

NATIONAL CENTER FOR EDUCATION STATISTICS

**GRADUATE
AND
FIRST-PROFESSIONAL
STUDENTS**

NATIONAL POSTSECONDARY
STUDENT AID STUDY
1996

U.S. Department of Education
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NATIONAL CENTER FOR EDUCATION STATISTICS

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Excerpted from
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Graduate and First-Professional Education,
1995-96 (NCES 98-083)*

U.S. DEPARTMENT OF EDUCATION

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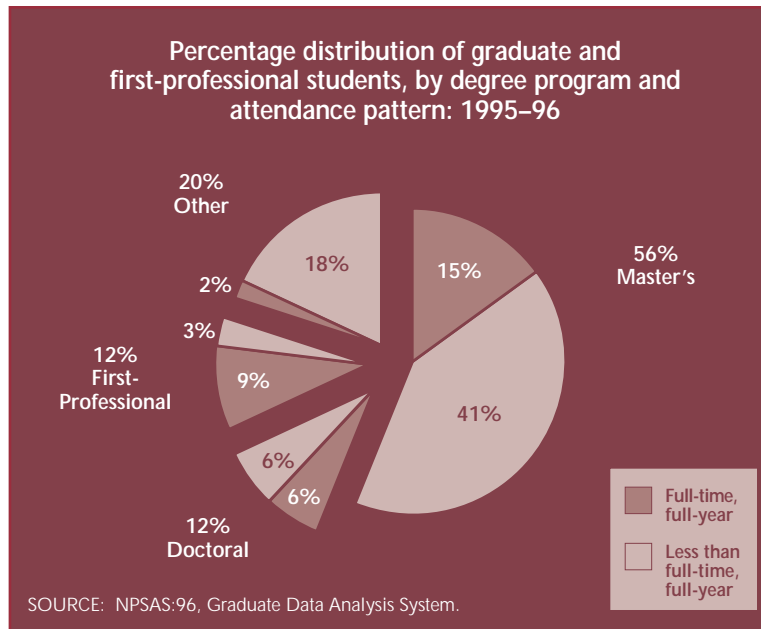
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f the 2.8 million students enrolled in graduate and first-professional education in 1995–96, 56 percent were enrolled in master’s degree programs, 12 percent in doctoral programs, 12 percent in first-professional programs, and 20 percent in nondegree programs. Graduate and first-professional students do not constitute a homogeneous group. Their demographic characteristics, when they enroll relative to earning their bachelor’s degree, how they combine work and studying, and how they finance their education all vary by degree program. Some of the major differences are related to level—master’s, doctoral, or first-professional—but others are related to the type of degree program within level as well. Students earning a Master of Business Administration (MBA), for example, are different in a number of ways from students pursuing a Master



of Arts (MA) or a Master of Science (MS) degree. In 1995–96, the National Postsecondary Student Aid Study (NPSAS:96) for the first time collected information on the specific type of degree students were pursuing. Short profiles of the students seeking selected types of graduate and first-professional degrees are presented here.

MASTER'S DEGREE STUDENTS

Among master's degree students, business and education predominated as fields of study, with almost half of the students at this level seeking either an MBA (19 percent) or a master's degree in education (28 percent). Another 29 percent were seeking an MA or MS in a field other than education, and the remaining 24 percent were seeking other types of master's degrees (such as a Master of Social Work, Master of Fine Arts, or Master of Arts in Library Science). Although the first three groups share the common characteristic of mainly less than full-time, full-year attendance, they differ in their demographic characteristics, work patterns, and methods of financing their education.

Business Administration (MBA)

Relatively few MBA students (9 percent) enrolled within a year of earning their bachelor's degree. The other 91 percent delayed their enrollment for a year or more, and about 60 percent waited at least 3 years. The majority of MBA students were in the 25- to 34-year-old range, with an average age of 31 years. Seventy percent of MBA students were male, and 73 percent were white, non-Hispanic.

Employment is a major part of the typical MBA student's life: 87 percent worked while enrolled, and of those who worked, 76 percent worked full time (35 or more hours per week). Also, among those who worked, 85 percent described themselves as employees who decided to enroll in school as opposed to students who were working to meet their expenses. MBA students enrolled in 1995–96 had an average 1994 income of about \$36,500. Part-time and/or part-year attendance was the norm, with 76 percent attending less than full time, full year in 1995–96.

