

NATIONAL CENTER FOR EDUCATION STATISTICS

UNDERGRADUATES WHO WORK

NATIONAL POSTSECONDARY
STUDENT AID STUDY
1996

U.S. Department of Education
Office of Educational Research and Improvement
NCES 98-137

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Excerpted from
*Profile of Undergraduates in U.S.
Postsecondary Institutions: 1995-96* (NCES 98-084)

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July 1998

At MPR Associates, Leslie Retallick designed the graphics and layout and Barbara Kridl edited the text.



In the decade between 1985–86 and 1995–96, undergraduate charges for tuition, room, and board increased 23 percent at public colleges and 36 percent at private colleges.¹ As a percentage of family income, these charges grew from about 12 to 15 percent at public colleges and 32 to 42 percent at private colleges.² While federal financial aid has kept pace with increases in tuition and fees over the same time period, a smaller proportion of federal aid has been distributed in the form of grants and a larger proportion in the form of loans.³

Faced with increases in education costs, many undergraduates rely heavily on work to help pay for their postsecondary education. Recent reports indicate that most undergraduates enrolled in U.S. postsecondary education work while enrolled, and many work full time.⁴ This may be especially true for students who are reluctant to borrow for fear of not being able to repay their education debt.

This booklet summarizes a study of undergraduates who worked while they were enrolled in postsecondary education in 1995–96. Unlike earlier studies of student employment, this study makes a distinction between undergraduates who work primarily to pay for their schooling and those who have established employment that they have combined with postsecondary study.

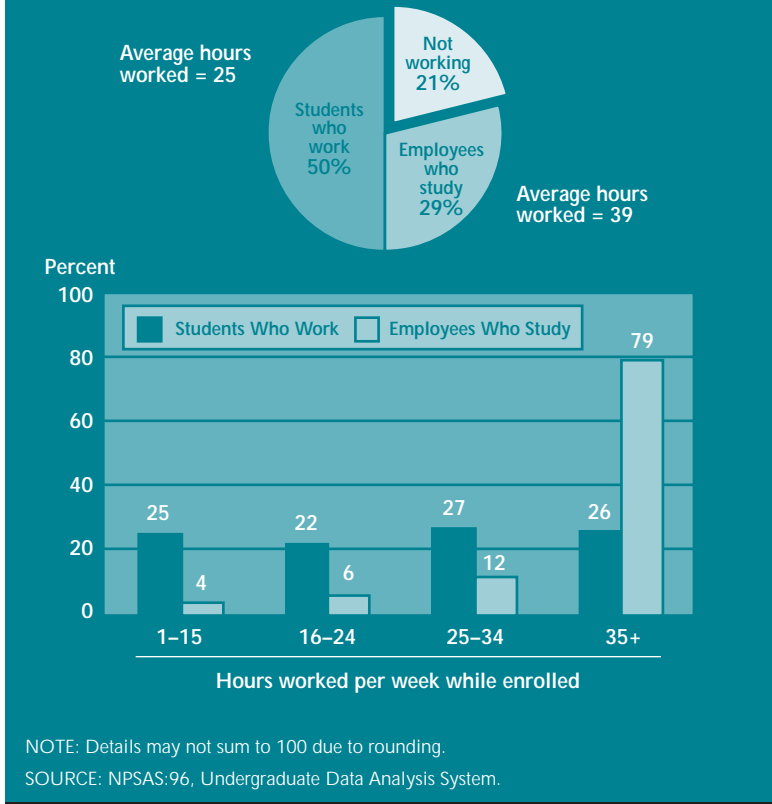
STUDENTS VERSUS WORKERS: HOW UNDERGRADUATES IDENTIFY THEMSELVES

As the enrollment of older students in postsecondary education has grown,⁵ the proportion of undergraduates who have spent a period of time in the work force also has risen. In 1995–96, more than half of undergraduates aged 24 years or older worked full time while they were enrolled, compared with less than one-quarter of students under the age of 24.⁶ Thus, it is useful to determine which students work for the purpose of paying for their education (“Students Who Work”) and which have established employment and are enrolled in postsecondary education to enhance their careers or for personal fulfillment (“Employees Who Study”). For the former group, working is clearly a means to help them achieve their educational goals, and for these students, the impact of work on their educational progress can be more directly assessed. For undergraduates with established employment, working is a primary activity that may or may not be related to their postsecondary enrollment.

