), this report profiles students in various degree programs and examines how they paid for their education, with particular attention to their use of teaching and research assistantships. In addition, the report contains a compendium of tables providing detailed data on four topics: (1) student characteristics; (2) enrollment characteristics; (3) types of financial aid; and (4) employment. In 1999-2000, more than one-half of all graduate and first-professional students were enrolled at the Master's level, with most enrolled less than full time. Sixty percent of all graduate and first-professional students and 82% of those enrolled full time, full year, received some type of financial aid, including grants, loans, assistantships, or work study. Twenty percent of all graduate and first professional students and 32% of full-time, full-year students received an assistantship in 1999-2000, although variations existed across program levels and fields of study. Assistantships were more common at the doctoral level. Findings from this study show that graduate and first-professional students are a diverse group, with notable differences in student characteristics.
Student Financing of Graduate and First-Professional Education, 1999-2000
Profiles of Students in Selected Degree Programs and Their Use of Assistantships
Statistical Analysis Report

July 2002

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Executive Summary

In 1999–2000, approximately 2.7 million students were enrolled in graduate and first-professional programs in colleges and universities in the United States. Using data from the 1999–2000 National Postsecondary Student Aid Study (NPSAS:2000), this report profiles students in various degree programs and examines how they paid for their education, with particular attention to their use of teaching and research assistantships. In addition, the report contains a compendium of tables providing detailed data on four topics: student and enrollment characteristics, types of financial aid, and employment. For each topic, highlights of major findings are also included.

Profile of Graduate and First-Professional Students

In 1999–2000, more than one-half (58 percent) of all graduate and first-professional students were enrolled at the master’s level, with the majority of them enrolled less than full time, full year (figure A). Another 13 percent were enrolled in doctoral programs and an additional 12 percent in first-professional programs; the latter were more likely than the former to attend full time, full year. The remaining 16 percent were enrolled in other graduate programs, including postbaccalaureate certificate programs and nondegree programs.

First-professional degree programs include the following: medicine (M.D.), chiropractic (D.C. or D.C.M.), dentistry (D.D.S. or D.M.D.), optometry (O.D.), osteopathic medicine (D.O.), pharmacy (D.Pharm.), podiatry (Pod.D. or D.P.M.), veterinary medicine (D.V.M.), law (L.L.B. or J.D.), and theology (M.Div., M.H.L., or B.D.).

Most of these students were enrolled less than full time, full year.

Master’s Degree Students

At the master’s degree level, approximately one-half of all students were working on either a master’s degree in business administration (M.B.A.) (20 percent) or a master’s degree in education (28 percent). The latter could include a Master of Arts in Teaching (M.A.T.), Master of Education (M.Ed.), Master of Arts (M.A.) or Science (M.S.) with a major in education. The rest were working on an M.A. or M.S. degree in a field other than education (31 percent) or on a different
master's degree such as a Master of Social Work (M.S.W.), Master of Public Administration (M.P.A.), or Master of Fine Arts (M.F.A.) (21 percent).

M.B.A. students were predominantly male (60 percent), and about two-thirds waited 3 or more years after earning their bachelor's degree before enrolling in the M.B.A. program. Most worked while enrolled (87 percent), and 75 percent of those who worked did so full time.

Master's students in education were primarily female. Some (17 percent) enrolled immediately after earning their bachelor's degree, but 83 percent waited at least a year, and 33 percent waited 7 years or more. Like M.B.A. students, most education master's students (91 percent) were combining school and work.

Noneducation M.A. and M.S. students were more traditional in their enrollment patterns. For example, they were more likely than M.B.A. or education students to enroll immediately after earning a bachelor's degree (about 26 percent vs. 12 and 17 percent, respectively), and they were more likely than education students to enroll full time, full year (about 31 percent vs. 16 percent).

Doctoral Degree Students

At the doctoral level, about 18 percent of all students were enrolled in education doctoral programs (either an Ed.D. or a Ph.D. with a major in education); 62 percent were enrolled in Ph.D. programs in fields other than education; and 21 percent were in other doctoral programs such as a Doctor of Business Administration (D.B.A.), Doctor of Public Administration (D.P.A.), or Doctor of Fine Arts (D.F.A.). Compared with master's students, doctoral students were more likely to enroll full time, full year (54 percent vs. 27 percent), and more likely to enroll right after earning their bachelor's degree (25 percent vs. 20 percent).

As was the case at the master's level, doctoral students in education differed from others at their level. For example, compared with Ph.D. students in other fields, doctoral students in education were more likely to be female (71 percent vs. 46 percent), be older (42 vs. 32 years, on average), delay enrollment after earning a bachelor's degree (89 percent vs. 72 percent), and, if they worked while enrolled, to work full time (74 percent vs. 27 percent).

First-Professional Students

Among students at the first-professional level, 38 percent were in law; 27 percent were in medicine (M.D.); and 29 percent were in other health fields (chiropractic, dentistry, optometry, osteopathic medicine, pharmacy, podiatry, and veterinary medicine). The remaining 6 percent were in theology programs.

Students in first-professional degree programs were younger on average (28 years) than students in master's or doctoral degree programs (33 and 34 years, respectively). They were also more likely to enroll full time, full year (77 percent vs. 27 percent of master's students and 54 percent of doctoral students). Medical students were less likely than law students to work while enrolled (19 percent vs. 59 percent).