MBA students were more likely than the other master's-level groups profiled here to enroll in a private, not-for-profit institution (59 percent, compared with 39 percent of education master's students and 34 percent of MA/MS students in fields other than education). About one-half (51 percent) of all MBA students received some type of financial aid.

Education (MEd, MAT, MA, MS, Other)

Students in education can earn a number of different master's-level degrees, including a Master of Arts (MA), Master of Science (MS), Master of Education (MEd), or Master of Arts in Teaching (MAT), among others. Often, different institutions award different degrees for similar programs. To get an accurate picture of master's-level graduate study in education, therefore, this analysis includes not only students enrolled in MEd and MAT programs but also students enrolled in MA, MS, and "other" master's programs whose major field of study was education. Using this categorization, 28 percent of all master's students were in education.

Master's Degree Students
(Percentage distributions)

	All master's level*	MBA	Master's level** (education)	MA/MS (except in education)
TOTAL	100	100	100	100
STUDENT CHARACTERISTICS				
Gender				
Male	44	70	26	47
Female	56	30	74	54
Age				
Under 25 years	16	13	13	20
25–29 years	33	39	27	37
30–34 years	18	24	17	18
35–39 years	11	10	13	10
40 years or over	21	14	32	15
Average age	32	31	34	31
Race–ethnicity				
American Indian/Alaskan Native	1	0	1	1
Asian/Pacific Islander	10	14	3	13
Black, non-Hispanic	7	3	9	6
Hispanic	5	8	5	7
White, non-Hispanic	76	73	82	73
Other	1	3	1	2
Citizenship				
U.S. citizen	94	93	99	90
Noncitizen, eligible for federal aid	3	2	1	4
Noncitizen, not eligible for federal aid	4	5	1	6
Average 1994 income (includes spouse's income if married)	\$33,783	\$36,488	\$37,445	\$29,952

Master's Degree Students—continued

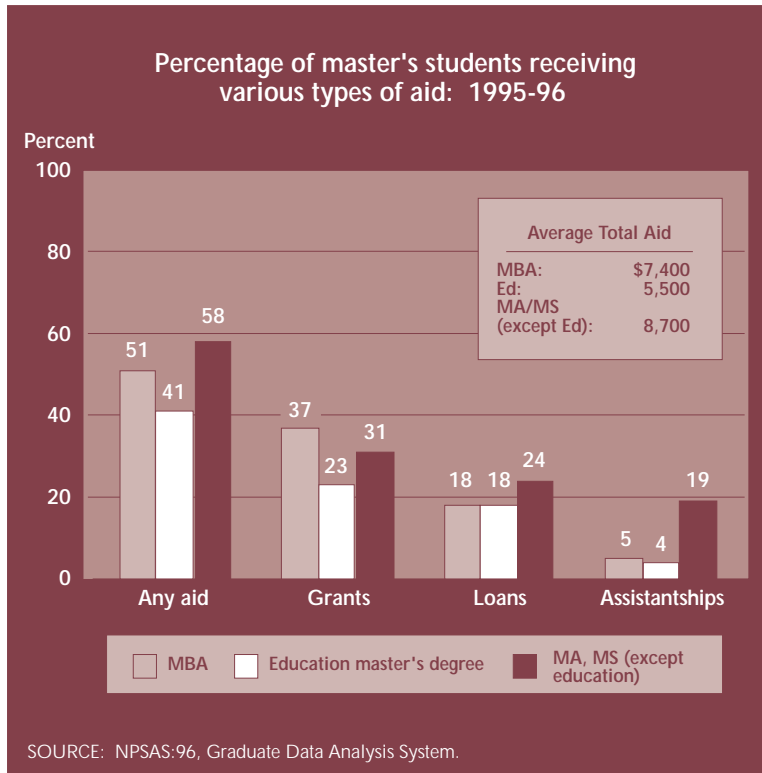
	All master's level*	MBA	Master's level** (education)	MA/MS (except in education)
ENROLLMENT CHARACTERISTICS				
Years since bachelor's				
Less than 1 year	16	9	12	19
1–2 years	25	29	23	25
3–6 years	30	34	26	30
7 years or more	29	28	39	26
Attendance pattern				
Full-time, full-year	26	24	16	28
Full-time, part-year	10	8	11	11
Part-time, full-year	40	47	45	40
Part-time, part-year	24	21	29	22
Institution type				
Public	57	36	60	64
Private, not-for-profit	40	59	39	34
Private, for-profit	2	6	1	2
EMPLOYMENT CHARACTERISTICS				
Worked at all	84	87	86	83
Worked 35+ hours/week (if worked)	57	76	67	48
Primary role if working				
Student working to meet expenses	37	15	25	57
Employee enrolled in school	63	85	75	43

*Includes students in master's programs not represented in the other columns.