About one-half of 1995–96 undergraduates identified themselves primarily as Students Who Work; slightly less than one-third (29 percent) identified themselves as Employees Who Study; and the remaining did not work while enrolled. Students Who Work reported working an average of 25 hours per week while they were enrolled, substantially fewer hours than the 39 hours per week reported by Employees Who Study.

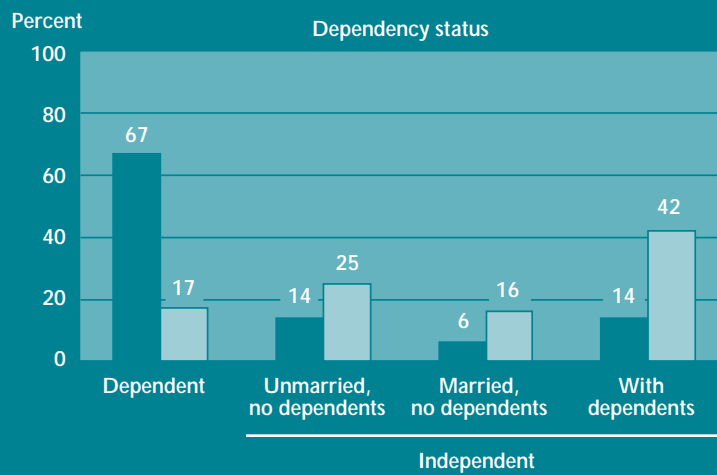
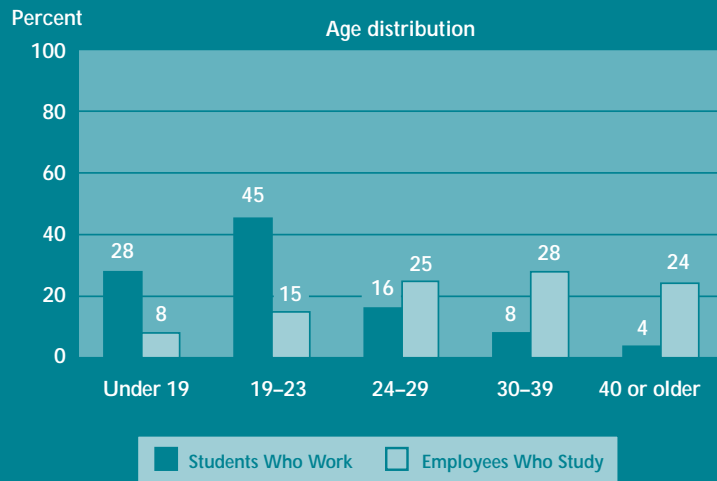
About three-quarters (73 percent) of Students Who Work were under the age of 24. In contrast, less than one-quarter of Employees Who Study were under 24. In keeping with these age

How undergraduates identify themselves and how much they work



differences, Students Who Work were far more likely to be financially dependent on their parents (67 percent versus 17 percent), while Employees Who Study were mostly independent. Fifty-eight percent of Employees Who Study were married and 42 percent had dependents, compared with about 20 percent and 14 percent, respectively, of Students Who Work.

Age distribution and dependency status of Students Who Work and Employees Who Study



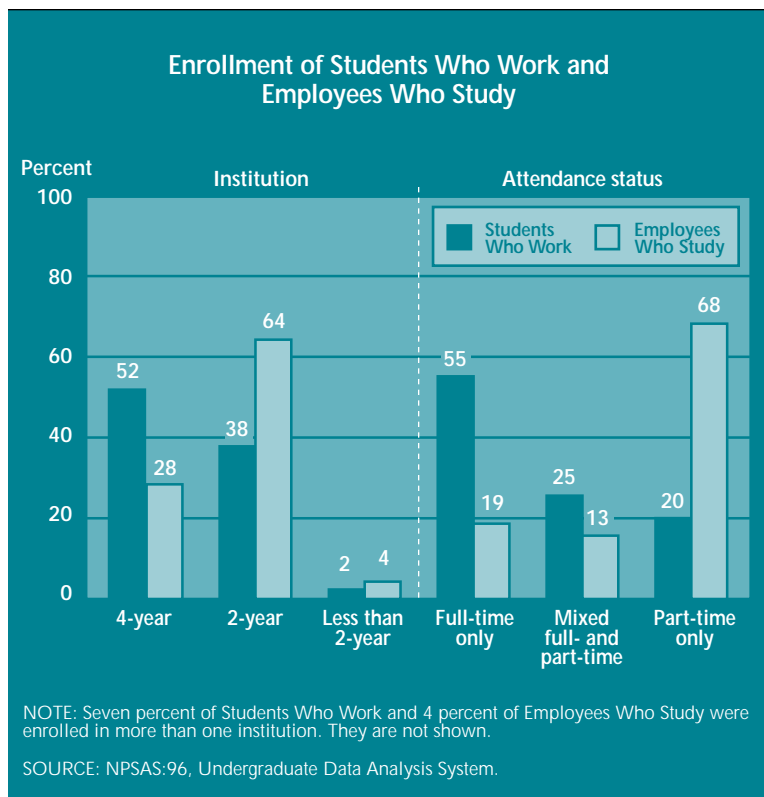
NOTE: Details may not sum to 100 due to rounding.
 SOURCE: NPSAS:96, Undergraduate Data Analysis System.