Paying for Graduate and First-Professional Education

In 1999–2000, 60 percent of all graduate and first-professional students and 82 percent of those enrolled full time, full year received some type of financial aid, including grants, loans, assistantships or work study (table A). The
Table A.—Percentage of full-time, full-year graduate and first-professional students who received any financial aid, grants, or loans and, for aided students, average amount, by type of degree and institution type: 1999-2000

<table>
<thead>
<tr>
<th>Type of degree and institution type</th>
<th></th>
<th></th>
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<tbody>
<tr>
<td></td>
<td>Percent</td>
<td>Amount</td>
<td>Percent</td>
<td>Amount</td>
<td>Percent</td>
</tr>
<tr>
<td>Total</td>
<td>82.2</td>
<td>$19,521</td>
<td>48.6</td>
<td>$8,930</td>
<td>53.7</td>
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<tr>
<td>Master's degree</td>
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</tr>
<tr>
<td>Public</td>
<td>79.2</td>
<td>$16,431</td>
<td>46.7</td>
<td>$7,606</td>
<td>50.2</td>
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<tr>
<td>Private not-for-profit</td>
<td>78.5</td>
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<td>46.4</td>
<td>$6,579</td>
<td>44.4</td>
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<tr>
<td>Doctoral degree</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>80.6</td>
<td>$19,758</td>
<td>48.2</td>
<td>$9,065</td>
<td>57.7</td>
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<tr>
<td>Private not-for-profit</td>
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<td>62.4</td>
<td>$13,372</td>
<td>29.3</td>
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<td>First-professional degree</td>
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</tr>
<tr>
<td>Public</td>
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<td>$19,047</td>
<td>62.1</td>
<td>$9,842</td>
<td>26.2</td>
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<tr>
<td>Private not-for-profit</td>
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<td>$26,834</td>
<td>64.1</td>
<td>$18,691</td>
<td>34.4</td>
</tr>
</tbody>
</table>

NOTE: Total includes students in other types of graduate programs and at private for-profit institutions. Any aid includes assistantships and work study as well as grants and loans.


The average amount of aid received by aided full-time, full-year students was about $19,500.

The percentages of students with financial aid and average amounts received varied by the level of the degree program. Among full-time, full-year students, 88 percent each of students at the doctoral and first-professional levels received aid, compared with 79 percent of students at the master’s level. Among full-time, full-year students with grants, doctoral students received larger average amounts of grant aid (about $13,400) than did master’s ($7,600) or first-professional ($6,900) students. However, full-time, full-year first-professional students took out larger loans, on average, than did their counterparts at the other two levels ($20,100 vs. $14,800 for master’s students and $14,100 for doctoral students).

### Assistantships

Assistantships benefit both students and their institutions. They provide students with a stipend to help cover their expenses and an opportunity to learn skills that help prepare them for their future careers. At the same time, they provide institutions with a source of labor for teaching and research projects. Twenty percent of all graduate and first-professional students and 32 percent of full-time, full-year students received an assistantship in 1999-2000. However, variation existed across degree program levels and fields of study. Doctoral students received assistantships more frequently (47 percent) than did master’s (16 percent) or first-professional (11 percent) students. In addition, at the doctoral level, students in science and in engineering were more likely than students in the humanities/social sciences to have assistantships (figure B). At the master’s level, M.A./M.S. students in science...
were more likely than those in other fields to have assistantships.

Assistantships are a common form of aid for foreign students, who are not eligible for federal grant and loan programs. In 1999–2000, 54 percent of foreign students received an assistantship, compared with 17 percent of U.S. citizens and resident aliens. This high percentage reflects the fact that about 40 percent of foreign students were studying science or engineering as well as their need to have an alternative to federal aid.

The average amount received by full-time, full-year graduate and first-professional students with assistantships was $9,800. Ph.D. students in the sciences who attended full time, full year received an average of $15,000 in assistantships, and those in engineering received an average of $13,500.

Students with assistantships often receive benefits in addition to a stipend. About two-thirds of those with teaching and research assistantships (64 and 67 percent, respectively) received tuition discounts or waivers in conjunction with their assistantship. Various types of insurance are also sometimes provided: 36 percent of teaching assistants and 42 percent of research assistants received insurance (such as health or life) that was at least partially paid for by their institutions.

One way of examining the contribution of assistantships is to compare them to the price of attending and to the amounts borrowed. For full-time, full-year graduate or first-professional students, the average price of attending (including tuition, books and supplies, and living expenses) was about $26,300. The average amount received for assistantships and the average amount borrowed were negatively related. For example,
students with assistantships paying less than $5,000 borrowed an average of $7,700, while those with assistantships of $15,000 or more borrowed an average of $2,200.

Responsibilities of Teaching Assistants

Teaching assistants were asked whether they had various responsibilities. They typically had multiple responsibilities. Almost one-half (46 percent) reported that they had full teaching responsibility for one or more courses during the 1999–2000 academic year. Forty-six percent led discussion sections for such courses, and 37 percent supervised lab sections for faculty-taught courses. The majority of teaching assistants held office hours (71 percent) and assisted faculty with grading or other instruction-related activities (70 percent).

Teaching assistants averaged a total of 15 hours per week in contact hours with students, office hours, or assisting faculty with grading or other instruction-related activities. Not included in this total are hours spent preparing for classes. Thus, the total time that teaching assistants devote to fulfilling their responsibilities is likely to be higher, especially for those individuals who have full responsibility for a course.

Summary

Graduate and first-professional students form a diverse group. In 1999–2000, some notable differences in student characteristics, enrollment patterns, and methods of paying for postbaccalaureate education existed across the major program levels (master’s, doctoral, and first-professional), but differences existed within levels as well.

About one in five graduate and first-professional students had a teaching or research assistantship in 1999–2000, but assistantships were more common at the doctoral than at the master’s or first-professional levels. Assistantships were also concentrated by field. About three-quarters of doctoral students in science and in engineering received assistantships, and they received larger amounts on average than those in the humanities/social sciences. Teaching assistants spent an average of 15 hours per week working with students in the classroom or lab, holding office hours, or assisting faculty with grading or other instruction-related tasks.
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