**Includes students in MEd and MAT programs, and students in MA, MS, or "other" master's degree programs with a major in education.

NOTE: Percentages may not sum to 100 due to rounding. Zeros represent values less than .5 percent.

SOURCE: NPSAS:96, Graduate Data Analysis System.



The relatively large proportion of master's students in education is related to teacher certification and recertification requirements and salary and advancement incentives for teachers and school and district administrators to continue their education.

In some ways, education master's students were similar to MBA students. For example, in 1995-96, relatively few in either program (12 percent of education master's students and 9 percent of MBA students) had enrolled within a year of earning a bachelor's degree. In addition, in both programs, most students worked while enrolled

(86 percent of education master's students and 87 percent of MBA students). Also, in both programs, a majority considered themselves to be primarily employees who enrolled in school rather than students who worked to meet expenses (75 percent of education students and 85 percent of MBA students). However, students pursuing master's degrees in education were less likely than MBA students to enroll full time, full year in 1995–96 (16 percent versus 24 percent).

Demographically, however, the two groups were different. Education master's students were slightly older than MBA students on average (34 years versus 31 years), and considerably more likely to be 40 years or older (32 percent versus 14 percent). In addition, education students were predominantly female (74 percent), while MBA students were predominantly male (70 percent). Education students were less likely than MBA students to be Asian/Pacific Islander and more likely to be black, non-Hispanic. Fifty-nine percent of master's students in education received no financial aid, making them the least likely of the master's-level groups profiled here to receive aid.

Arts or Science (MA, MS), Except Education

The noneducation MA/MS students were spread across many fields of study, with no one field predominating: 21 percent were in engineering, computer science, or mathematics; 16 percent were in health fields; 16 percent were in the humanities; 14 percent were in life and physical sciences; 12 percent were in social sciences; 12 percent were in business-related fields; and the remaining 10 percent in other fields. Nineteen percent enrolled in graduate school within a year of receiving their bachelor's degree.

Like the MBA and education master's students, the majority of noneducation MA/MS students attended less than full time, full year (72 percent). However, their work patterns were quite different from those of the other two master's-level groups. While similar percentages of all three groups worked while enrolled (83 to 87 percent), the noneducation MA/MS students were less likely to work full time while enrolled than the other students (48 percent versus 67 percent of education master's students and 76 percent of MBA students). Furthermore, among those who worked, the noneducation MA/MS students were much more likely than the others to consider themselves students working to meet expenses rather than employees enrolled in school (57 percent versus 15 percent of MBA students and 25 percent of education master's students).

On average, the noneducation master's students had lower incomes (including spouses' incomes if married) than the MBA and education master's students (\$30,000 versus \$36,000 and \$37,000, respectively). Fifty-eight percent of the noneducation MA/MS students received financial aid, averaging \$8,700 for those with aid. They were much more likely than MBA and education students to have assistantships (19 percent versus 4 percent of education master's students and 5 percent of MBA students).

DOCTORAL DEGREE STUDENTS

The enrollment patterns of doctoral degree students differed from those of master's degree students in 1995–96. For example, doctoral students were much more likely than master's degree students to enroll full time, full year (46 percent versus 26 percent).

The demographic characteristics of master's and doctoral students differed as well. While women outnumbered men (56 percent to 44 percent) at the master's level, students at the doctoral level were predominantly male (61 percent). Similar proportions of master's and doctoral degree students were black, non-Hispanic (about 7 percent) or Hispanic (4 to 5 percent), but doctoral students were more likely than master's students to be Asian/Pacific Islander (17 percent versus 10 percent). This difference was due, at least in part, to the relatively large number of foreign students at the doctoral level: 10 percent of doctoral students, compared with 4 percent of master's students, were noncitizens not eligible for federal financial aid.