Roughly half of Students Who Work were enrolled in 4-year colleges or universities (52 percent), and 38 percent were enrolled in 2-year institutions. In contrast, Employees Who Study were enrolled predominantly in 2-year institutions, while about one in four (28 percent) were enrolled in 4-year colleges or universities. Consistent with their working intensity, about two-thirds of Employees Who Study were enrolled exclusively part time, while more than half of Students Who Work were enrolled exclusively full time.

STUDENTS WHO WORK TO PAY EDUCATION EXPENSES

The remainder of this analysis focuses on undergraduates who identified themselves as students who work to help pay for their education. These students tend to be younger, more often enrolled in 4-year institutions, and more likely to be enrolled full time than their counterparts who are primarily employees.

How much these students worked was strongly associated with where they were enrolled and whether they attended full time or part time. Students who were enrolled in 4-year colleges tended to work fewer hours than those in 2-year institutions. For example, 34 percent worked 15 or fewer hours and 18 percent worked 35 or more hours, while among those in the 2-year sector, 15 percent worked 15 or fewer hours and 36 percent worked 35 or more hours. Students who attended exclusively full time were also more likely to work 15 or fewer hours and less likely to work full time than students with mixed or exclusively part-time enrollment.



How Work Affects Course Taking and Academic Performance

Students Who Work were asked about the limitations that work imposed on their academic program. These limitations included restricting the choice of classes, limiting the number of classes, limiting time in which classes can be scheduled, and having less access to the library. About 40 percent of Students Who Work reported that their work schedule limited their class schedule,

Students Who Work:¹
Number of hours worked per week while enrolled

	Percent working:				Average hours per week worked
	1–15 hours	16–20 hours	21–34 hours	35+ hours	
Total	25	22	27	26	25
Institution level²					
Less-than-2-year	14	23	34	30	27
2-year	15	19	30	36	29
4-year	34	24	25	18	22
Attendance intensity					
Exclusively full-time	31	16	26	19	23
Mixed full-time/part-time	20	24	28	28	26
Exclusively part-time	15	23	26	43	30

¹Represents about half of the undergraduate population.

²Does not include undergraduates enrolled in more than one institution.

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

SOURCE: NPSAS:96, Undergraduate Data Analysis System.

and 36 percent reported that their choice of classes was reduced. It is clear from these results that the more hours students worked, the more likely they were to report any one of the four limitations. For example, for each of the four limitations, less than one-quarter (15 to 22 percent) of students working 15 or fewer hours reported that work imposed the limitation, compared with 41 percent or more of students working full time.

Students Who Work:*

How work affects class schedule

	Limited number of classes	Limited class schedule	Limited access to library	Reduced class choices
Total	30	40	26	36
Average hours worked while enrolled				
1–15	15	22	14	16
16–20	24	31	20	28
21–34	32	42	30	38
35 or more	51	61	41	60

*Represents about half of the undergraduate population.

SOURCE: NPSAS:96, Undergraduate Data Analysis System.

Parallel to these findings, the more students reported working (up to 34 hours), the more likely they were to indicate that working had a negative effect on their academic performance.⁷ Those working more than 15 hours per week were at least twice as likely to say work had a negative effect. About 17 percent of students working 15 or fewer hours reported that work had a negative effect on their academic performance, compared with 34 percent of those working 16–20 hours, 46 percent of those working 21–34 hours, and 55 percent of those working 35 or more hours. Conversely, students working 15 or fewer hours were much more likely to report that work had a positive effect on their academic performance than students working more hours.