At the doctoral level, 70 percent of the students were enrolled in Doctor of Philosophy (PhD) programs; 12 percent were enrolled in doctoral programs in education (EdD); and 18 percent were enrolled in other doctoral programs (such as Doctor of Business Administration, Doctor of Fine Arts, Doctor of Engineering, and Doctor of Public Administration). The two groups profiled here, PhD and EdD students, differed from each other quite notably in terms of their demographic, enrollment, and employment characteristics.

Doctoral Degree Students

(Percentage distributions)

	All doctoral level*	PhD students	EdD students
TOTAL	100	100	100
STUDENT CHARACTERISTICS			
Gender			
Male	61	62	46
Female	39	38	54
Age			
Under 25 years	10	10	0
25–29 years	32	36	10
30–34 years	24	22	20
35–39 years	13	14	11
40 years or over	22	17	59
Average age	33	32	41
Race–ethnicity			
American Indian/Alaskan Native	0	1	0
Asian/Pacific Islander	17	17	11
Black, non-Hispanic	7	7	19
Hispanic	4	4	5
White, non-Hispanic	69	69	63
Other	2	2	2
Citizenship			
U.S. citizen	83	82	88
Noncitizen, eligible for federal aid	6	7	6
Noncitizen, not eligible for federal aid	10	12	6
Average 1994 income (includes spouse's income if married)	\$33,080	\$30,007	\$59,082

Doctoral Degree Students—continued

	All doctoral level*	PhD students	EdD students
ENROLLMENT CHARACTERISTICS			
Years since bachelor's			
Less than 1 year	24	25	5
1–2 years	23	27	3
3–6 years	23	23	14
7 years or more	30	25	79
Attendance pattern			
Full-time, full-year	46	51	16
Full-time, part-year	8	6	9
Part-time, full-year	37	36	49
Part-time, part-year	10	7	26
Institution type			
Public	63	64	50
Private, not-for-profit	35	32	50
Private, for-profit	3	4	0
EMPLOYMENT CHARACTERISTICS			
Worked at all	76	76	98
Worked 35+ hours per week (if worked)	36	32	83
Primary role if working			
Student working to meet expenses	74	80	18
Employee enrolled in school	26	20	82

*Includes students in doctoral programs not represented in the other columns.

NOTE: Percentages may not sum to 100 due to rounding. Zeros represent values less than .5 percent.

SOURCE: NPSAS:96, Graduate Data Analysis System.

Doctor of Philosophy (PhD)

Among students enrolled in PhD programs in 1995–96, 25 percent began their graduate program within a year of earning their bachelor's degree. Another 27 percent enrolled 1–2 years after earning their bachelor's degree, and the remaining half enrolled 3 or more years later. The average PhD student was 32 years old. They were distributed across a range of fields of study: 26 percent were in social or behavioral science fields; 21 percent were in life sciences; 17 percent were in engineering, computer science, or mathematics; 13 percent were in the humanities; and 23 percent were in "other" fields.

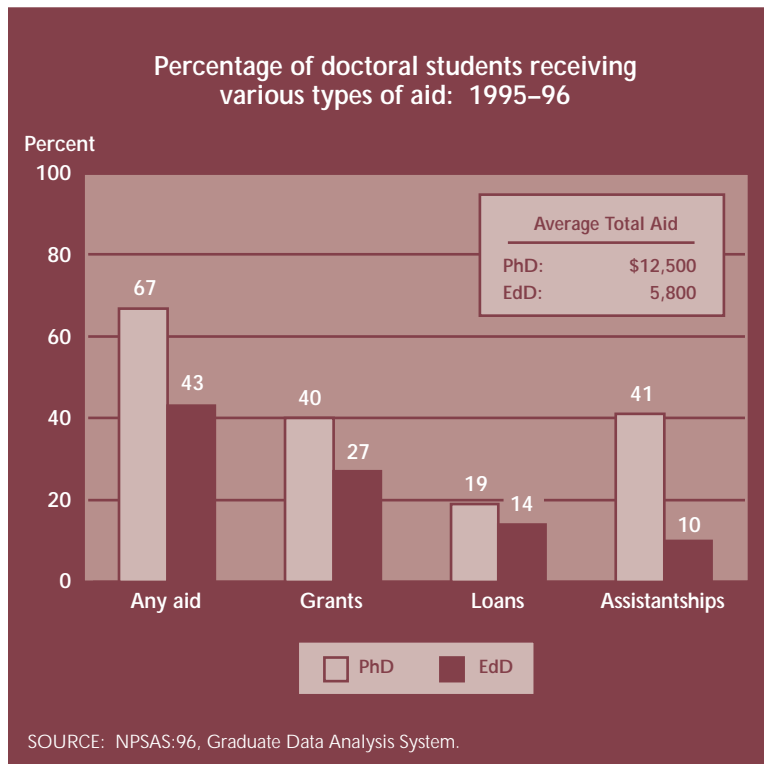
Sixty-two percent of all PhD students were male; 69 percent were white, non-Hispanic, and 17 percent were Asian/Pacific Islander. Twelve percent were noncitizens not eligible for federal financial aid. The noncitizen group was heavily concentrated in science (30 percent) and engineering/computer science/mathematics (31 percent). In these two areas, they accounted for 17 percent and 21 percent, respectively, of all PhD students.

About half (51 percent) of all PhD students enrolled full time for the full year. About three-quarters (76 percent) worked while enrolled, and among those who worked, the average number of hours worked per week was 31. Nevertheless, 80 percent of all PhD students who worked (and 87 percent of those enrolled full time, full year) considered themselves students working to meet expenses rather than employees who decided to enroll in school.

In most cases, students' work appeared to be related to their studies. More than 9 out of 10 thought that their work was helping to

prepare them for their career (93 percent) and was giving them experience for future employment (92 percent). These data reflect the large proportion of PhD students (41 percent) who had teaching or research assistantships.

Two-thirds of all PhD students received some type of financial aid. The percentage of PhD students receiving assistantships (41 percent) was much higher than that for master's students (10 percent), EdD students (10 percent), or first-professional students (4 percent).



Doctor of Education (EdD)*

Students who enroll in EdD programs relatively rarely start within a year of earning a bachelor's degree (5 percent in 1995–96). Instead, they typically return after a number of years of teaching or working in an administrative position, often so they can advance in their careers or move to a higher position on a salary schedule. Seventy-nine percent of EdD students had delayed at least 7 years after they earned their bachelor's degrees before beginning their graduate programs. Consequently, students pursuing an EdD tended to be much older than PhD students. Fifty-nine percent were 40 years or older (versus 17 percent of PhD students), and their average age was 41 years (versus 32 years for PhD students).

Relatively few EdD students enrolled full time, full year (16 percent versus 51 percent of PhD students). Virtually all EdD students worked while enrolled (98 percent), and 83 percent worked at least 35 hours per week. Eighty-two percent of those who worked described themselves as employees who decided to enroll in school as opposed to students working to meet expenses. In this way, they were quite different from PhD students, among whom 80 percent described themselves as students working to meet expenses. EdD students who were working while enrolled had average incomes (including their spouses' incomes if married) of \$59,000 in 1994.

*There are additional doctoral-level students in education; they earn PhD degrees. In 1995–96, 7 percent of PhD students were in education. Generally, EdD students are oriented toward teaching or administration, while PhD students are oriented toward research and postsecondary faculty positions. However, there are many exceptions, and some institutions prepare students for both types of careers but offer only one doctoral-level degree in education.

Reflecting their predominantly part-time enrollment and full-time employment, EdD students were much less likely than PhD students to receive financial aid. In fact, their aid pattern resembled that of master's students in education.

FIRST-PROFESSIONAL STUDENTS

First-professional programs include medicine, other health-related fields (such as chiropractic, dentistry, optometry, osteopathic medicine, pharmacy, and veterinary medicine), law, and theology. In 1995–96, 44 percent of all first-professional students were enrolled in law school; 33 percent were pursuing a health-related degree other than an MD; 20 percent were enrolled in an MD program; and 3 percent were studying theology.

With an average age of 28, first-professional students tended to be younger than master's degree or doctoral students, whose average ages were 32 and 33 years, respectively. First-professional students also were much more likely to enroll full time, full year (81 percent versus 26 percent of master's students and 46 percent of doctoral students).