Students Who Work:*

How work affects performance

	Positive effect	Negative effect	No effect
Total	15	37	48
Average hours worked while enrolled			
1–15	22	17	61
16–20	14	34	52
21–34	12	46	43
35 or more	10	55	35

*Represents about 34 percent of the undergraduate population (67 percent of students who work to pay expenses who, in turn, represent half of undergraduates).

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

SOURCE: NPSAS:96, Undergraduate Data Analysis System.

In summary, more than one-third of Students Who Work reported that work limited their class schedule, and about the same proportion reported that work had a negative effect on their academic performance. Furthermore, among those who worked more than half time, roughly half reported that work adversely affected their performance. Taken as a whole, therefore, these results indicate that more than one in four undergraduates who identify themselves as students who work to pay for education expenses are adversely affected by the amount they work.

Relationship Between Working and Borrowing

The results from a recent report based on a national survey of undergraduates who first began their postsecondary education in 1989–90 (BPS:89/94) indicate that students who borrowed to pay for their education had higher postsecondary persistence rates (as of 1994) than those who did not borrow.⁸ This remained true after controlling for institution type and other variables related to persistence. The same analysis also showed that working 14 or fewer hours per week had a positive effect on persistence in a multivariate model compared to working 15–33 hours. The results of this report imply that the methods students choose in paying for their postsecondary education can have an impact on their persistence and eventual degree attainment.

Among undergraduates who were enrolled in 1995–96, those who identified themselves as students who worked to pay for their education expenses differed in their likelihood of borrowing and how much they borrowed relative to how much they worked. Overall, about one-third of Students Who Work (35 percent) had taken out a student loan, borrowing an average of \$4,150. Students who worked 15 or fewer hours, however, were more likely to borrow than students who worked more hours. In addition, among those who borrowed, students who worked 15 or fewer hours borrowed more on average than those who either worked 21–34 hours or 35 or more hours, but not more than students who worked 16–20 hours. These patterns for the rate of borrowing held even when analyzed separately for students in public 4-year colleges and those in private, not-for-profit 4-year institutions.

Students Who Work:*

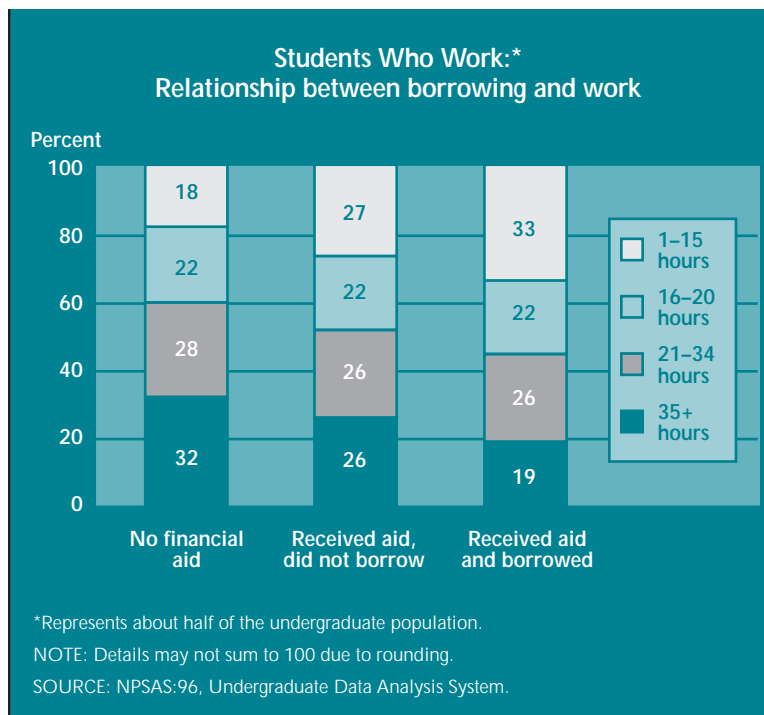
Financial aid profile

	Any aid	Grant aid	Loan aid	Average total aid	Average grant aid	Average loan aid
Total	57	44	35	\$5,988	\$3,274	\$4,146
Average hours worked while enrolled						
1–15	69	56	46	7,966	4,725	4,344
16–20	57	46	36	6,151	3,146	4,216
21–34	55	39	36	4,949	2,530	4,080
35 or more	47	36	26	4,255	2,038	3,810

*Represents about half of the undergraduate population.

SOURCE: NPSAS:96, Undergraduate Data Analysis System.

The figure on the next page illustrates the relationship between work intensity and financial aid status for Students Who Work. It demonstrates that financial aid in general, and financial aid that includes borrowing in particular, were associated with working intensity. Students who received financial aid but did not borrow were more likely than those who did not receive aid to work 15 or fewer hours and less likely to work 35 or more hours. Similarly, among those who received aid, students who borrowed were more likely than students who did not borrow to work 15 or fewer hours and less likely to work 35 or more hours. Thus, there is some indication that students are substituting work for borrowing. There were no differences, however, in the pro-



portion of students working either 16–20 hours or 21–34 hours with respect to receiving aid or borrowing.

Persistence in 1995–96

To estimate whether students interrupted their enrollment in 1995–96, an indicator of whether or not students were enrolled for eight or more months was used. The analysis was limited to students who

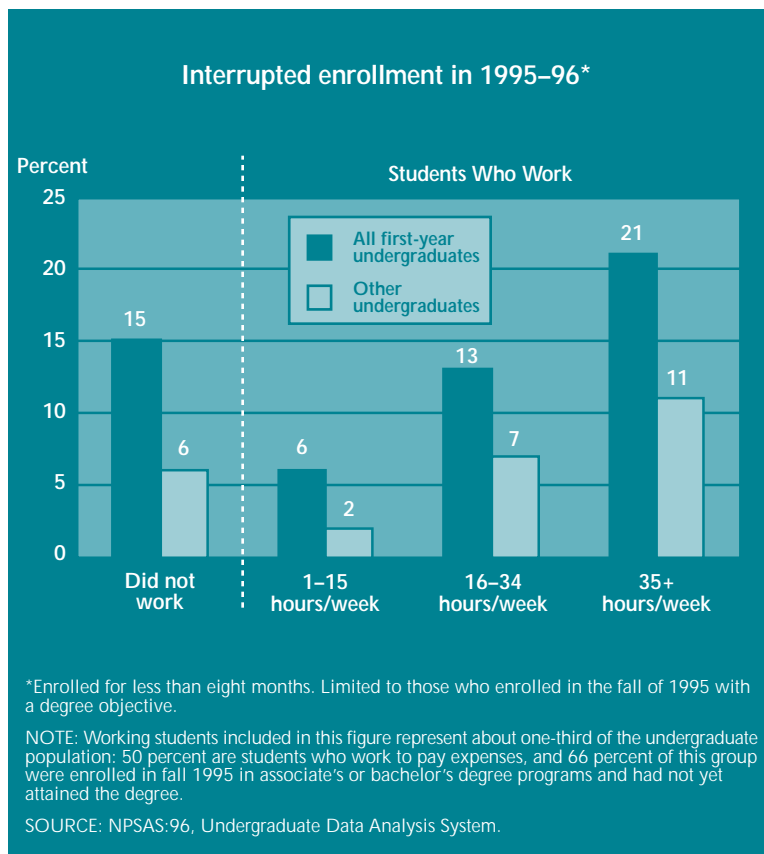
- worked while enrolled to pay education expenses;
- were enrolled in the fall of 1995; and
- had an associate's or bachelor's degree objective and did not attain the degree in 1995–96.

Given their educational objectives, these students would be expected to continue their enrollment for a full academic year. This group represents about one-third of the undergraduate population. Because first-year students are much more likely to drop out or interrupt their enrollment than continuing students, the analysis also distinguishes between these two groups of students.

As shown in the following figure, the results indicate that the likelihood of students attending for a full year was related to their employment intensity. This was true for both first-year and continuing students. About one in five (21 percent) first-year students working 35 or more hours per week did not attend for a full year, compared with about one in twenty (6 percent) who worked 1–15 hours. Among continuing students, 2 percent who worked 1–15 hours did not attend for a full year, compared with 11 percent of those working full time. For both first-year and continuing students, those working 1–15 hours per week were less likely to interrupt their enrollment than students working 16–34 hours per week.