In terms of financing their education, the principal way in which first-professional students differ from master's and doctoral students is their heavy reliance on borrowing, even when considering only full-time, full-year students. About three-quarters (74 percent) of full-time, full-year first-professional students borrowed in 1995–96, compared with 43 percent of full-time master's students and 27 percent of full-time doctoral students. Full-time, full-year first-professional students borrowed more, on average, as well: \$16,900 versus \$11,500 for master's degree students, and \$10,300 for doctoral students.

First-Professional Degree Students
(Percentage distributions)

	All first-professional*	Medicine (MD)	Law (LLB or JD)
TOTAL	100	100	100
STUDENT CHARACTERISTICS			
Gender			
Male	60	61	56
Female	40	39	44
Age			
Under 25 years	38	45	41
25–29 years	40	46	39
30–34 years	9	5	8
35–39 years	7	2	7
40 years or over	6	3	6
Average age	28	26	27
Race–ethnicity			
American Indian/Alaskan Native	1	2	1
Asian/Pacific Islander	10	21	5
Black, non-Hispanic	6	7	7
Hispanic	7	5	11
White, non-Hispanic	76	65	75
Other	1	1	1
Citizenship			
U.S. citizen	95	94	97
Noncitizen, eligible for federal aid	3	4	2
Noncitizen, not eligible for federal aid	1	2	1
Average 1994 income (includes spouse's income if married)	\$16,494	\$10,751	\$18,848

First-Professional Degree Students—continued

	All first-professional*	Medicine (MD)	Law (LLB or JD)
ENROLLMENT CHARACTERISTICS			
Years since bachelor's			
Less than 1 year	39	57	39
1–2 years	29	24	34
3–6 years	18	8	19
7 years or more	14	11	9
Attendance pattern			
Full-time, full-year	81	93	77
Full-time, part-year	6	4	6
Part-time, full-year	10	2	14
Part-time, part-year	3	2	2
Institution type			
Public	42	63	31
Private, not-for-profit	58	37	69
EMPLOYMENT CHARACTERISTICS			
Worked at all	50	31	56
Worked 35+ hours per week (if worked)	17	15	17
Primary role if working			
Student working to meet expenses	76	88	83
Employee enrolled in school	24	13	18

*Includes students in first-professional programs not represented in the other columns.

NOTE: Percentages may not sum to 100 due to rounding.

SOURCE: NPSAS:96, Graduate Data Analysis System.

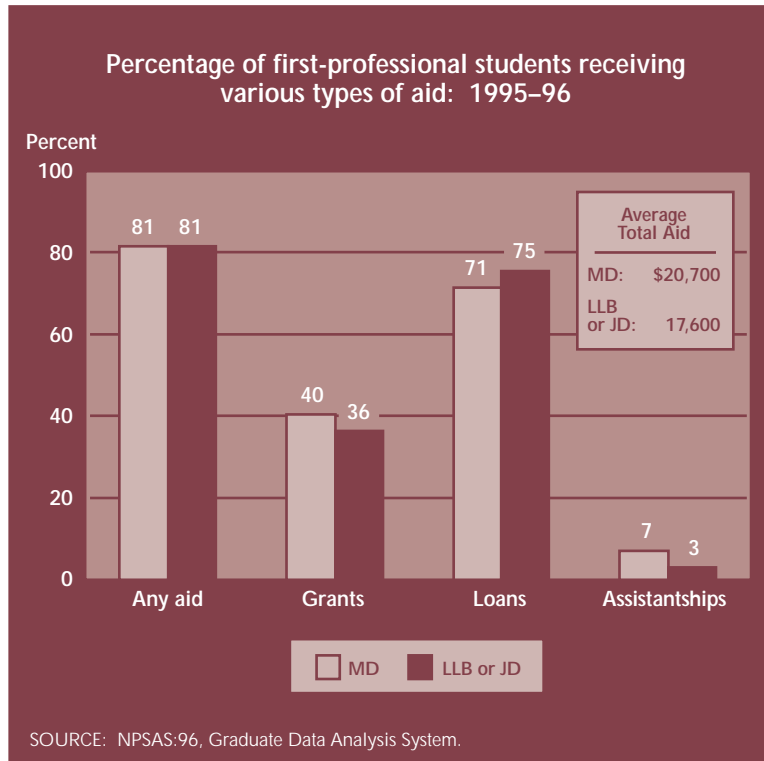
Fifty-seven percent of first-professional students borrowed the maximum Stafford loan, which was \$8,500. They were far more likely to do so than were master's students (12 percent) or doctoral students (9 percent).