This study determined the likelihood of students interrupting their enrollment only within one academic year. As such, it is an overestimate of actual one-year persistence because it does not take into account students who did not return to school the following school year. Nevertheless, even within this restricted time frame, the results confirm the adverse relationship of working full time to persistence, and they also suggest that, compared with working 1 to 15 hours per week, working more hours while enrolled is associated with higher rates of enrollment interruption.

Supporting the findings of earlier studies, this analysis also found that students who did not work while enrolled were less likely to



interrupt their enrollment than those working 1–15 hours. This result held for both first-year (15 percent versus 6 percent) and other students (6 percent versus 2 percent). In fact, students who did not work had similar attrition rates as students working 16–34 hours.

SUMMARY AND CONCLUSIONS

For undergraduates who identify themselves as Students Who Work, the purpose of work is to help them achieve their educational goals, and for these students, the impact of work on their academic program can be assessed.

Students Who Work reported working an average of 25 hours per week. They were relatively evenly distributed across the work spectrum, with similar proportions reporting that they worked full time as working 15 or fewer hours—about one in four in each group. Working intensity was associated with where students were enrolled and whether they attended full time or part time. Students in 4-year institutions or students attending full time (regardless of where they were enrolled) were more likely to report working 15 or fewer hours and less likely to report working full time than their counterparts enrolled in 2-year institutions or those attending part time.

How much students worked was strongly related to how often they reported that work limited their schedule or negatively affected their performance. Students working 15 or fewer hours were much less likely than students working more hours to report that work limited their class choices, their class schedules, the number of classes they could take, or access to the library. In fact, as the number of hours worked while enrolled increased, the likelihood of students reporting such limitations rose. Similar results were found for the likelihood of dependent students reporting that work had a negative effect on their academic performance. Overall, the results indicated that more than one in four Students Who Work felt that work adversely affected their academic program.

In addition, there was a clear relationship between persistence in 1995–96 and work intensity. One in five first-year students working full time did not attend for a full year, compared with one in twenty among those working 15 or fewer hours. Even when controlling for related factors such as attendance status, income, and institution type, students who worked full time had lower persistence than those who worked 1–15 hours.⁹

In this study, there was some indication that students may substitute working for borrowing. Students who reported working 15 or fewer hours were far more likely to borrow (47 percent versus 26 percent) and also borrowed more on average (\$4,344 versus \$3,810) than their counterparts working full time. The differences in the proportions working 15 or fewer hours versus 35 or more hours were also found for students in either public 4-year institutions or private, not-for-profit 4-year institutions. While borrowing results in debt that must be repaid when students finish their postsecondary education, choosing to work intensively in lieu of any borrowing may increase a student's chance of not finishing his or her degree. In fact, based on the results of this study, it appears that borrowing enough to reduce the number of hours a student needs to work to no more than 15 hours per week may increase a student's chances of completing her or his degree.

REFERENCES

¹Figures are adjusted for inflation. *Digest of Education Statistics 1996* (NCES 96-133) (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 1997), tables 37 and 309.

²*The Condition of Education 1997* (NCES 97-988) (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 1997), 71.

³NPSAS report series based on NPSAS:90 (93-201), NPSAS:93 (95-202), and NPSAS:96 (98-076): *Financing Undergraduate Education: 1995-96* (Washington, DC: U.S. Department of Education, National Center for Education Statistics).

⁴See, for example, S. Cuccaro-Alamin and S. Choy, *Postsecondary Financing Strategies: How Undergraduates Combine Work, Borrowing, and Attendance* (NCES 98-088) (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 1998); and L. Horn, *Undergraduates Who Work While Enrolled in Postsecondary Education: 1989-90* (NCES 94-311) (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 1994).

⁵S. Choy, *A Profile of Older Undergraduates* (NCES 95-167) (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 1995).

⁶L. Horn, J. Berkold, and A. Malizio, *Profile of Undergraduates in U.S. Postsecondary Institutions: 1995-96* (NCES 98-084) (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 1998), Compendium table 1.1.

⁷Note that only dependent students (67 percent of Students Who Work) were asked to report on the effect that work had on their academic performance.

⁸S. Cuccaro-Alamin and S. Choy, *Postsecondary Financing Strategies: How Undergraduates Combine Work, Borrowing, and Attendance* (NCES 98-088) (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 1998).

⁹The full study reported in *Profile of Undergraduates* included a multivariate analysis confirming the adverse effect of working full time on one-year persistence.

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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