Medicine (MD)

In 1995–96, medical students tended to enroll either immediately after receiving their bachelor's degree (57 percent) or within 1 to 2 years (another 24 percent), and almost all (93 percent) enrolled full time, full year. The majority of medical students were male (61 percent). In addition, medical students were most likely to be white, non-Hispanic (65 percent) or Asian/Pacific Islander (21 percent).

Although 31 percent of medical students worked while enrolled, 88 percent of those who worked considered themselves primarily students working to meet expenses. Among students who worked, the average number of hours they worked per week was 27. Thirty-two percent of the medical students who worked but considered themselves primarily students reported that working restricted their choice of classes.

Eighty-one percent of all medical students received some type of financial aid, and the average amount received by aided students was \$20,700. Medical students were much more likely than any other students profiled here except law students to take out loans (71 percent versus between 14 and 24 percent of other groups). Among those who completed in 1995–96, the average amount medical students borrowed for their graduate education was \$55,900.



Law (LLB, JD)

Although law students were less likely than medical students to enroll immediately after receiving their bachelor's degree (39 percent versus 57 percent), the majority still enrolled within 2 years of graduating. The majority of law students attended full time, full year (77 percent). However, this was a lower percentage than for medical students (93 percent).

The majority of law students were male (56 percent). In addition, the majority were white, non-Hispanic (75 percent). Asian/Pacific Islanders made up a smaller proportion of law students (5 percent) than of medical students (21 percent).

Fifty-six percent of all law students worked while enrolled, a greater proportion than medical students, 31 percent of whom did so. Like medical students, however, most of those who worked considered themselves students working to meet expenses (83 percent for law students and 88 percent for medical students).

Eighty-one percent of law students received some financial aid (the same percentage as medical students). The average amount received by aided law students was \$17,600. Like medical students, they depended heavily on loans, with 75 percent borrowing in 1995–96. Among those who completed school in 1995–96, law students had borrowed an average of \$47,400 for their graduate education.

CONCLUSION

Graduate and first-professional students constitute a diverse group. Some of the major differences among students seeking various types of degrees have been summarized here. One of the clear differences is how the various groups combine school and work. At the master's level, graduate study is primarily a part-time activity. MBA students and students seeking master's degrees in education are particularly likely to work full time while enrolled and to consider themselves primarily employees who have decided to go to school as opposed to students working to pay their expenses. PhD students, on the other hand, are

more likely to enroll full time. While many of them work while enrolled, many of their jobs are related to their studies (such as assistantships), and most consider themselves primarily students rather than employees. EdD students appear to be very different from PhD students. They tend to enroll at a much later stage in their careers and attend part time while continuing to work full time. First-professional students tend to enroll soon after earning their bachelor's degrees and attend full time.

Students in the various types of degree programs differ in terms of how they finance their education as well. For example, master's degree students in fields other than education are more likely than other master's-level students to get assistantships. The majority of master's degree students in education receive no aid at all. Two-thirds of all PhD students received some type of aid in 1995–96. Consistent with the fact that they tended to be enrolled part time and to work full time, the majority of EdD students did not receive any aid. Law and medical students, most of whom attend full time, rely the most heavily on loans. Law students graduating in 1995–96 borrowed an average of \$47,400 for their graduate education, and medical students borrowed an average of \$55,900.

NPSAS:96 REPORTS FROM NCES

REPORTS

National Postsecondary Student Aid Study 1995–96 (NPSAS:96), Methodology Report. 1998 (NCES 98-073)

Profile of Undergraduates in U.S. Postsecondary Education Institutions: 1995–96. 1998 (NCES 98-084)

Student Financing of Undergraduate Education, 1995–96. Forthcoming (NCES 98-076)

Student Financing of Graduate and First-Professional Education, 1995–96. 1998 (NCES 98-083)

Data Analysis System (DAS) CD. 1998 (NCES 98-074)

ABSTRACTS

Undergraduates Who Work. 1998 (NCES 98-137)

Borrowing for College. 1998 (NCES 98-138)

Graduate and First-Professional Students. 1998 (NCES 98-139)

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